A Case Study of Teaching Styles at One Ontario College

by

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A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
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Abstract

The purpose of this case study was to explore, describe, and compare the teaching styles practiced by faculty members at Loyalist College (permission to name received) with those articulated in college documents, and espoused by academic deans and faculty. This exploratory descriptive study focused on the practiced teaching styles as self-reported by participating faculty at Loyalist College, compared to the formally espoused approach to teaching adult learners at this College. Furthermore, this research identified trends of practiced teaching styles of participating faculty regarding their demographic profile, educational philosophy, and level of participation in professional development activities.

To explore, describe, analyze and compare the approach to teaching adult learners at Loyalist College, a mixed method design was utilized through college document analysis, the use of interviews and Conti’s (1982) Principles of Adult Learning Scale (PALS) survey.

The quantitative data identified that participating faculty at Loyalist College scored an overall teacher-centred practice, but upon deeper analysis, scores indicated a commitment to a practice that is closer to both teacher and learner-centred. The qualitative data analysis identified that college documents, academic deans and participating faculty espouse more of a learner-centred compared to teacher-centred
approach to teaching adult learners at Loyalist College.

Comparatively, in ranking of scores, an increased teacher-centred practice was the most popular teaching style (n=15); a very strong learner-centred practice was next (n=8); four faculty identified a very strong teacher-centred teaching style and the same number identified an increased learner-centred approach; finally, one faculty identified an extreme learner-centred approach and one faculty identified an eclectic practice. No faculty at Loyalist College identified an extreme teacher-centred practice. Although the majority of participating faculty were teacher-centred, the scores also indicated a commitment to learner-centred practices. Twenty (60.6%) of participating faculty scored within one standard deviation.

Although the findings of this research are not generalizable, they may have implications for practice, policy and further research to incorporate best practices in teaching adult learners at Loyalist College and possibly even the Ontario College system.
Acknowledgments

There are many individuals that I would like to acknowledge in helping me along my way, from start to finish. First, I want to thank my President at Loyalist College for giving me support to do research at the college and believing in her faculty. Next, I want to thank my colleagues, the faculty at Loyalist College. These folks are truly about student success and work hard to do whatever they can to help students reach greatness. That same dedication was shown to me every time a colleague asked, “how are you doing?” and “is there anything I can do to help you?” Thank you for letting me bend your ear, seek your guidance and never feel that I was a burden – truly learner-centred.

I also want to extend my gratitude and thank my thesis supervisor, Dr. Katharine Janzen. Talk about learner-centred, she demonstrated this throughout my journey, every step of the way!! Her patience and encouragement were at times, the only thing that kept me moving forward. Often, I would receive feedback and wonder what was wrong with how I had it, then I would start to incorporate the feedback and recognize how much better my work was because of her feedback. Thank you for guiding me to better! I also want to include my committee members in my gratitude, Dr. Brian Desbiens, Dr. Pat Hedley and Dr. Stephanie Waterman, your feedback was truly invaluable for my success!

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Dedications

Oh, the Places You’ll Go
You have brains in your head.
You have feet in your shoes.
You can steer yourself
any direction you choose.
~Dr. Seuss~

To my sons, I dedicate this work and encourage you to always use the brains in your head and the feet in your shoes. To my daughter-in-laws, you are supportive, kind and loving women, and I am so lucky to have such strong, independent women in my world.

To my sisters, thank you for always checking in and giving me support just at the right time. Thank you to my youngest sister and her husband, you both sacrificed your time and time with each other, all in an effort to help me.

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My friends, I am always so amazed by your encouragement and unconditional support. Without fail you checked in on my progress, understood when I had to change plans because I was in the middle of deadlines or had to say no when asked to go places, you never stopped asking, and never stopped being patient.

Lastly, but most importantly, to my husband, I dedicate this work to you, for being with me every step of the way – you never gave up, even when I wanted to!

I dedicate this work to my family and friends – thank you for your continuous love, encouragement and support – you all rock!
Chapter One: Introduction

The purpose of this case study was to explore, describe, and compare the “practiced” (Argyris & Schön, 1974) teaching styles of faculty members at Loyalist College, (permission to name received, Appendix B) one of the 22 English language Ontario Colleges of Applied Arts and Technology (CAAT), with those articulated in College documents, and espoused by academic deans and faculty. The data were assessed through the lens of adult learning theory and the theory of action. Teaching styles were measured by educational practices characterized as learner-centred, teacher-centred, or eclectic, based on the modified Principles of Adult Learning Scale (PALS), an assessment tool developed by Conti (1982). I had considered using the term ‘pedagogical approach' in place of ‘teaching styles', however, the literature used teaching styles more often, so I opted to stay consistent with the literature. Analysis of publicly available college documents, interviews with participating academic deans and responses from participating faculty on the modified PALS also informed this mixed-method research study.

In this chapter, I provide an overview of the research study, which includes the background, problem statement, and rationale of the study - that is, why the study was warranted. Also, adult learning theory (e.g., Knowles, 1968) and Argyris and Schön’s theory of action are introduced as the theoretical lenses which ground this study. Finally, the scope and limitations of this research study are described.

In chapter two I describe the literature reviewed and analyzed; in chapter three research design and methodology are addressed; chapters four and five present the analysis and interpretation of the findings and; finally, chapter six provides a summary,
discussion and implications for further research.

**Background of the Problem**

The original 1965 mandate for Ontario Colleges of Applied Arts and Technology (CAAT) was to educate and diversify the workforce by giving students who did not have the interest, finances and/or skills to attend university, an opportunity for post-secondary education (Davis, 1991). However, the student profile has changed since 1965. In the last 10 years, the number of non-direct (not directly out of high school) applicants have risen by 12%, and as of May 2018, 73% of all Ontario college applicants were non-direct; 60% of students attending Ontario colleges were 21 years of age and over and; the average applicant age was 24 years old (Colleges Ontario, 2018).

The change in student profile was first identified as a faculty workload issue during the drafting of the 2003-2005 Collective Agreement for Academic Employees of the Ontario Colleges of Applied Arts and Technology (Ontario Public Services Employees Union, 2004). At this time, the letter of understanding was included indicating that a task force would be created to discuss issues related to faculty workload (Workload Task Force, 2005). The task force’s report states:

The students in Ontario's college classrooms today are diverse in many ways. They have varying levels of academic preparation; they speak many languages other than English or French; they come from varied cultural backgrounds; they have part-time – some even full-time jobs; they have families and family responsibilities; increasing numbers have learning disabilities that require accommodation; many are “career change” students returning to school after many years in the workforce or recent university graduates.
seeking a specific skill with which to enter the workforce. These factors impact on teaching and learning process and relationships between teachers and learners. (pp. 18-19)

Bransford, Brown and Cocking (2000) believe that adults learn differently than children. These authors and others (e.g., Rager, 2006; Ahl, 2006; Merriam, Caffarella & Baumgartner, 2007; Wlodkowski, 2008; Mezirow, Taylor & Associates, 2009; Long, 2009; Pink, 2009; Cranton & Taylor, 2012; Kolb & Yeganeh, 2012, Brookfield, 2013) characterize adult learners by qualities that are associated with six principles of adult learning theory: the learner’s need to know, self-concept, prior experience, readiness to learn, orientation to learning, and motivation to learn (Knowles, Holton & Swanson, 2011). As identified by Colleges Ontario (2018), almost two-thirds of Ontario college students are adult learners based on their average age.

Furthermore, adults learn within their own established cognitive and conceptual models based on what they have learned and experienced throughout their much longer lives than that of children (Rogers, 1993). Malcolm Knowles (1996) believes that teachers need to understand the differences between teaching children and teaching adults although he acknowledges that students can be located on a learning maturity continuum and that some adult students may require a more pedagogical approach. According to Knowles, Holton and Swanson (2011), “if a pedagogical assumption is realistic for a particular learner in regard to a particular learning goal, then a pedagogical strategy is appropriate, at least as a starting point” (p. 68).

Gordon (1997) points out that college faculty are recruited both for their academic credentials in their discipline and for their direct experience in the field they are hired to
teach. While teachers from Kindergarten to Grade 12 must have earned a Bachelor of Education and be certified to teach by the Ontario College of Teachers (Ontario College of Teachers, 2016), and similar to the Ontario universities, education or certification as teachers is not a requirement for employment in the Ontario CAAT. Consistent with their original mandate for vocationally relevant programs, most college professors are hired (for teaching not only in certificate and diploma programs but also the undergraduate degree programs) based on academic qualifications related to their industry, their experience and their expertise (Tesa, 2013). Competency in teaching and learning in Academic professorship postings (publicly) at five colleges in Eastern Ontario that I reviewed, respectively advertised that teaching experience is a *strong/definite asset*; that *preference* will be given to those applicants with work/teaching experience, or that a minimum of two (2) years of teaching experience or *equivalent* is required (Algonquin College, 2018; St. Lawrence College, 2018; Loyalist College, 2018; Durham College, 2018; Fleming College, 2018). The assumption that people who are experts in their discipline can teach their discipline needs to be challenged.

According to the pilot project *Foundations for Success* (2010), 35% of students do not graduate within the allotted time of their program of study and, the factors linked to low graduation rates include: students do not have college-level English and Math; financial stressors; no family support (33% of college applicants are first-generation students) and; concerns about future careers. Finnie, Childs and Qiu (2012) describe the most likely time students leave postsecondary education is during their first year. These authors state, “while the majority of students who drop out do so in their first year, the cumulative rates do rise over time, from 14.9 to 21 to 23 percent in Years 1 through 3 for
Ontario college students. In short, just under a quarter of all those who start a college program in Ontario leave that program without graduating or switching (directly) to another program in the first three years” (p. 16). In addition, nearly 50 percent of college students identify “didn't like it/not for me” as their reason for leaving or switching programs (Finnie et al., 2012). Finnie et al. offer a strategy for identifying those students who are at risk that includes “to target interventions at students according to their academic records, going back to high school and within PSE, surveying students regarding their attitudes to their studies and how they feel about being in school and taking other such direct measures of how they are doing” (p. 49). Whitaker (2004) argues, “as the quality of teachers drops, so does a student's opinion of the school. From kindergarten through college, the quality of the teachers determines our perceptions of the quality of the school” (p. 9). Kuh et al. (2005) concur “if faculty and administrators use principles of good practice to arrange the curriculum and other aspects of the college experience, students would ostensibly put forth more effort” (p. 9). It is reasonable then to assume that the student’s opinion of the school would improve as well.

The literature identifies that adults prefer to learn in an environment that recognizes foundational principles in adult learning (e.g., Brookfield 2012, Caffarella, 2002; Weimer, 2002; Conti, 2004; Galbraith, 2004; Knowles, Holton & Swanson, 2011). However, the literature also acknowledges that teachers, especially those not trained in teaching adults, may have no preparation for teaching others and may rely on teaching the same way they were taught (e.g., Marshall, 1991; Brown, 2003; Chicoine, 2004; McQuiggan, 2012; Tesa, 2013) which is not always consistent with evidence-based best practices. With diverse student demographics, faculty hiring practices, and research
supporting best teaching practices in adult learning, it is essential to examine whether faculty are following evidence-based teaching and learning strategies when facilitating adult learning.

Statement of the Problem

The specific problem that my research sought to address is that there appears to be a disconnect between what adult learners want/need and what college teachers deliver. Given that 60% of students attending college in Ontario are 21 years of age and over (Ontario Colleges, 2018), and based on the scholarly literature on adult learning, research confirms that adult learners prefer a learner-centred environment (e.g., Caffarella, 2002; Weimer, 2002; Kuh, 2003; Conti, 2004; Galbraith, 2004; Elias & Merriam, 2005; Cranton, 2006b; Rager, 2006; Ahl, 2006; Knowles, Holton & Swanson, 2011; Merriam & Bierema, 2014). Lieb (1991) states that adults enroll in colleges because they have a goal and they are seeking a specific outcome. Adults enter an educational environment motivated to learn after they determine a need. And, Knowles (1996) points out that adults tend to learn because they are trying to solve a problem or live more satisfyingly.

Based on my professional experience as a coordinator and professor at Loyalist College for more than 15 years, I have observed that many college professors are not aware of the teaching style they practice, or how it impacts their adult learners. In order to empower faculty to facilitate effective learning, they must first be aware of their own teaching practices. This study provided an opportunity for participating faculty at Loyalist College to assess their own teaching practices, to compare their practiced teaching style with their espoused teaching style, and lastly, to compare their practiced teaching styles to the espoused approach of teaching adult learners articulated in college documents and academic deans, at Loyalist College.
**Purpose of the Research**

The overall question that informed this study was: How do the teaching styles practiced by participating faculty at Loyalist College compare to their demographic profile including, educational philosophy and professional development, and the espoused approach to teaching adult learners at Loyalist College? The specific research questions that drove this study are described in detail in chapter three.

This study aimed to assess the teaching styles practiced by participants at Loyalist College, through the exploration of their self-reported teaching styles which were based on their scores on the modified Principles of Adult Learning Scale (PALS). The PALS is an assessment tool developed by Conti (1982), which assesses the most frequently practiced actions that a teacher of adults might implement in a classroom relative to established adult learning principles. Also, the increased awareness generated by the study findings may help faculty to reflect on their teaching styles and ultimately improve the effectiveness of the educational experience for learners.

**Rationale**

According to the publicly accessible document, *2013-2014 Report Back*, from Loyalist College to the Ministry of Training, Colleges and Universities (Loyalist College, 2018), most learners at Loyalist College are between 18 and 24 years of age. Given that this data is five years old, current personal observation would suggest that the average age of learners is closer to 24 years old. The 2017-2020 Strategic Mandated Agreement, 2016-2020 Academic Plan and 2017-2018 Annual Report all speak to an approach to facilitating learning at Loyalist College that is “learner-centred”, but I have found no research on teaching styles practiced by its faculty to support this espoused standing.
This study was warranted because of the close relationship between the impact of teaching approaches on adult learners and subsequent student retention and success, which is an essential concern for the Ontario colleges. According to Fisher and Hoth (2010), the 21st-century classroom has changed, and studies indicate that persistently high college dropout rates are due to students being unprepared, financial stresses and the burden of personal responsibilities. Studies also indicate a positive correlation between student-faculty interactions and academic attainments including cognitive, social, and personal development (e.g., Evans, Forney, Guido, Patton, & Renn 2010; Pascarella & Terenzini, 2005; Astin, 1993; Hayek & Kuh, 2004; Pace, 1990; Tinto, 1987).

The topic that is the focus of this study was important to explore because the literature identifies the importance of learner-centred teaching with adult learners. Chickering and Gamson (1987) offer seven practices that teachers of adult learners can do to improve teaching and learning in colleges and universities. These include: encouraging contact between students and faculty, developing reciprocity and cooperation among students, using active learning techniques, giving prompt feedback, communicating high expectations, and respecting diverse talents and ways of learning. Brookfield (2005) similarly identifies six traits that adult learners expect in learning including identifying their learning goals, talking about their experiences, determining what they gain from the learning, having preconceived goals and timelines, and finally, requiring flexibility to meet their learning needs.

In *Measures of Engagement in Postsecondary Education: Theoretical Basis and Applicability to Ontario’s Colleges* (CCI Research Inc. 2009), Astin (1984), Tinto (1987), Pascarella (1985) and Pace (1979) are named as the leading theorists who “contributed to the conception of student engagement” (p. 11). Although many factors have been
identified that impact student persistence, one of the consistent inferences I found in the literature is that students are more inclined to stay in college when they report a positive relationship with their teachers.

Weimer (2002) advocates that learner-centred teachers are engaged in a more positive relationship with learners because they share the power and authority of the learning process with learners, shifting their role to that of guide, facilitator or coach. In the context of the guide metaphor, Weimer states

Guides show people the way, and sometimes they even go along, but guides do not make the trek for the traveler…Guides offer advice, point out the pitfalls, and do their best to protect, but it is not within their power to prevent accidents. Learner-centred teachers are there every step of the way, the real action features students and what they are doing. (p. 77)

Other topical theorists (e.g., Kuh, 2003; Yazzie-Mintz, 2007; Chalmers, 2007; Pascarella & Terenzini, 2005) concur that student engagement is impacted by student-faculty interaction. According to Kuh, Kinzie, Buckley, Bridges and Hayek (2006), student satisfaction with overall college experience tends to depend on having more faculty and peer interaction. It is reasonable to assume that the more satisfied a student is with the quality and nature of their interactions, the more they will persist with their studies.

Morley (2003) believes that professional identities are always in flux. He contends that it is no longer acceptable to reproduce the skills and knowledge that professors were hired initially to teach; they themselves must now be entrepreneurial, innovative and add value to the organization. Morley also believes that professors are experiencing a threat to their autonomy, powerlessness to control their time, priorities and objectives. If faculty have the opportunity to
examine their approaches to teaching, to identify their educational philosophy, and to develop and implement strategies that produce positive learning experiences for their learners, they may feel empowered to be more entrepreneurial, innovative and consequently add value to the Ontario colleges.

An understanding of the different philosophies in adult education may assist adult educators to be more selective and critical in their effort to facilitate a quality learning experience for all students. Knowles, Holton and Swanson (2011) point out that adult educators may not utilize one specific philosophy, instead adopt a combination of approaches. Faculty may not even be aware of or acknowledge their own educational philosophy, but it is likely that their decisions about curriculum and delivery methods reflect their implicit beliefs regarding the purpose and process for adult education. Heimlich and Norland (1994) state, “your personal philosophy of teaching and learning will serve as the organizing structure for your beliefs, values and attitudes related to the teaching-learning exchange” (p. 38). The findings of this research may help faculty to gain personal insight into their implicit educational philosophy, and encourage them to explore effective teaching styles when working with adults to potentially enhance learner-centred education and student success.

**Personal Rationale**

As I undertake this study, it is important for me to acknowledge that I am a well-educated, white, middle-aged cisgender woman, and a person of privilege. I have been afforded many opportunities in my academic and career journey. My passion for social justice and working within marginalized communities led me to appreciate the critical role of social service workers within this context. My desire to support students to become stronger advocates and more sensitive to working within their communities led me to teach at Loyalist College. I started
teaching part-time in 2002, as an “industry expert” but with no formal training in teaching. Gardiner (1998), identifies that teachers often teach based on how they were taught because that is what they know. For me, this was true; I taught from a teacher-centred approach because that was the approach with which I was familiar. I had no concerns or issues with content because I was an expert in my field of study. However, I quickly learned that being an expert in my field did not make me an expert in teaching that field to others. I became frustrated and disillusioned by teaching because I felt responsible for transferring all my career knowledge to learners then authentically assessing whether I was successful. If learners were not successful, I felt it was my fault, and I must not have taught them very well.

From 2002-2005, I worked on contract as faculty at Loyalist College. My approach to teaching changed slightly with experience, but I certainly did not teach with (or even know about) adult learning principles in mind. My teaching style remained teacher-centred, and although I was still somewhat frustrated and disillusioned, over time, I became more confident and comfortable. Not being employed full-time at Loyalist College gave me the luxury of coming into the college, teaching my course, and leaving to return to my full-time position outside of the college. In addition, working full-time in industry and teaching on a contract basis did not afford me the time to think about how I was teaching. I did not have reason to pay attention to student retention because it did not negatively impact my class. I did not think at a macro level of the health of the program or college, I thought of the numbers of students in my classroom, and although they may have gone down slightly, it did not occur to me that this was a concern. I worked in the silo of my classroom. When I was hired full-time in 2005, I started to pay more attention to student attrition and the impact of teaching-style on adult learners. I was
eager to engage in professional development because I was now a full-time faculty member and I could focus on being a great teacher, not just an industry expert.

Professional development related to teaching and learning is available to college professors, and in Eastern Ontario the colleges collaborate to provide a training program for new hires. This initiative is known as Focus on Learning (FOL). Each of the five colleges (Algonquin, Durham, Fleming, Loyalist and St. Lawrence) assign two representatives to facilitate planning and implementation at FOL. Many of the workshops and small group discussions during FOL are about teaching strategies. One of the workshops I attended as a new hire in 2005, was about interactive lecturing. This workshop dispelled all the myths about lecturing. The strategies I learned were teaching approaches that were interactive and involved the learner; no longer was I going to be “the sage on the stage but rather the guide at the side” (Smith, 2017). Unfortunately, FOL did not address the philosophies of teaching or teaching styles. I was fortunate to be hired in a program that approached teaching from an adult learning philosophy, and I was able to continue my transition from teacher to learner-centred teaching.

In 2008 I was approached by my College and asked if I wanted to be a facilitator at FOL. I immediately said yes. I experienced transformation through professional development at FOL. I had gone from frustrated and disillusioned in a teacher-centred approach to being passionate and excited about teaching in a learner-centred approach. I wanted this training to be offered to all new hires in Eastern Ontario colleges, including contract faculty. During many years facilitating at FOL, I have heard new hires say that learner-centred strategies “will not work” in their classes. Many say it is because they have too many students or teach subjects that cannot be taught in a learner-centred way. This argument is not about a teacher’s style in facilitating adult learning; it is about the strategies used to teach content. There are inherent limitations to some strategies, but
It is not always the environment or content that I heard in the complaints, sometimes it was only the belief, without reason, that the approach will not work. This realization led me to suspect that environment and content may pose some limitations to adult learning teaching approaches, but a more significant factor might be the teachers’ preferences and their understanding of what constitutes effective teaching of adult learners.

It was my hope when doing this research that if there was a misalignment between Loyalist College's formal commitment regarding espoused teaching styles in the College, and faculty self-reported practiced teaching style at Loyalist College, that academic deans would critically reflect on hiring practices and professional development activities to better align espoused theory with in-action practice at the College. While the findings of this study are not generalizable, I hope that the findings will also encourage faculty who teach adult learners in any context to reflect on their own teaching strategies and how they can maximize student learning.

**Theoretical Framework**

The theoretical frameworks that ground this research study are based on adult learning theories and theories of action.

**Adult learning theories.** A summary of adult learning theories is offered here and explored in depth in chapter two. Malcolm Knowles (1975, 1977, 1980, 1986, 1990, 1996) is recognized as initiating the study of adult learners and exploration of the characteristics and needs of adult learners. Patricia Cross (1974, 1981, 1990a, 1990b, 1991, 1996, 2001, 2005) studied the needs of adult learners in the classroom, including effective teaching methods for adult educators in community colleges. Knowles and Cross agree on key factors when facilitating the learning process with adult learners. These factors include: that adults need to know the “why” behind what they are learning; that information is integrated into their daily
lives; that they are less concerned with theory and abstract issues and more concerned about practical application; that they are seeking answers to life issues; that adults are self-directed and prefer to learn on their own terms; that adults want their life experiences included in the learning; and that adults tend to be more intrinsically motivated but value extrinsic benefits. The constructivist theory fits with adult learning theory in that constructivists believe that learning originates through interactions with others and the construct of meanings assigned to social exchanges. Weimer (2002) states, “at its core, this theory is about the relationship between learners and content” (p. 11). Stage, Muller, Kinzie and Simmons (1998) state that the constructivist approach “emphasizes learners actively constructing their own knowledge rather than passively receiving information transmitted to them from teachers and textbooks. From a constructivist perspective, knowledge cannot simply be given to students: Students must construct their own meanings” (p. 35). Guba (1990) describes the constructivist paradigm as a long-established worldview with meaning and understanding as the end goal. Rogers (1993) believes “all the knowledge of surrounding reality we possess is the result of our own active mental process. In this sense, it is our own construction” (p. 2). Constructivism challenges faculty to not guard their expertise as theirs alone, but instead let students interact, at whatever level they are at, with content. Weimer (2002) states, according to constructivist theories, students need not wait until they have developed expertise before they interact with content. They are encouraged to explore it, handle it, relate it to their own experience, and challenge it whatever their level of expertise. (p. 13).

Merriam and Caffarella (1999) and, Bransford, Brown and Cocking (2000), assert that adults learn differently than children. These authors and others, including Conti, (2009), Galbraith (2004), Huba and Freed (2000), and Weimer (2002) support learner-
centred (also known as student-centred) teaching styles, which incorporate adult learning theory in teaching praxis.

Teaching style and teaching method are not the same. A summary is offered here and explored in depth in chapter two. Teaching style refers to actions that influence the understanding of the nature of learning (Brown, 2003). Galbraith (2004) believes that teaching style includes “the overall characteristics, attitudes, traits and qualities that a teacher displays in the teaching and learning environment” (p. 6). Conti (as cited in Galbraith, 2004) refers to teaching style as “distinct qualities displayed by a teacher that are persistent from situation to situation regardless of content” (pp. 76-77). Heimlich and Norland (1994) agree, stating that teaching “style is what a teacher is” (p. 159). Teaching style is influenced by numerous factors, including prior exposure to teachers, educational philosophy, classroom experiences and participation in professional development.

Galbraith (2004) believes that “teaching styles can be quite diverse, and the approaches can range from being teacher-centred to learner-centred” (p. 7). Teaching methods are the techniques, approaches, and strategies used to accomplish specific learning objectives, purposes, or goals (Svinicki & McKeachie, 2014). Heimlich and Norland (1994) state that “we can improve the very essence of our teaching by increasing and diversifying our use of methods and techniques and strategies” (p. 176).

The educational philosophical perspective held by educators is reflected in their teaching styles and defines the roles of teacher and student (e.g., Brookfield, 2013; Elias & Merriam, 2005; Galbraith, 2004; Zinn, 2007). Strout (2015) states that “by being aware of the relationship between educational philosophy and teaching practices, educators can reflect on their current practices and decide if they wish to continue with similar practices
or design and implement new practices” (pp. 34-35). A brief description of five philosophies of adult education is offered here and explored in depth in Chapter two.

*Liberal* educators are interested in the development of the learners’ intellectual powers. This approach to education is the development of intellectually, morally, spiritually, and aesthetically literate people (Elias & Merriam, 2005). *Behavioural* education promotes skill development, behaviour change, and compliance with societal standards and expectations (Elias & Merriam, 2005). *Progressive* adult education is founded on the belief that education is a means to social, economic, or political change. Progressive educators believe that education helps people respond to situational needs and expands over our lifetime (Lindeman, 1961). Zinn (2007) describes *humanistic* education as promoting personal growth and development. The development of the whole person is at the core of humanistic education. Finally, the *radical* adult educator is focused on empowering oppressed people to “change culture and its structure in order to eliminate various inequalities, dominations, and exploitations” (Kumar, 2015, p. 40). Raising group consciousness to inflame community action and promote social change is the objective of radical education (Wilson & Hayes, 2000). According to Zinn (cited in Galbraith, 2004) and Elias and Merriam (1995), the behaviours of teachers correspond to each of the five philosophies. For example, liberal philosophy suggests extreme teacher-centred behaviours and radical philosophy suggests extreme learner-centred behaviours (cited in Galbraith, 2004, pp. 72-73). Faculty may not know their theoretical thoughts on adult learning at Loyalist College. My research explores the educational philosophy of faculty and compares it to their practiced teaching style.
A brief description to distinguish between learning-centred, learner-centred, and teacher-centred is offered here and is also explored in depth in Chapter two.

A learning-centred institution establishes learning outcomes for each of its programs based on community and academic requirements (Koester, Hellenbrand & Piper, 2005), or, in the case of the Ontario CAATs, as mandated by the Ministry of Training, Colleges and Universities. For instance, the Workload Task Force (2005) identified a shift in the Ontario colleges to becoming more ‘learning-centred,’ emphasizing the outcomes of the learning process rather than the inputs, which impacts on every aspect of the program design and delivery and changes the relationship between the teacher and learners as well as the nature of interactions inside the classroom and out. (p. 5)

On the other end of the spectrum is the teaching-centred institution that is less concerned about the learning process and more concerned about the transmission of knowledge. Tagg (2003) states, “in the Instruction Paradigm, the mission of the colleges and universities is to provide instruction, to offer classes. The successful college, by Instruction Paradigm standards, is the one that fills classes with students and thus grows in enrollment” (p. 15). The approach used by teachers to meet established learning outcomes can be teacher-centred, learner-centred or a combination of both.

The teacher-centred approach to learning is “at the core of the Instruction Paradigm is a conception of teaching as the transmission of information from teachers to students” (Tagg, 2003, p. 19). Rogers (1993) contends that teachers believe they know what learners need to know and he describes the teacher-centred learning environment as one where primary control is on the
teacher. The teacher-centred approach is more about covering content and less about letting learners develop their understanding of content. Weimer (2002) describes the teacher as the decision maker regarding which lessons are taught, due dates for assignments, how to assess learning and, when and where students can interact with them. The teacher-centred approach is not designed for shared responsibility between the teacher and the learner in the learning process. Tagg (2003) describes teacher-centred teaching as “the teacher maintains the locus of control over the instructional process and monitors pupils' learning throughout the process” (p. 19).

The learner-centred approach is a teaching style based on collaboration between students and faculty, and students and their peers. In this model, the role of teachers shifts from transmitters of knowledge to facilitators of learning. Conti (cited in Galbraith, 2004) explains that in a learner-centred classroom “education focuses upon the individual learner rather than on a body of information…the teacher trusts the students to take responsibility for their own learning” (p. 78). Huba and Freed (2000) describe learner-centred education as teachers and students learning together in a cooperative, collaborative and supportive culture. Learner-centred education occurs best when adult learning theory is incorporated into teaching practice (Huba & Freed, 2000; Weimer, 2002; Merriam & Bierema, 2014). According to O’Banion (1997), learner-centred teaching style engages learners as partners in their learning, and learners recognize that they are responsible for their choices. By giving students options for learning, the reality of their capability to be involved is not seen as a limitation, but an opportunity to collaborate. Bruffee’s (1993) work helps to explain theories of collaborative learning in the assertion that learning in groups, learning communities, and social contexts helps to construct the collaborative learning movement. Weimer (2002) states furthermore that the
“notion of group work from the constructivist perspective helped to spawn the

collaborative learning movement” (p. 12).

Although many models conceptualize the elements of the learning process, Figure

I depicts how I simply but clearly conceptualize the elements of the learning process.

Figure 1: Conceptual Map of Elements of the Learning Process

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Theories of action. A summary of theories of action is described here and explored in
depth in chapter two. Argyris and Schön (1974) believe that people have thoughts of how to
plan, implement and review actions (espoused theory) but that these thoughts may be
incongruent with the actual action taken (theory-in-action). This is not merely the difference
between what people say and do, but rather a theory that is consistent with what people say and
another theory consistent with what people do. Therefore, the distinction is not between “theory
and action but between two different theories of action” (Argyris, Putnam & McLain Smith,
1985, p. 82). People are not always aware that their theories-in-action are incongruent with their
espoused theories.

Argyris and Schön suggest that the espoused (what the behaviour should be)
theory is based on the worldview and values on which people believe their behaviour is
based. Moreover, the in-action (what the actual behaviour is) theory is based on the
worldview and values demonstrated by their behaviour. Argyris (1991) asserts that people
hold maps in their heads that design actions for intended consequences but, few people are aware that the maps they use to take action are not congruent with the theories they espouse and, that even fewer people are aware of the maps or theories they do use. To reiterate, what we say we do (espouse) may not be what we actually do (in-action). Faculty may believe their teaching behaviour is based on adult learning principles (espoused theory), but in actuality, their behaviour (theories in-action) may or may not suggest otherwise.

**Worldview**

The worldview lenses that framed this research were advocacy/participatory and pragmatic.

**Advocacy/participatory.** Creswell (2009) states that researchers with an advocacy/participatory worldview conduct research with “an action agenda for reform that may change the lives of the participants, the institutions in which individuals work or live, and the researcher’s life” (p. 9). I selected the advocacy/participatory worldview for this study because I hoped that during the process of completing the online survey, faculty would reflect on their teaching styles to critically assess their practice when teaching adult learners. Mezirow (1991) identifies that transforming meaning requires consciousness raising, self-reflection, critical thinking, and awareness of the constraints of one’s personal reality model. My hope that participating faculty would be reflective during the process was demonstrated when one faculty member stated, “your survey is excellent and gave me some thoughts about teaching” (F1, code used for faculty participants). Another participating faculty also acknowledged the reflective opportunity by stating, “fascinating topic” (F24, code used for faculty participants). Another reason
the advocacy/participatory worldview was appropriate is that “advocacy research provides a voice for these participants, raising their consciousness or advancing an agenda for change to improve their lives” (Creswell, 2009. p. 9). The voice of adult learners is espoused in the literature, but teacher-centred practice continues to suppress best practices. The changes that I hope my findings advance at Loyalist College include professional development that endorses teaching adult learners and, also embedding adult learning principles in criteria for hiring faculty. The literature (Merriam, Caffarella & Baumgartner, 2007; Bransford, Brown & Cocking, 2000; Weimer, 2002) demonstrates that learner-centred teaching is the preferred approach for adult learners, publicly available reports and personal observation indicate that learners at Loyalist College are adults and, retention is impacted by the relationship between faculty and students; therefore an agenda for change is warranted.

**Pragmatism.** The pragmatic worldview was also appropriate for this study because it addressed the real-world problem that best practices in teaching adults may not be congruent with practiced teaching styles. Creswell (2014) states, “pragmatism as a worldview arises out of actions, situations, and consequences, rather than antecedent conditions” (p. 10). For my research, the teaching styles practiced by participating faculty, the learning environment and the student demographics attending postsecondary are the real-life situations that this study seeks to address as they impact student persistence and retention.

Regarding the actions of teachers, I found that the literature has clearly identified that best practices in teaching adult learners are learner-centred (Gross, 1977; Conti, 2004; Galbraith, 2004; Huba & Freed, 2000; Stage & Manning, 2016). Kuh, Kinzie, Schuh, Whitt and Associates (2005) identify that “institutional environments that are perceived by students as inclusive and
affirming and where expectations for performance are clearly communicated and set at reasonably high levels” are essential to student learning (p. 8). In addition, the demographic profile of students applying to colleges indicates that 73% of applicants are not applying directly after high school and 60% of students currently enrolled are 21 years and over (Colleges Ontario, 2018). Lastly, the consequences of students who are unable to persist in postsecondary negatively impact college funding. Base funding is provided regardless of retention; however, growth funding (for enrolment growth) and performance funding (4% of the total funding) could be reduced if attrition is high (Ontario Ministry of Training College and Universities, College Funding Model Consultation Paper, 2019). Also, revenue generated from tuition is negatively impacted if students do not persist.

According to Morgan (2014), pragmatism can be considered a paradigm of choices which is fitting for mixed methods research because of the complexity of integrating qualitative and quantitative methods. My research uses mixed methods design to identify practiced teaching styles (quantitative) and how they compare to the espoused teaching of adult learners (qualitative) at Loyalist College.

**Scope and Limitations of the Study**

This exploratory, descriptive case study was based on a purposive sample of participants at only one Ontario college, and because the selection of the study site and participants were not a random sample of the total population of 24 colleges, the findings are not generalizable. Gay, Mills and Airasian (2006) describe generalizability as “based on the behaviour of a small group (sample) of individuals, researchers try to explain the behaviour of a larger group (population) of people” (p. 407). The study sample is not representative either, because of the vast diversity among the 22 English language
colleges. However, the purpose of qualitative research is not generalizability of the findings but rather a deep understanding of the phenomena explored. Nevertheless, the findings may provide valuable insights to all educators of adults and may encourage them to reflect on their own teaching practices.

This study is limited to the exploration, description and analysis of the participating faculty's own perceptions of their teaching styles, although neutral observation of faculty behaviours to identify theories in use would have been beneficial, this was beyond the scope of my study; however included as an implication for future research. Finally, this study was limited to faculty and academic deans; however, implications for future research should include analysis of how all employees within postsecondary relate to adult learners.

**Summary of Chapter One**

In chapter one, I have presented an overview of this research study, which included, the background of the problem, the problem statement, the purpose and rationale of the study. Adult learning and theories of action were introduced as the theoretical framework that grounded this study. The advocacy/participatory and pragmatic worldviews and the scope and limitations of the research were also presented.

In chapter two I describe the literature reviewed and my analysis of the literature related to the following themes: adult learning, philosophies of adult education, and teaching styles. Also, Argyris' and Schön's (1974) espoused theories and theories-in-action, and Conti's (1979) Principles of Adult Learning Scale will be reviewed. Based on my observations as a coordinator and professor at Loyalist College, and my understanding of the goals for teaching and learning espoused in college documents, I was interested to find out if there was inconsistency in faculty
espoused theories and theories-in-action and how self-aware faculty were of the inconsistencies, hence my interest in Argyris' and Schön's theory.

Chapter three addresses the research design and methodology of the study. The findings and analysis and interpretation of the findings are presented in chapters four and five, and chapter six provides a summary, discussion, and implications for further research.
Terms and Definitions

Academic deans. For the purpose of this study, academic deans are heads of all academic programs at Loyalist College. Academic Deans report to the Vice President of Academics. Managers and Chairs of programs report to Deans.

Adult learners. For the purpose of this study, the term adult learners refer to learners who are 21 and over years of age (the majority of learners) in the Ontario colleges. The terms students and learners are used interchangeably throughout this paper.

Andragogy. Andragogy is a term coined by European educators of adults. It is “the art and science of helping adults learn” (Knowles, 1980, p.43). Merriam and Bierema (2014) describe that it “contributed to the development of the field of adult education at a time when adult educators were struggling to establish their own identity separate from childhood education” (p.46).

Colleges of Applied Arts and Technology (CAATs). The Ontario Ministry of Training, Colleges and Universities defines CAATs as the Colleges of Applied Arts and Technology (Ministry of Training, Colleges and Universities, 2018).

Educational philosophy. Beliefs about education that provide a basis for selecting instructional content, establishing teaching/learning objectives, selecting and/or developing instructional materials, interacting with learners, and evaluating educational outcomes (Zinn, 2004). The five western educational philosophies discussed in this thesis include Liberal, Behavioural, Progressive, Humanistic and Radical (Elias & Merriam, 2005; Zinn, 2007).
**In-action/practiced teaching style.** In this paper, I use these terms interchangeably to refer to the teaching style that faculty practice according to the Principles of Adult Learning Scale (PALS).

**Learner-centred.** Huba and Freed (2000) describe learner-centred education as teacher and student learning together in a cooperative, collaborative and supportive culture. In this model, the role of teachers shifts from transmitters of knowledge to facilitators of learning. Conti (1982) explains the “teacher functions as a facilitator rather than as a reservoir of knowledge” and employs a variety of teaching methods and materials, including allowing students to take responsibility for their own learning (p.147). It is generally deemed appropriate for teaching approaches in Andragogy but not always in Pedagogy.

**Learning-centred.** A learning-centred institution establishes learning outcomes for each of its programs based on community and academic requirements (Koester, Hellenbrand & Piper, 2005), or, in the case of the Ontario CAATs, knowledge, skills and attitudes related to vocational and general learning outcomes to be demonstrated by learners as mandated by the Ministry of Training, Colleges and Universities (Ministry of Training, Colleges and Universities, 2018). Some characteristics of learning-centred parallel learner-centred pedagogy, such as collaboration, options and responsibilities of students; providing more learning options and; a climate of learning (O’Banion, 1997).

**Mature student.** This term was used interchangeably as representative of adult learners. It is noted that mature students are not necessarily aligned with chronological age, but for the purpose of my study, mature student was indicative of learners aged 21 years and older.
**Pedagogy.** This term originated from the Greek words “paid,” (child) and “agogos” (leader of) and was used to describe teaching children. Although pedagogy simply means to teach (Merriam-Webster Dictionary, n.d.), the term still carries the association of teacher/instructional centred (Fries, 2012).

**Practice.** Practice is the process of doing and reflecting. Actions are considered when planning, then again when reflecting or evaluating. Theoretical thoughts do not inform every action. Theory could be considered in actions when planning, reflecting or evaluating but it does not inform the action (Quinlan, 2012).

**Praxis.** Praxis reflects informed action. It is the process of acting within a theoretical framework of thought. In praxis, concrete action is informed by abstract theory. Action is deliberated through deep thinking and justification (Freire, 1970).

**Principles of Adult Learning Scale (PALS).** PALS is a 44-item survey developed and tested by Conti (1982) which identifies whether those completing the assessment tool prefer teaching styles that are teacher-centred, learner-centred or eclectic. According to Conti (cited in Galbraith 2004), high scores on the PALS indicate a learner-centred approach and low scores indicate a teacher-centred approach and scores in the middle range suggest that faculty draw on both learner-centred and teacher-centred practices, indicating an eclectic approach.

**Professors.** For the purpose of this study, the term professors refers to teachers in an Ontario college as identified in the Ontario Public Service Employees Union (OPSEU) classification (Academic Employees Collective Agreement, 2017-2021). Professors, teachers and faculty are used interchangeably throughout this paper.
**Student/learner.** In this paper, I use these terms interchangeably to refer to students/learners in postsecondary learning environments.

**Teacher-centred.** In a teacher-centred approach, teachers decide which lessons are taught, when assignments are due, how learning is assessed, and the frequency of student participation and interaction with the instructor (Weimer, 2002). The teacher views his or her role as a transmitter of data to the students that are willing to accept the data as knowledge without inquiry (Daley, 2003). Students are assumed passive recipients in the learning process.

**Teaching styles.** Regardless of content, the distinct qualities of a teaching style are that the teaching activities are persistent from situation to situation including the “total atmosphere created by a teacher’s views on learning” (Conti, cited in Galbraith, 2004, p. 77). Robinson (2012) describes teaching style as, “set of teaching behaviors employed in the learning context which are consistent over time and context” (p.30).
Chapter Two: Literature Review

This chapter focuses on my review of relevant literature. Although I found many relevant themes in the literature, for the purpose of this study the following themes were focused on: adult learning, philosophies of adult education, and teaching styles. In addition, literature that addressed Argyris' and Schön's (1974) espoused theories and theories-in-action, and Conti's (1982) Principles of Adult Learning Scale were reviewed.

Adult Learning

Learning is “the act or experience of one that learns”; “knowledge or skill acquired by instruction or study”; and “modification of a behavioral tendency by experience” (Merriam-Webster Dictionary, n.d.). Nilson (2003) suggests in Teaching at Its Best: A research-based resource for college instructors, that regardless of the student profile the following well-researched principles about how people learn will apply: People are born learners, beginning with an insatiable childhood curiosity; people learn by connecting new knowledge to what they already know; people learn sociably but also one-on-one and on their own; people don’t learn well by passively listening to a teacher talk; people learn when actively engaged in a life experience and; people must be inspired to learn a specific topic (p. 10). Draves (1984) states, the adult’s mental learning state is not a blank chalkboard on which you, the teacher, can write as you wish. Neither is the adult learner’s head an empty pail for you to fill with your knowledge and ideas. The adult learner’s chalkboard already has many messages on it, and his mental pail is almost full already. Your job as teacher is not to fill a tabula rasa, but to help your participants reorganize their own thoughts and skills. A prerequisite to helping adults learn is to understand how they learn. (p. 7)
The Adult learner. To find a single description that best defines the “adult learner” is a difficult task. Definitions of adult learning are as varied as adult learners themselves are. Long (cited in Galbraith, 2004) indicated that there is greater variability within a 50-year-old cohort of learners than there is among a 30-year-old cohort because as people age cohorts become more heterogeneous. Therefore, to define the adult learner as representative of all adult learners would be impossible. In contrast, to continually define the variables that differentiate adults would be endless. Long stated in Galbraith (2004), that “perhaps the best we can do is to observe that exceptions to the rule, as represented by central statistical tendencies, are rather commonplace when speaking about adult learners” (p. 25).

Malcolm Knowles (1970), the pioneer of adult learning, identifies six factors that separate the younger and older learners: (1) adult learners are autonomous and self-directed (2) adult learners have accumulated a foundation of life experiences, and knowledge (3) adult learners are goal-oriented (4) adult learners are relevancy-oriented (5) adult learners are practical (6) adult learners expect to be shown respect. Similarly, Lindeman’s (1961) key assumptions about adult learners are:

1. Adults are motivated to learn as they experience needs and interests that learning will satisfy.
2. Adults’ orientation to learning is life-centred.
3. Experience is the richest source for adult’s learning.
4. Adults have a deep need to be self-directing.
5. Individual differences among people increase with age. (cited in Knowles, Holton & Swanson, 2011, p. 38)
Cercone (2008) identifies the following learning traits that separate the adult learner from the child learner:

1. Adults need to be actively involved in the learning process.
2. Adults need scaffolding to be provided by the instructor. Scaffolding should promote self-reliance, and it should allow learners to perform activities they were unable to perform without this support.
3. Adults have a pre-existing learning history and will need support to work in the new learner-centred paradigm.
4. Adults need the instructor acting as a facilitator.
5. Adults need consideration of their prior experience. The instructor should acknowledge this prior experience because adults need to connect new knowledge to past events.
6. Adults need to see the link between what they are learning and how it will apply to their lives. They want to apply their new knowledge immediately. They are problem-centred.
7. Adults need to feel that learning focuses on issues that directly concern them and want to know what they are going to learn, how the learning will be conducted, and why it is important. The course should be learner-centred vs teacher-centred.
8. Adults need to test their learning as they go along, rather than receive background theory.
9. Adult learning requires a climate that is collaborative, respectful, mutual, and informal.
10. Adults need to self-reflect on the learning process and be given support for transformational learning.

11. Adults need dialogue, and social interaction must be provided. They need to collaborate with other students.

12. Adult learners bring a wealth of experience to the learning process. They want to share past life experience, values, beliefs and opinions. Learning is about challenging and debating new concepts. Kaufman (2003) states that the adult learner makes a quick connection between content and what is occurring in their own life experiences.

13. Adult learners are self-directed. When the adult can determine what they will gain from the learning experience, they are more inclined to be interested in the details of the process. (pp. 154-159)

Cranton (2000) indicates that there is agreement on many key concepts in adult learning such as adults bring experience to learning, they are engaging in learning to meet a need, and that adults prefer to be self-directed. Learning is about challenging and debating new concepts. Adults want to share their past life experience, values, beliefs and opinions (Brookfield, 2013). Cranton (2000) adds that change could be difficult for adults because they may have ingrained beliefs and values. Mezirow (1991) describes transformative learning as a process where unchallenged beliefs, values and perspectives are questioned resulting in a change in how one sees self, and/or the world around them. Cognizant reflection is a quality that adults bring to the learning experience (Brookfield, 2012a). It is in adulthood that reflective skills are developed (Mezirow & Associates, 2000; King & Kitchener, 2004). Through reflection, adults can challenge meanings that they have given prior experiences. Cranton (2006a) states that “what we expect to happen based on what has happened in the past – are the product of experiences, and it
is those expectations that are called into question during the transformative learning process” (p. 8). Davis-Manigaulte, Yorks and Kasl (2006) defines transformative learning as, “a holistic change in how a person both affectively experiences and conceptually frames his or her experiences of the world when pursuing learning that is personal development, socially controversial, or requires personal or social healing” (p. 45). Adults want to participate in constructive dialogue that recognizes their experiences bring value and meaning to learning. Brookfield (1986) emphasizes the important role of critical reflection to identify learning needs and transform how adults see themselves and their world.

Intelligence is a popular topic in psychology, but researchers lack a standard definition. Many have suggested that it is a general ability, while others have said that it is a range of different abilities. Proponents of the theory that intelligence is a singular general ability (also known as the g factor) believe that it is the capacity to carry out abstract thought, the general ability to learn, and adaptability to the environment (Sternberg, 1985; Terman, 1921; Wechsler, 1997). Others would argue that intelligence is the mastery of skills and abilities in different mental domains (Carroll, 1993; Horn & Cattell, 1966; Wechsler, 1997). Whether intelligence is a singular ability or a range of abilities, intelligence continues across a lifespan. People of all ages can carry out abstract thought, adapt to their environment, and master skills.

Intelligence is not restricted by age, and in fact, some would suggest that intelligence is enriched as people age. Rogers (1993) defines learning as a process of change in knowledge, understanding, skills, attitudes, and ultimately, behaviour. He explains that adults build up maps, pictures, and paradigms of reality and that this controls approaches to learning. Rogers believes that reality maps are redrawn as “new significances are seen, new relevancies are identified, new experiences build new expectations” (p. 10). He asserts that people experience events and
interpret those events to place a structure and meaning to them. The process involves assessing the similarities and differences with other events. By doing this, a series of constructs evolve that are unique to each individual. Rogers notes that “each person’s map will be different, for each person sees the self and each item of reality differently” (p. 3). Adults judge new material and place it on their map according to how it relates to the self. The more relevant material is placed closer on the adult learner map whereas less relevant material is on the fringes.

Rogers (1993) differentiates between children’s and adult’s maps, by stating that “it is possible to suggest that for some people, especially children, the map of reality is relatively small” (p. 4). Rogers identifies that adults are more concerned with organizing and systematizing their maps than they are with new areas that lie outside of their map. Adults are puzzled by anomalies and want to know how to fit the new meaning into their current map. Roger argues that subject matter, which is far removed, or irrelevant from an individual, will not stick because it is alien and does not compute with the learner-self. Thus, the self is not able to process the reconstruction of their map. Rogers' answer to this dilemma is to bring the subject matter closer to the self. Rogers presents a survey in Adult Learning Maps and the Teaching Process (1993) regarding the difficulty or ease with which adults learn certain subjects:

1. **Familiarity.** The relationship between the material and the relevance to the adult. More relevant material is closer to proximity on the map, irrelevant material is located in a remote area on the map and very well may be forgotten.

2. **Experience.** Past experience, both primary and secondary, contribute to the ease of learning subject matter. Adults push away material that does not fit.

3. **Utility.** More useful material is closer to the centre on their map and material that is perceived as less useful will be located further away.
4. **Inner consistency.** Things that make sense will be closer to the centre of the map.

5. **Understandability.** Students will fit the subject material within their existing framework.
   The need to know the data may or may not deter the learner.

6. **Bonding.** The subject material is tested as to whether it relates to other subjects already on the map. A positive or negative relationship determines the perception of ability to learn the material.

7. **Self-horizons.** Belief about ability will impact what adults learn. Past experiences of success or failure impact perception of how close or remote the material is situated on their map.

8. **Social modeling.** The image of the person that has mastered the subject matter compared to self-image plays a role in learning. This factor is not about competency but rather a self-evaluation on whether the individual can be the kind of person that has mastered the material. (p. 199)

Rogers asserts that other factors are likely involved in the difficulty or ease with which certain subjects might be learned. He acknowledges that the process “seems to be very complex and will vary from individual to individual” (p. 7). He also stresses that each person would give greater or lesser weight to some of the factors and that general conclusions cannot be drawn.

Smith (1996) concurs that learners regard learning as relating parts of subject matter to each other and to the real world and understanding the world by reinterpreting knowledge. Malcolm Knowles (1984) indicates that the longer we live, the more experience we accumulate; therefore, chronologically adults can bring a wealth of experience to the learning environment that must not be dismissed. Lieb (1991) explains that adults are practical and will focus on the learning that is most useful in their life experience.
Experience is an essential social variable when discussing adult learners. Rogers (1969) and Maslow (1968) emphasize subjective experience as an integral component of the adult learner. Long, as discussed in Galbraith (2004), suggests that the learning environment can be a rich and stimulating interaction when adults bring more and different kinds of experiences. He also notes that the quantity and quality of experience brings a depth to learning that is not possible with children. Knowles (1984) agrees with the notion that experience is a key factor that differentiates the adult learner. Research on adult learning emphasizes the richness of adult learning when experience is valued in the learning environment (Caffarella, 2002; Kolb & Yeganeh, 2012; Wilson & Hayes, 2000).

Knowles, Holton and Swanson (2011), and Brookfield (2013) state that adults are seeking new skills or knowledge when they attend a learning environment. They may be at different levels of academic readiness, but they are motivated to learn. Regardless of the motivation, according to Brookfield (2013) and Merriam, Caffarella and Baumgartner (2007), often the adult learner is seeking learning to meet an immediate need. According to MacKeracher (2004), “motivation to learn can be described as being either a drive to reduce uncertainty and meet unmet needs or a drive towards positive growth through exploring the unknown” (p. 132). Cranton (2012) includes the following general characteristics that motivate adult learners:

Most often, adults become involved in a learning situation by choice. When they have chosen to learn, they have clear, specific goals, whether to improve job skills, move up the salary scale, satisfy intellectual curiosity, or make social contacts. They expect the instructional situation to be relevant to them. (p. 23)

Long (2002) asserts that learning is a basic human characteristic that originates at the genetic level (intrinsic), while Mocker and Spear (1982) believe that the focus of learning is
generated by external circumstances (extrinsic). Knowles (1984) indicates that motivation for learning is intrinsic but adds that extrinsic benefits are valued. MacKeracher (2004) agrees with Long stating, “Learning, then, is a normal physiological and psychological activity that proceeds out of inner drives fuelled by intrapersonal energy rather than out of external pressure fuelled by rewards and punishment” (p. 7).

Seminal theorist Houle (1961) identifies three orientations of learners, each of whom are motivated by different factors: activity-oriented learners, goal-oriented learners and learning oriented learners. Activity-oriented learners are seeking to fulfill a personal need and often attend adult education looking for social contact. Goal oriented learners are attending to accomplish an objective, such as training specifically for career advancement. Learning-oriented learners attend because they are lifelong learners and seek knowledge. Aslanian and Brickell (1980) expand the list of motivations to global perspectives that include career, family, leisure, art, health, religion and citizenship. Although dated, Johnstone and Rivera’s (1965) list of motives continue to be relevant and were more specific, such as to become a more informed person, to prepare for a new career, for advancement purposes, for better use of spare time, and to meet new people.

Wlodkowski (1999) explains that inclusion, attitude, meaning, and competence are conditions that can facilitate or impede motivation. Lieb (1991) identifies six sources of motivation for adult learning:

1. Social relationships: to make friends and connect with people.
2. External expectations: to comply with expectations or recommendations from formal authority.
3. Social welfare: to improve the ability to work in the context of community for the good of humanity.
4. Personal advancement: to achieve better in job performance and status.

5. Escape/stimulation: to do something different from the routine of home or work.

6. Cognitive interest: to learn for the sake of learning. (p. 2)

Cranton (2006a) points out that Knowles (1975, 1980) initiated the concept of self-directed learning. Cranton (2016) states that not all adults are self-directed when they first attend a new learning situation and that “the role of the educator is then to gradually foster independence and self-direction” (p. 24). Knowles (1975) saw self-direction as a distinguishing characteristic of adult learners, but he did not see it as adults learning independently or isolating themselves. Adults are not as interested in the transmission of information from teacher to student because they view themselves as independent people who are not reliant on teachers to tell them what they need to know. Candy (1991) defines self-direction as people controlling their learning and planning their educational experiences both formally and informally. Adults expect to be perceived and treated by others as their own caretakers, responsible for themselves. Adults want to feel competent in their learning. Adults enter an educational activity with an increased focus. Adults do not tend to learn for the sake of learning; they learn because they are trying to solve a problem or, live in a more satisfying way (Knowles, 1984). Bain (2004) posits, “When we encounter new material, we try to comprehend it in terms of something we think we already know” (p. 26). Cranton (2012) identifies that:

Usually, adults prefer to be self-directed learners. They do not want to be treated like children and told what to do. Since they have their own goals and experiences, they want to find activities and ways of doing things that relate to them. By now, they have established individual preferences for working alone or in groups, and for learning by listening, reading or doing. (p. 23)
Brookfield (1995) believes that many variables influence how adults learn such as differences shaped by history, culture, physiology, cognitive style, learning style and personality. He believes that educators must be open to learning from adult learners on what it is they need to know. Magro (cited in Poonwassie and Poonwassie, 2001) concurs adding, “unique life experiences, barriers, personality traits, learning style preferences and attitudes influence an individual’s capacity for and involvement with learning” (p. 76). Siebert and Karr (2003) identify fear as an influence on how adults learn stating, “you may doubt your ability to succeed in college if you have not studied or taken tests for a long time, if you have to work, or have other responsibilities” (p. 10).

Although scholars may identify contrasts between teaching children and teaching adults (Henschke & Weinstock, 1991; Merriam & Brockett, 1997; Muirhead, 2007; Hiemstra, 2011), “curiosity, this insatiable need to know about the environment in which an individual must survive…knowledge-seeking” (Keel & Rowland, 1974, p. 504) remains the bedrock of learning. Table 1 summarizes the differences between adults and children as learners.

**Pedagogy and Andragogy**

**Pedagogy.** The word pedagogy comes from the Greek word paidagogos, which refers to a slave who led boys (agogos) to and from school and taught them manners and tutored them after school (Salvatori, 1996). According to Simpson and Weiner (1989) the Greek word “peda” translates to child, which means that the word pedagogy literally translated to “the teaching of child”. Today, the word has come to mean teaching. Pedagogic training is what everyone majoring in education receives (Merriam-Webster Dictionary, n.d.).

Pedagogy still has the connotation of a teacher/instructional-centred approach to learning.
Table 1: Differences between Adults and Children as Learners.

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children</th>
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<tbody>
<tr>
<td>• Have extensive pragmatic life experiences that tend to structure and limit new learning. Learning focuses primarily on transforming or extending the meanings, values, skills, and strategies acquired in previous experience.</td>
<td>• Have fewer pragmatic life experiences. Learning focuses mainly on forming and accumulating basic meanings, values, skills and strategies.</td>
</tr>
<tr>
<td>• Experience extreme pressures for change from factors related to family, work and community roles and expectations; and from personal needs for continuing productivity, self-definition, responsibility, and connection to others.</td>
<td>• Experience significant pressures for change from factors related to physical growth and socialization, and preparation for future family, work and community roles.</td>
</tr>
<tr>
<td>• Have learning needs related to current life situations and future expectations.</td>
<td>• Have learning needs related to developing meanings and strategies for understanding current and future experiences.</td>
</tr>
<tr>
<td>• Have the capacity for using generalized, abstract thought.</td>
<td>• Are more likely to use specific, concrete thought.</td>
</tr>
<tr>
<td>• Are likely to be able to verbally express their own needs and describe their own learning strategies, allowing them to negotiate and collaborate in planning their own learning programs.</td>
<td>• Are likely to non-verbally express their own needs and learning strategies, encouraging ‘expert’ observers and interpreters to plan learning programs for them.</td>
</tr>
<tr>
<td>• Are assigned a responsible status in society and are expected to be productive.</td>
<td>• Are assigned a non-responsible status in society and are expected to play and learn.</td>
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Slavin (2012) states, “the link between what a teacher wants students to learn and students' actual learning is called instruction or pedagogy” (p. 238). Fries' (2012) literature review came from articles and textbooks written for teachers of prekindergarten to 12th grade, and she stated that “the very nature of the context of this literature removes the need to define pedagogy as a
concept which applies exclusively to those who teach children and adolescents” (p. 25). Adult education literature concurs—Gehring’s (2000) definition is “education of children” (p. 151), Ozuah’s (2005) definition is “the art and science of teaching children” (p. 83) and Muirhead’s (2007) definition is “child learning” (p. 179). Each of these definitions denote pedagogy as being the approach to teaching children. Forrest III and Peterson (2006) state that “in simple terms, pedagogy is oriented to teaching children and their characteristics” (p. 114).

Smith (1982) describes pedagogy as subject interest that is established by the institution or teacher. Ozuah (2005) states that “pedagogy is fundamentally a teacher-centred model, where the teacher determines what will be learned, how it will be learned, when it will be learned, and if it has been learned” (p. 83). Pedagogy assumes that students need to be told what they need to learn. Tagg (2003) describes pedagogy as,

probably the most popular teaching strategy that is used by teachers to facilitate learning. It is teacher directed and follows a formal structure with specific steps to guide pupils toward achieving clearly defined learning outcomes. (p. 19)

Knowles, Holton and Swanson (2011) describe four assumptions about learners in the pedagogical model:

1. The learner is a dependent personality. The teacher/trainer is expected to take full responsibility for making the decisions about what is to be learned, how and when it should be learned, and whether it has been learned. The role of the learner is to carry out the teacher’s directions passively.

2. The learner enters into an educational activity with little experience that can be used in the learning process. The experience of the teacher/trainer is what is important. For that reason, a variety of one-way communication strategies are employed, including
lectures, textbooks and manuals, and a variety of audiovisual techniques that can transmit information to the learner efficiently.

3. People are ready to learn when they are told what they have to learn in order to advance to the next grade level or achieve the next salary grade or job level.

4. People are motivated to learn primarily by external pressures from parents, teachers/trainers, employers, the consequences of failure, grades, certificates, and so on. (pp. 298-299)

Tagg (2003) states, “at the core of the Instruction Paradigm is a conception of teaching as the transmission of information from teachers to students. The paradigm thus emerges from a model of pedagogy that defines and gives value to everything else in the institution” (p. 19). In the Instruction Paradigm if the student is not grasping the curriculum, either the teacher needs to teach harder, or there is a deficit with the student. Biggs (1999) describes two levels of thinking that characterize the central assumptions of the Instruction Paradigm. Level one is a “blame-the-student theory of teaching, based on student deficit. When students don't learn…, it is due to something the students are lacking……” (Tagg, 2003, p. 22). Level two, the responsibility of knowledge transmission is the teacher's, hence “it is also a deficit model, the blame this time being on the teacher” (p. 23). When problems arise with ‘blame-the-student theory,' the postsecondary institution has only three choices: 1) increase resources (more money to support smaller classes, more books, better facilities), 2) raise the level of incoming students (selective admissions, screening) or 3), when those approaches do not work, the teacher needs to teach harder (p. 21).

**Andragogy.** In the adult education literature, pedagogy generally refers to the education of children and andragogy specifically to the education of adults (Muirhead, 2007). Andragogy
had been initially coined in Europe as the parallel to pedagogy (Saunders, 1991). Malcolm
Knowles (1968) is considered the pioneer of andragogy. Knowles argued that children learn very
differently than how adults learn (Birzer, 2004). Although there are other adult learning theories,
Knowles' andragogy is cited more often in literature than any other theory (Goddu, 2012). Lieb
(1991) describes andragogy as the process of adult cognition over the content of teaching. The
question of what constitutes an adult was posited by Darkenwald and Merriam (1982), “that an
adult is someone who has assumed the primary social role of worker, spouse or parent and has
left the principal social role of full-time student that children and adolescents hold (cited in
terms, pedagogy is oriented to teaching children and their characteristics. By comparison,
andragogy is dedicated to teaching humans who perform socially productive roles and have
assumed primary responsibility for their own lives” (p. 114).

Knowles, Holton and Swanson (2011) identify five assumptions about learners in the
andragogic model:

1. The learner is self-directing. Adult learners want to take responsibility for their own
   lives, including the planning, implementing, and evaluating of their learning
   activities.
2. The learner enters into an educational activity with a great deal of experience. This
   experience can be a valuable resource to the learner as well as to others. It needs to be
   valued and used in the learning process.
3. Adults are ready to learn when they perceive a need to know or do something in order
   to perform more effectively in some aspect of their lives. Their readiness to learn may
be stimulated by helping them to assess the gaps between where they are now and where they want and need to be.

4. Adults are motivated to learn after they experience a need in their life situation. For that reason, learning needs to be problem-focused or task-centred. Adults want to apply what they have learned as quickly as possible. Learning activities need to be clearly relevant to the needs of the adult.

5. Adults are motivated to learn because of internal factors, such as self-esteem, recognition, a better quality of life, greater self-confidence, the opportunity to self-actualize, and so forth. External factors, such as pressure from authority figures, salary increases, and the like, are less critical. (pp. 299-300)

Forrest III and Peterson (2006) claim that adults need to be responsible and self-directing because before they are learners, they are parents, spouses and workers. According to Goddu (2012), “theories that incorporate personal history as part of adult learning may prove to be most beneficial. Adults bring a wealth of practical experience to the learning table. Taking the practical experience and combining it with theory maximizes learning” (p. 171). Wlodkowski (1993), and Vella (1994) state that adult learners “demand that the materials have immediate utility and relevant application” (cited in Nilson, 2003, p. 11). Spence (2001) identifies that people learn when they are actively engaged in life experience. Bridges (2004) states that adults may be seeking intrinsic and/or extrinsic rewards, may be triggered to attend by a family or employment situation or may be seeking self-actualization. Assumptions regarding the adult learner are irrelevant if the adult learner is unable to persist or stay engaged in postsecondary studies.

In the report CCI Research Report, *Measures of Student Engagement in Postsecondary*
Education: Theoretical Basis and Applicability to Ontario’s Colleges (2009) four leading theorists in student engagement were named: Astin, Pace, Tinto, and Pascarella. Astin (1993) titled his theory the “input-environment-output” (I-E-O) model. Input refers to student characteristics at the time of entry into college, environment refers to institutional characteristics: curriculum; faculty; residence; financial aid; and student peer groups, while the output is about characteristics of the student after exposure to college. Astin (1993) identifies factors that affect student persistence including living in a campus residence, participating in extracurricular activities, holding a part-time job on campus, attending a four-year college (relevant in the context of CAAT because students may attend more than one two or three year program), identifying with the college or university environment, and frequently interacting with faculty. Factors related to living on campus, holding a part-time job on campus, and participating in extracurricular activities may be less relevant for adult learners. According to Schlossberg, Lynch and Chickering (1989), “adult learners appear to be highly motivated and are perceived as being more involved by faculty, although despite at least half of Astin’s factors do not apply to them” (p. 31).

Pace (1990) conceptualizes the idea of quality of effort. He theorizes that student engagement begins with a students’ background—whether they are full-time, part-time, or transfer status; their efforts and activities; contact with faculty and other students; and the use of facilities. Pace believed that students’ perceptions of the college environment contributed to their perceptions of gains.

Tinto (1987) argues that students are more likely to leave college if they have negative or disconnecting experiences. Students also tend to leave if they feel an absence of interaction. Tinto believed that characteristics such as the student’s background, skills, financial resources,
prior education, intentions, external commitments, interactions with faculty and social systems contribute to positive or negative experiences. The concept of Tinto’s theory parallels Astin’s model of involvement and Pace’s quality of effort theory. Dietsche (1990) uses Tinto’s work to identify four classes of variables that contribute to students dropping out compared to those students that persist. He identified: 1) background variables, such as demographic characteristics and academic history; 2) entry-level variables which include the students’ goal and commitment; 3) interaction variables including the interaction between the student and the institution and their academic and social integration; and 4) outcome variables, which include intent to leave and persistence.

Pascarella’s (1985) model is titled the General Causal Model for Assessing the Effects of Differential Environments on Student Learning and Cognitive Development. He takes into consideration the institution’s structural characteristics and environment. Pascarella identifies five main sets of variables: 1) students’ background and pre-college characteristics; 2) structural and organizational characteristics of the institution; 3) institutional environment; 4) student interactions with faculty and other students and; 5) quality of effort.

Pascarella and Terenzini (2005) examine college conditions and student experiences that influence persistence, including academic performance, academic major, financial aid, interactions with peers, residence, learning communities, general academic and social integration, intercollegiate athletics, and interactions with faculty members.

Grades are not a perfect measure of learning because they tend to reflect a student’s performance relative to other students, versus measuring the attainment of learning (Astin, 1993). However, according to Pascarella and Terenzini (2005), “college grades may well be the single best predictors of student persistence” (p. 396). Studies indicate that good grades reduce
dropout behaviour (DesJardins, Ahlburg, & McCall, 2002). Adult learners may be attending as a means to an end, regardless of grades.

The learner’s academic major has been identified as a factor for persistence. Pascarella and Terenzini (2005) suggest that students in postsecondary schools in the US are majoring in the sciences, mathematics, engineering, business, and health-related professions are more likely to persist than students in the social sciences, humanities, or education (p.424). The reason or causal factors are unclear, but the authors point out that the former majors take more time to complete. Time to complete a major may not be as prevalent of a factor for persistence in the CAAT context because three years is the maximum length of a program (Ontario College, 2018), unless pursuing a Bachelor of Science in Nursing which is a 2+2 model, two years in college and two more years in University. The top five careers identified by Colleges Ontario (2018) for Second Career students (average age 41) are truck drivers, accounting clerks, medical administrative assistants, heavy equipment operators, and community and social service workers. The older student may not be as concerned with the time required to complete a major, but more interested in the potential earning power of the major they have chosen. Financial responsibilities increase based on the length of a program, and therefore for adult learners, finances may be the deciding factor on persistence more so than the academic major. Debt and time can become factors that discourage learners from continuing higher education. Learners who are trying to manage employment, family responsibilities, and studies are forced to split their attention (Pascarella & Terenzini, 2005)

Pascarella and Terenzini (2005) note that the extent to which students become involved in their academic and social systems impacts their decisions to persist in postsecondary education. Astins’ (1984) research on student involvement theory suggests that student time is the most
precious resource. Students' attainment of goals is directly related to the amount of time and effort they can put forth (p. 25). The reality of adult students is time and effort to manage the goal of an education competes with the time and effort required for full/part-time jobs, family, responsibilities, etc. The theory of student involvement “encourages us, as educators, to focus less on our own concerns and more on our students – how motivated they are and how much time and energy they devote to the learning process” (Schlossberg, et al., 1989, p. 30). Schlossberg, et al., speculate that adults are more likely to spend discretionary time on their studies after they have completed their family/employment responsibilities.

Role characteristics is another social variable to consider when discussing adult learners. Adult learners often face competing roles in their lives. Besides being learners, they may be parents of children, caregivers to elderly parents, primary/secondary wage earners, all examples of priorities that adults may have to put ahead of being learners. In addition, the role between faculty and adult learner is different compared to faculty and younger students. Adult learners may perceive faculty more as their equal whereas younger students may view faculty from an authoritarian position (Schlossberg, et al., 1989). Pascarella and Terenzini (2005) state “studies indicate that students’ perception of faculty members’ concern for student development and teaching, as well as their availability to students, have positive and statistically significant effects on persistence, even when controlling for other factors” (p. 417).

Forrest III and Peterson (2006) argue that andragogy could be used in pre-adult education. Knowles (1980) revised his theory that a teacher was either pedagogical or andragogical and identified a spectrum of learning, ranging from subject-centred (pedagogy) to learner-centred (andragogy). Knowles also acknowledges that not all adults are learner-centred and not all children are subject-centred. Parker Palmer (2007), states that,
As the debate swings between the teacher-centred model, with its concern for rigour, and the student-centred model, with its concern for active learning, some of us are torn between the poles…The problem, of course, is that we are caught in yet another either-or…Perhaps there are clues to a synthesis in the image of the community of truth, where the subject ‘sits in the middle and knows.’ Perhaps the classroom should be neither teacher-centred nor student-centred but subject-centred. (p. 118)

Critics of andragogy have said that it excludes gender, cultural, social, and racial variables in adult learners (Merriam, Caffarella & Baumgartner, 2007; Illeris, 2002). According to Schapiro (2003), andragogy does not include, issues of power and social justice, in society and the educational process; the need for critical reflection as a necessary component of an adult learning process; the crucial place of dialogue and discussion as means for learning; and a recognition of multiple ways of knowing and learning (p. 152). Baxter Magolda’s (1992) research of college men and women found that

   men and women did not differ in what they learned, only in how they preferred to go about that learning. Women more often than men used connected procedures and relational strategies to gather and understand information, while men more often than women used separate procedures and autonomous strategies. (cited in MacKeracher, 2004, p. 167)

Table 2 summarizes the differences between pedagogy and andragogy.

   Next, adult education philosophies will be reviewed. The lenses used to review philosophies include the difference between education and training. Barnes (2014) states “Education is all about learning the theory. Training gives you the skills to do something rather than just know about something” (p. 1). Training tends to focus on skills development and aligns
Table 2: *Comparison of the Assumptions of Pedagogy and Andragogy*

<table>
<thead>
<tr>
<th>Role of the learner</th>
<th>Pedagogy</th>
<th>Andragogy</th>
</tr>
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<tbody>
<tr>
<td>The role of the learner is dependent.</td>
<td>The role of the learner is more self-directed, but the movement from dependency to self-directedness occurs at different rates for different persons.</td>
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<table>
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<tr>
<th>Role of the teacher</th>
<th>Pedagogy</th>
<th>Andragogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teacher is expected to take full responsibility for determining what, when and how to learn, including whether it has been learned.</td>
<td>The teacher has a responsibility to encourage and nurture this movement towards self-directedness.</td>
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<table>
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<tr>
<th>Role of the learner’s previous experience</th>
<th>Pedagogy</th>
<th>Andragogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The experience learners bring to a learning situation is of little worth. The experience from which learners will gain the most is that of the teacher, the textbook writer, the audiovisual aid producer, and other experts.</td>
<td>As people grow and develop, they accumulate an increasing reservoir of experience that they want to use in learning. People attach more meaning to learnings they gain from experience than those they acquire passively.</td>
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<thead>
<tr>
<th>Primary technique of delivery</th>
<th>Pedagogy</th>
<th>Andragogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmittal techniques – lecture, assigned reading, AV presentations.</td>
<td>Experiential techniques – laboratory experiments, discussion, problem-solving cases, simulation exercises, field experience, and the like.</td>
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<tr>
<th>Readiness to learn</th>
<th>Pedagogy</th>
<th>Andragogy</th>
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<tr>
<td>People are ready to learn whatever society says they ought to learn. Most people of the same age are ready to learn the same things.</td>
<td>People become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks or problems.</td>
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<tr>
<th>How learning should be organized</th>
<th>Pedagogy</th>
<th>Andragogy</th>
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<tr>
<td>Learning should be organized into a reasonably standardized curriculum, with a uniform step-by-step progression for all learners.</td>
<td>Learning should be organized around life-application categories and sequenced according to the learners’ readiness to learn.</td>
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<th>Orientation of learning</th>
<th>Pedagogy</th>
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<td>Learners see education as a process of acquiring subject-matter content, most of which they understand will be useful only at a later time in life.</td>
<td>Learners see education as a process of developing increased competence to achieve their full potential in life. Learners want to be able to apply whatever knowledge and skill they gain today to living more effectively tomorrow. People are performance-centred in their orientation to learning.</td>
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<th>Organization of curriculum</th>
<th>Pedagogy</th>
<th>Andragogy</th>
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<tbody>
<tr>
<td>Organized into subject matter units which follow the logic of the subject from simple to complex.</td>
<td>Should be organized around competency/development categories.</td>
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*Adapted from: A single conversation with a wise man is better than ten years of study: A model for testing methodologies for pedagogy or andragogy. Taylor and Kroth (2009).*
with the mandate of the CAAT for vocational training. Education on the other hand, focuses on a deeper understanding of the principles and options that ground the implementation of the skills learned.

**Philosophies of Adult Education**

**Liberal/classical perspective.** A Liberal education is also referred to as classical humanism, perennialism, rational humanism, and general education (Elias & Merriam, 2005). The liberal perspective is the oldest educational philosophy and is a descendant of classical philosophy. The first philosophers of this theory were Socrates, Plato, and Aristotle. These philosophers “proposed an intellectual education for statesmen and politicians” (Elias & Merriam, 2005, p. 18). Historically, higher education was from the liberalist perspective, and it was only accessible to individuals who could afford to pay, who could focus their time solely on their studies and who sought to lead and serve the nation (Elias & Merriam, 2005). Proponents defined the intention of liberal education as a means to develop critically reflective learners who could speak from multiple sources of knowledge, were advocates of lifelong learning, valued intellectual discourse and were committed to the study of classic works (Elias & Merriam, 2005; Maehl, 2004).

In 1965, the Honourable William G. Davis (then Minister of Education in Canada) introduced Bill 153, with the intent to educate and train individuals in specific fields to create an educated and diversified workforce and to give those students an opportunity for applied education (Davis, 1991). Learning, from the liberal perspective is not seen as a means to an end, such as career development, but rather as a lifelong commitment to acquiring vast amounts of knowledge. Content is of primary concern, and less concern is given to the utilitarian direction of education.
Hight (1950), believes that all people must be liberally educated because people are teachers in their speech, their counsel of friends and in dealing with others. A liberal education emphasizes literature, social, intellectual history, and considers religion and the humanities superior to science. The liberally educated student seeks knowledge, and the teacher is the expert that transmits knowledge. Darkenwald and Merriam (1982) note that “it is the role of educators to identify what the learners do and do not know and to determine learning goals. The learners, because they lack knowledge in this new area, are not capable of setting goals” (p. 45). Elias and Merriam (2005) state, “liberal education produces a person who is literate in the broadest sense – intellectually, morally, spiritually and aesthetically” (p. 31).

Elias and Merriam (2005) emphasize that “people continue to search for truth, desire to develop their moral characters, strive for spiritual and religious visions, and seek the beautiful in life and nature. As long as human beings do these things, the liberal tradition in education will be a potent force” (p. 49). Moody, (as cited in Elias & Merriam, 2005) argue that liberal studies are well suited to older adults because “In the fields of philosophy, and literature there are elements that can only be grasped in all their depth and richness by individuals who bring a lifetime of personal experience to their study” (p. 47).

Advocates of behaviourist, progressive and/or humanistic theories value the development of critical thinking and the concept of lifelong learning as seen in liberal education (Gross, 1977; Knowles, 1990, 1996; Knowles, Holton & Swanson, 1998, 2005, 2011; Maehl, 2000). However, “liberal educators today view with suspicion efforts of behaviorists to modify behavior through reinforcement and punishment, as well as the
efforts of some educators to use emotional strategies to bring about value commitments” (Elias and Merriam, 2005, p. 29).

**Behavioural perspective.** The behavioural philosophy of adult education has its roots in the field of psychology. According to Elias and Merriam (2005) John B. Watson, founder of behaviourism in the 1920s, focused his research on overt, observable behaviour, and believed that all organisms, animal or human, learn from environmental conditioning. Watson proved that the environment could produce desired/positive behaviour or reduce undesired/negative behaviour. Watson insisted that

the way to understand humans was through observing their behavior, not exploring the inner, unobservable recesses of mind and emotion…all behavior could be explained in terms of conditioning…he could take any healthy infant and through environmental conditioning produce anything from a doctor to a beggar. (p. 86)

Thorndike (1932) studied both animal and human intelligence. He explained learning as a process of association. He developed the “S-R” theory of learning. This theory promoted that organisms remember satisfactory responses to the stimulus (law of effect) and repeating the stimulus strengthens the bond between the stimulus and response (law of exercise). A pleasurable bond occurs if the organism is ready which maximizes learning (law of readiness). He believed that human nature is purely mechanical, and these connections are stamped into the human brain. Knowles, Holton, and Swanson (1998) state: “attention is maintained, and appropriate S-R connections are strengthened through the precise application of rewards toward the goals set by the teacher” (p. 75). These authors believe that Thorndike saw teaching as the “control of learning by the management of reward…the teacher is not primarily concerned with
internal states of the organism, but with structuring the situation so that rewards will operate to strengthen desired responses” (p. 75).

Skinner (1938) built on Watson’s themes with his theory of conditioning. He believed that “their environment, the conditions of which can be studied, specified and manipulated, controls humans. An individual's behaviour is determined by the events experienced in an objective environment” (Elias & Merriam, 2005, p. 88). Skinner believed that learning happens based on the strength, frequency and reinforcement of stimulus. He coined the terms “classical conditioning” and “operant conditioning.” Classical conditioning results in responses that are reflexive and therefore involuntary (i.e., salivating when seeing food). Operant conditioning results in responses that are manipulated by the environment. When responses are reinforced, the bond between the stimulus and the response solidifies. Schedules of reinforcement are significant in Skinner's theory of conditioning. Reinforcements can be provided every time the desired behaviour is demonstrated (continuous), after a certain number of times the desired behaviour is exhibited (fixed ratio), during timed intervals (fixed interval) or random intervals that are not timed or numbered (variable schedules). Shaping reinforces the behaviour by continually rewarding the behaviour as it moves towards the desired outcome. Adverse stimuli are unpleasant or painful and result in a decreased probability of the behaviour occurring again. Reinforcements are not always extrinsic; sometimes the behaviour itself is the reward.

Skinner stated in *The Technology of Teaching* (1968), that humans do learn without being taught, but discovery is not education. He specified that “it is dangerous to suggest to the student that it is beneath his dignity to learn what others already know…it is equally dangerous to forego teaching important facts and principles in order to give the student a chance to discover them for himself” (p. 110). Skinner believed that personal freedom was an illusion and that “[m]an's
struggle for freedom is not due to a will to be free, but to certain behavioral processes characteristic of the human organism, the chief effect of which is the avoidance of or escape from the so-called ‘aversive' features of the environment” (Skinner, 1971, p. 42). Kolesnik (1975) states that “the task of parents and professional educators and society at large, according to Skinner, is to define the kinds of behavior wanted in their societies and to produce people who will behave in those ways” (p. 106).

Ralph Tyler (1949) bases his model of curriculum development and instruction on changing the behavioural patterns of people. He identifies a four-step generic model for planning educational programs. In step one, every educational program should have clearly defined purposes. These purposes can be elicited from many different sources including, the learners, society and subject specialists. In step two, objectives that state the specific changes to take place in students are identified. According to Tyler, the expectation of learning is to bring about specific changes in students’ behaviours. In the third step, the learning experiences facilitate the attainment of identified objectives. Tyler suggests that the role of the teacher is to manipulate the environment by setting up situations that will evoke the desired behaviour. He also indicated that learning experiences must reinforce each other. Tyler identifies three criteria for organizing a learning experience: 1) continuously providing chances to experience elements, 2) sequentially building on the preceding experience to increase learner’s depth and breadth of understanding, and 3) integration of the learning so that it can be united into the learner's behaviour. The fourth and final step in Tyler's model is evaluation. He stresses that evaluation is based upon the educational objectives that were identified for the desired behavioural change (Elias and Merriam, 2005, pp. 106-107). Today we see Tyler's influence in the community college's design of curriculum and instructional methodology. Elias and Merriam (2005) describe the impact of
behaviourism on education stating that “no other system of psychology has had as much impact on general and adult education, or had its principles be the cause of as much debate as behaviorism” (p. 83). Maehl (2000) states that the behavioural perspective of adult education is “based on scientific management of learning to produce specific modification in behavior” and evidenced in the classroom through “definition of objectives for learning, controlling the learning process and reinforcement of activities” (p. 32).

There are many debates on the elements of behaviourism. However, core concepts are seen today in education. Elias and Merriam (2005) suggest that teachers follow these ideological themes by identifying consequences, recognizing the automaticity and immediacy of expected behaviours, defining relevant criteria, coordinating the frequency of reinforcement activities, breaking content into small meaningful steps, preparing for the unplanned lack of response to positive reinforcement and creating learning contracts between teacher and student (p. 88).

The role of student and teacher is very distinct in behavioural adult education. Elias and Merriam (2005) note that the student is actively involved in learning, practicing new behaviour and receiving feedback. The environment very much influences student success. The teacher is the manager, predictor, and controller of the environment. The behaviour paradigm “sets before teachers, aims, objectives, and criteria which are standard and fixed” (p. 110). Darkenwald and Merriam (1982) identifies three components in behaviourism: 1) relevant conditions/stimuli in which a learner is expected to perform; 2) the expected behaviour including a general reference to the product of the behaviour; and 3) descriptive criteria that judges acceptable/unacceptable or successful or unsuccessful (p. 66). These authors state that “although there are some differences in emphasis among the proponents of behaviorism…behaviorists have sought to discover general principles that explain human learning…through controlled laboratory experiments, behaviorists
observe an organism's overt behavior and attempt to explain it in terms of external environmental contingencies rather than internal causes of action” (p. 101).

**Progressive perspective.** Progressive education was a response to social changes caused by urbanization and industrialization in the early decades of the twentieth century. Severe social, political and economic upheaval resulted in education for democracy (Darkenwald & Merriam, 1982). Elias and Merriam (2005) note that “educators who proposed new ways of seeking and applying knowledge challenged the traditional liberal education of the day. Reason, experience and feeling began to replace tradition, faith and authority as the chief ways of arriving at truth and value” (p. 52). Bergevin (1967) states, “continuing education of adults was essential in preserving and enhancing a democratic way of life…it was a necessary built-in requirement of a society emerging from the control by the few to control by the many” (p. 35). Maehl (2000) describes the progressive perspective of adult education as follows: “this concept of adult education is an outgrowth of the progressive movement linking politics, social reform and education” (p. 32). Progressive adult education is founded on the belief that education is a means to social, economic or political change. Lindeman (as cited in Darkenwald & Merriam, 1982) believes that education should not be just used to cope with change but should contribute to social action.

Elias and Merriam (1995) describe John Dewey's promotion of progressive ideas simply as “people engaged in joint activity to solve their common problems” (p. 47). Lindeman (1961) saw learning as lifelong; it helps adults over their lifespan respond to situational needs. He described learning as experiential and building on knowledge, and he rejected the concept of learning being terminal.
Elias and Merriam (2005) drawing from Dewey offer the five principles of progressive adult education:

1. A broadened view of education - Education is not restricted to school but includes activities from the family, workplace, school, church and community. “Education is extensive… the school is just one agency among many responsible for transmitting culture” (p. 61).

2. A new focal point in education - With a broadened view of education comes new focus – the learner. “Progressives in education attempted to make use of the interests, needs, and desires of learners in forging educational experiences” (p. 64).

3. A new educational methodology - The progressives do not support rigid methods of assigning, studying and reciting traditional or liberal education. They believe that the preferred methodology is from a “problem-solving” position. A problem to be solved is clarified, ideas or hypothesis about the problem are generated, and finally, testing of ideas or hypothesis is implemented to solve the problem (pp. 65-66).

4. A changed relationship between teachers and learners - A broadened view, new focal point, and new educational methodology leads to a changed relationship between teachers and learners. Learning is something that students do for themselves. The teacher provides a setting that is conducive to learning and by doing so, becomes a learner too. “The teacher’s responsibility is to organize, stimulate, instigate, and evaluate the highly complex process of education” (p. 68).

5. Education as an instrument of social change - Progressives believe that education should not be designed to prepare learners to merely fit into society but also to change society. Education is not just about individuality and social consciousness but also about fostering
creativity and stability. “For the progressives, education was to be directed at fostering creativity and stability, as well as individuality and social consciousness” (p. 72).

Lindeman (as cited in Elias & Merriam, 2005) states that “[t]he teacher finds a new function. He is no longer the oracle who speaks from the platform of authority, but rather the guide, the pointer-out, who also participates in proportion to the vitality and relevancy of his facts and experiences” (p. 70). Teachers of the progressive perspective are helpers, partners, and guides in learning. They promote but do not direct learning through experiential tasks, group activities and discussions, individualized learning experiences, team teaching, and self-directed learning (Elias & Merriam, 1995).

**Humanistic perspective.** The humanistic perspective began in protest against behaviourists. Humanist educators argued that “a person’s behaviour is not determined by external forces or internal urges; rather, behaviour is the consequence of human choices which individuals can freely exercise” (Elias & Merriam, 2005, p. 120). The humanist perspective is founded in humanistic psychology and is influenced by Abraham Maslow and Carl Rogers (Elias & Merriam, 2005). Maslow (1954) believed that humans are truly free and autonomous to make their own choices on how to behave. By nurturing each person's special talents and skills, the potential for growth is unlimited. Individuality or uniqueness is celebrated. The heart of the self is unique and unlike any other person. He believed that enhancement of the self is possible through actualizing individual potentialities. Maslow advocated that all adults strive towards growth, self-actualization, or self-transcendence. Similar to Maslow's self-actualization is Rogers’ (1969) description of the fully functioning individual. Rogers describes the purpose of education as promoting personal growth and development. He stated that the person:
is able to experience all of his feelings and is afraid of none of his feelings; he is his own sifter of evidence but is open to evidence from all sources; he is completely engaged in the process of being and becoming himself, and thus discovers that he is soundly and realistically social; he lives completely in this moment but learns that this is the soundest living of all time. He is a fully functioning organism, and because of awareness of himself, which flows freely and through his experiences, he is a fully functioning person. (p. 288)

Wilson and Hayes (2000) also believe that personal growth is a goal of adult learning. Humanists believe that humans are naturally and inherently good and if given a loving environment and freedom from judgment to learn, humans will grow and benefit themselves and society in general.

The role of adult educators from the humanistic perspective is to facilitate learning for students that will maximize their potential for growth in an environment that is trusting and cooperative. The assumption is that learners are highly motivated, self-directed and assume responsibility for their learning. The teacher does not just provide information but instead creates conditions for learning to take place. Teachers trust students to be responsible for their learning, and they respect and utilize students’ experiences in the learning environment. As stated in Elias and Merriam (2005), “[a]n adult instructor dealing with adult students can hardly ignore the wealth and variety of individual experiences as a foundation for facilitating learning” (p. 127). Teaching from a prescribed curriculum is not the goal of humanistic educators. They are facilitators, helpers and partners in the learning process.

Humanistic learning theory is sometimes substituted for the constructivism learning theory. According to Merriam and Caffarella (1999), “constructivist stance
maintains that learning is a process of constructing meaning; it is how people make sense of their experience” (p. 260). When defining social constructivism, Creswell (2009) states, “subjective meanings are negotiated socially and historically. They are not simply imprinted on individuals but are formed through interaction with others (hence social constructivism) and through historical and cultural norms that operate in individuals’ lives” (p. 8).

Learning is a highly personalized experience where the learner defines the meaning and the importance of educational activities. It is the intellectual and emotional development of the total person while protecting their dignity, autonomy, freedom and self-direction (Elias & Merriam, 1995; Maehl, 2000). The humanistic approach is closely tied to the belief that adult learners are self-directed and able to define their own learning goals (Brookfield, 1986; Knowles, 1990; Tennant, 1997). Humanists assume that the student is naturally learner-centred and that learner motivation and evaluation are primarily internal processes (Cranton, 1996). The humanistic approach assumes that adult learners come to learning voluntarily, are democratic, and have no presumption that knowledge is limited (Elias & Merriam, 2005).

Humanist and behaviourist perspectives are very divergent. Behaviourists believe that behaviour is learned and a result of the environment. Humanists believe that humans are free to choose how they behave. They can be proactive or reactive, they can influence their situation, and they can change. “Human beings are capable of making significant personal choice within the constraints imposed by heredity, personal history, and environment” (Elias & Merriam, 2005, p. 120). Behaviourists view learning as manipulating external stimuli to change behaviour. Humanists view learning as reacting to new internal awareness (Elias & Merriam, 2005). Behavioural research uses rigorous scientific methods, precise language and objectivity while
humanist research is based on intuition, understanding and subjective experience. Behaviourists are concerned with observable behaviour and are looking for changes in overt behaviour. Humanists focus effort on internal emotions and insight into problem-solving. Behaviourists manipulate people and/or the environment to produce a predetermined desired effect. Humanists bring awareness to individual human characteristics and possibilities. A behaviourist will argue that behaviour is the result of selective perception; a humanist will counter that argument stating that perception to stimuli is an individual experience and differs between people (Elias & Merriam, 2005). The critical distinction between humanistic and progressive philosophy is the aim of education. Humanist advocate that learners are self-actualizing through maturation and growth. Progressive educators also advocate maturation and growth but added the vital role of social action.

**Radical perspective.** The radical perspective is concerned with empowering social, economic or political reform. The term radical implies challenging the status quo however proponents of this philosophy have not been as successful in the “liberating, empowering and transformative aspects” of that notion (Elias & Merriam, 2005, p. 147). The radical philosophy espouses that governments use education as a means of forcing compliance, ignorance, or homogeneity (Freire, 1996; Maehl, 2000). Cranton (1996) suggests that radical adult education aims to empower people who are oppressed by constraints placed upon them in their culture. The goal is to liberate silent members of society not the educational needs of the individual. Wilson and Hayes (2000) state that the primary concern is “group consciousness raising, community action, and social change” (p. 74).

Radical philosophers of adult education are also concerned with gender and race issues. An example of this belief is a study by Wilson and Hayes (2005) that identifies much of the
funding and prioritization of projects is based on male-led research and that current research policies oppress women and will eventually harm women's health. Racial concerns continue to impact society and educational opportunities as well. Davis-Manigaulte, Yorks and Kasl (2006) note the “whiteness” in their studies and the focus on improving underrepresented sectors of society in educational philosophy.

Brazilian educator Paulo Freire (1970) is probably the most well-known proponent of the radical perspective. He rejected the idea that knowledge was a gift bestowed on students by teachers. He was offended that students were given a ready-made view of social reality especially when it glaringly contradicted their lived experience. Elias and Merriam (2005) note that,

Freire's dialogic education is problem-posing in that it begins with an investigation of the cultural situation of the learners. This cultural situation provides the curriculum of problems that are to be discussed in the educational process…teachers and learners arrive at a decision to become involved in concrete actions to solve these problems. (p. 159)

Freire believed that the Brazilian government was intent on maintaining a class of the poorest. He was highly critical of the national education system that transmitted only information that was at the discretion of the teachers. He advocated that students were not allowed access to knowledge that would raise their consciousness (Elias & Merriam, 2005). Freire’s books on Pedagogy of the Oppressed and Cultural Action for Freedom were published in 1971 after he was jailed for attempting to spread “subversive and revolutionary ideas” (Elias & Merriam, 1995, p. 146).

Most of the philosophies attempt to advocate within a society’s value system. Progressives and humanists attempt to utilize education to reform society while radicals want
profound changes in society. According to Elias and Merriam (2005), the radical position stems from three primary traditions. First, the anarchist tradition, that views education as destructive to individual autonomy. Second, the Marxist tradition, that views education, especially schooling, as a form of alienation in a modern industrial world. Last, the third tradition that emphasizes changing personality traits, family structures, and child-rearing practices as the first step in radical education. The institutionalization of adult education has drawn much attention to anarchist educators. Marxist educators are being criticized for their work with adults and radicals want educators to consider the freedom of the learner from repressive influences in society, including the family structure (Elias & Merriam, 2005). In the current context of Reconciliation, I suggest that it would be valuable to explore the role of residential schools in Canada as another means of social control and manipulation. Although this was beyond the scope of my study, I have included this in my discussion of implications for further research in chapter six.

Brookfield (2005) admits that many theorists have talked about radicalism in adult learning but that the field of adult education still resists this theory. He advocates a theory that would challenge ideology, recognize hegemony and unmask power (Elias & Merriam, 2005). Elias and Merriam (1995) note that the radical view is positive in the willingness to identify and challenge conventional thoughts and promote change in the status quo.

In summary, when planning programs for adults, many of the core concepts from the different adult education philosophies need to be incorporated into the curriculum. Knowledge for the sake of knowing, content-based learning, and theorizing (all of which tend to be experienced in postsecondary institutions) are approaches to adult learning valued from the liberal perspective. The requirements for learning objectives, needs assessment and accountability are evidence of the influence of the behavioural perspective. More adult learning
institutions are recognizing the importance of providing an opportunity for experiential learning, including the knowledge and experiences that learners bring to the learning environment. This inclusion supports a progressive approach to adult learning. Learner involvement in the assessment of learning and a focus on the learning environment itself is currently being examined closer in community colleges. This learner-centred approach supports a humanistic perspective. Finally, as we progress in adult education, the status of women, race, empowerment, challenging power structures and our ideology will also progress, the Radical perspective will continue to gain momentum.

Zinn (cited in Galbraith, 2004) states “beliefs about education do provide some basis for selecting instructional content, establishing teaching/learning objectives, selecting and/or developing instructional materials, interacting with learners, and evaluating educational outcomes” (p. 41). The next section compares teacher and learner-centred teaching styles and discusses the objectives of a learning-centred institution.

**Teaching Styles**

Teaching styles are the range of behaviours and decisions teachers make during the learning process. Conti (cited in Galbraith, 2004) describes teaching styles as “the distinct qualities displayed by a teacher that are persistent from situation to situation regardless of the content” (pp. 76-77). Teaching style incorporates the teacher’s beliefs about teaching, their educational philosophy, and their approach to teaching (Zinn, 1983; Conti, 1989). Teaching style is not the same as teaching method. Conti (1989) describes teaching style as “the range of behaviors in which a teacher can operate comfortably according to a certain value system” (p. 4). It is broader than an isolated strategy a teacher may use to meet a learning outcome. Teaching style is “the way in which the teacher consistently functions inside this range (behaviors within a
certain value system) defines the teacher’s teaching style” (Fries, 2012, p. 21). Based on the literature, the two commonly accepted types of teaching styles are; teacher-centred and learner-centred (Conti, 1998; Galbraith, 2004; Fries, 2012; Huba & Freed, 2000; Cranton, 2000; Weimer, 2002; Kauchak & Eggen, 2011).

Teacher-centred. Because of the Ontario Colleges of Applied Arts and Technology mandate for vocationally relevant programming, Ontario colleges frequently hire industry experts. Being an industry expert does not mean that one is automatically qualified to teach adult learners. If the only frame of reference an industry expert has on “how to teach” is based on their experience as learners, they may have a teacher-centred approach. Gardiner (1998) recognized that it is common for teachers to teach based on what they are most familiar with, often that is teacher-centred teaching style.

As discussed, pedagogy can be thought of as an instructional/teacher-centred approach to learning that assumes the learner has limited experience and is dependent upon the teacher to transfer knowledge. Kauchak & Eggen (2008) state, “historically, classroom instruction was teacher-centred which means that teachers carefully specify goals, present the content to be learned, and then direct learning activities” (p. 405). Rogers (1993) believes that teachers come to the learning environment with an agenda (students are to achieve learning outcomes), content (subject expertise) and process (teaching). He argues that teachers believe they know what learners need to know and that they have teaching methods that will redraw learners’ maps of reality (i.e., direct transformational learning). Rogers describes the teacher-centred learning environment as one where the teacher is solely in control.

Teacher-centred teaching styles are consistent with the adult learning philosophies of liberal education and behaviourism (Elias & Merriam, 1995). In liberal adult education the
teacher is “the expert; transmitter of knowledge; authoritative; clearly directs the learning
process” and methods used are “lecture; dialectic; study groups; contemplation; critical reading
teacher as “a sage who imparts universal truths. Curriculum content exposes students to the time-
honored truths of society” (p. 50). In behavioural adult education, the primary objective of the
teacher is to change the behaviour of the learner, the teacher exclusively designs and implements
the curriculum with no input from learners (Jones and Brader-Araje, 2002; Daley, 2003).
Methods teachers use include “programmed instruction; contract learning; criterion-referenced
testing; computer-aided instruction; skill training” (cited in Galbraith, 2004, p. 73). The
behaviourist approach rewards the learner (Ormrod, 2005) as opposed to building on the internal
thinking of the learner (Merriam & Caffarella, 1999).

Weimer (2002) identified six predominant areas in the teacher-centred approach that
change when teaching is learner-centred: balance of power; function of content; role of the
teacher; responsibility of the learning; purpose and processes of evaluation. Liu, Qiao and Liu
(2006) report that teacher-centred teaching styles still dominant practice regardless of learner-
centred advocacy in higher education.

In summary, the role of the teacher in the teacher-centred teaching style is to determine
goals, direct learning; the role of the student is passive recipient, vessels to be filled with
knowledge; the environment is formal, autocratic and highly structured; teaching methods
include lecture, socratic, practice and feedback, direct instruction; and learner interactions with
faculty are managed by faculty (Huba & Freed, 2000). The perceptions of faculty attitudes and
beliefs of their role (instructor, teacher, professor, facilitator) were outside of the scope of my
study but is an implication for future research.
Learner-centred. According to the Pew Research Centre (2019), millennials were born between 1981 and 1996 (22-37 year olds) and constitute 60% of the current student demographic attending college (Colleges Ontario, 2018). In my review of the scholarly literature on adult learning that is the focus of this study, learner-centred practices are the preferred approach (e.g., Galbraith, 2004; Cranton, 2006; Knowles, Holton & Swanson, 2011; Merriam & Bierema, 2014). Although true of many generations of learners, Mann & Robinson (2009) specifically point out that, based on their research, millennials generally seek a different teaching style than listening to lectures. According to Robb (2013), technology and an informal approach to learning are the preferred way of learning for millennials and, faculty who recognize this are more apt to have engaged and motivated students. Mangold (2007), and McCurry and Martins (2010) identify that these adult learners prefer activities instead of passive instruction. Skiba and Barton (2006) agree and note that faculty need to adjust their pedagogy to adapt to the different learning needs of millennial learners who are the majority of learners in Ontario Colleges according to the Pew Research Centre (2019). Ahmed (2013) believes that “students need to have ownership of their own learning, contribute to the design of curriculum, and responsibility for some levels of instruction” (p. 24). McClenney (1998) agrees that the “traditional model of lone faculty member lecturing to students sitting in rows in an isolated classroom was never particularly effective educationally” (p. 5).

Cannon and Newble (2000) define student-centred learning as follows:

Student-centred learning is a broad term that is used to describe ways of thinking about teaching and learning that emphasize student responsibility and activity in learning rather than content or what the teachers are doing. Essentially, student-centred learning has student responsibility and activity at its heart, in contrast to a strong emphasis on teacher-
control and coverage of academic content found in much conventional, didactic teaching.

(pp. 16-17)

According to these scholars, surface learning is the consequence when teachers believe their job is to transmit information to learners and, learner-centred teachers are more interested in the quality of learning outcomes from student activity as opposed to subject coverage.

According to Weimer (2002) the last few decades have seen a paradigm shift in teaching styles from teacher-centred to learner-centred. Weimer asserts that faculty roles change, and they become facilitators that guide learners in the following ways:

1. Teachers gradually do less of the learning tasks (generating examples, asking the questions, answering the questions, summarizing the discussions, solving problems) and students do more.

2. Teachers do less telling and let students do more discovering. Teachers need to let go of wanting to tell students what to learn, how to learn, when to learn, why to learn.

3. Teachers do more designing of activities and assignments that become the vehicles for learning to occur.

4. Teachers model how to learn by learning alongside students; “making sure we are always learning new things and not just more content in our fields” (p. 87).

5. Teachers do more to support student learning from and with each other; use the potential value of working and learning from each other.

6. Teachers create and maintain conducive learning conditions that motivate students to learn; “motivation is not something a teacher can force or require, but research has shown that certain kinds of learning climates foster it” (p. 90).
7. Teachers use feedback to maximize learning potential. Grading is used to give constructive feedback to learners. (pp. 82-91)

Huba and Freed (2000) identify the following hallmarks of learner-centred teaching: learners are actively involved and receive feedback; learners apply knowledge to enduring, and emerging issues and problems; learners integrate discipline-based knowledge and general skills; learners understand the characteristics of excellent work; learners become increasingly sophisticated learners and knowers; professors coach and facilitate, intertwining teaching and assessing; professors reveal that they are learners too, and; learning is interpersonal, and all learners – students and professors – are respected and valued (p. 33).

Brandes and Ginnis’s (1986) formative work in learning-centred identify the following principles: the learner has full responsibility for their own learning; subject matter must have relevance and meaning for the learner; involvement and participation are necessary for learning; relationship between learners is essential and; the teacher should be a facilitator and resource person (pp. 12-15). McClenney (1998) believes that in a learner-centred environment, faculty will become more “human” in their interactions with students by mentoring, managing a range of learning resources, facilitating reflection, sharing wisdom and managing the process of education (p.5).

Learner-centred teaching styles are consistent with the adult learning philosophies of progressive, humanistic, and radical perspectives (Elias & Merriam, 1995). In progressive adult education the teacher is “the organizer; guides learning through experiences that are educative; stimulates, instigates and evaluates learning process” and methods used are “problem solving; experience-based education; democratic ideals; lifelong learning; pragmatic knowledge; needs assessment; social responsibility” (cited in Galbraith, 2004, p. 74).
According to Zinn (2007) the teacher’s role in progressive adult education is to educate “people to live responsibly and resolve problems cooperatively within a democratic society” (p.15). Strout (2015) states that “knowledge is actively constructed in a progressive educational philosophy and the educator is considered a guide who promotes communities within the classroom” (p. 38).

In humanistic adult learning philosophy, the teacher is “facilitator; helper; partner; promotes but does not direct learning” and methods used are “experiential learning; group tasks; group discussion; team teaching; self-directed learning; individualized learning; discovery method” (cited in Galbraith, 2004, p. 74). Kumar (2015) describes experiential learning, cooperation and individuality as key components in humanistic adult learning. Elias and Merriam (2005) describe the purpose within the humanistic orientation is to enhance growth and personal development for the good of society.

Teachers who are in the radical adult education philosophy camp are called “coordinator; suggests but does not determine direction for learning; equality between teacher and learner” and the methods they use include “dialogue; problem posing; critical reflection; maximum interaction; discussion groups; exposure to media and people in real life situations” (cited in Galbraith, 2004, p. 74). Fries (2012) states that “education’s purpose is to bring about, through education, fundamental social political and economic changes in society” and that according to Kauchak and Eggen, (2005) “the educational focus is recognition that society needs to be reconstructed and that education must take the lead in that reconstruction” (p. 18). Cranton (2000) states that “no matter what or where we teach, we do need to know what it is we hope people will learn, prepare a sequence or structure for working toward that learning, provide some appropriate and effective learning strategies and experiences and include reliable ways of
knowing if and when learning occurs” (p. 3).

In summary, the role of the teacher in the learner-centred teaching style is to serve as a guide, to use learner's prior experiences in learning, and to be responsive to learners’ needs. The role of the student is active and engaged partners in learning; the environment is democratic, self-regulated, problem-centred, collaborative; teaching methods include cooperative learning, problem-based learning and inquiry; and learner interactions with faculty are mutually agreed upon (Huba & Freed, 2000).

Learning-centred institutions. Confusion between the meaning of learning-centred compared to learner-centred is echoed in the literature. Some authors used these terms interchangeably; some authors are very opinionated on the distinction between the terms, and some authors advocate that the difference is simply the vocabulary used to describe the same characteristics. Bosch et al. (2008) state, “clarifying the underlying confusion about the meaning of the learner/learning-centred college has no urgency at most institutions because addressing the issue may be perceived as having no practical consequences” (p. 84). These authors also identify that Barr and Tagg (1995), McDaniel, Felder, Gordon, Hrutka, and Quinn (2000) and O'Banion (2000), scholars in the field of postsecondary learning, focus on student learning outcomes, regardless of the labels used. Kember and Kwan (2000) conducted a study at Hong Kong Polytechnic University and conclude that “faculty members characterize learning-centred approaches as those that give attention to student motivation, discovery learning strategies, a holistic view of students, assessment choices, remedial opportunities, and respect for students' prior experience – many of the teaching characteristics that emerged in our study” (cited in Bosch, et al, 2008, p. 96).
Candela, Dalley and Benzel-Lindley (2006) indicate that one of the most important tasks for learning-centred educators is to identify learning outcomes. Candela et al. state that “learning outcomes are used to design curricula, develop learning activities, document student learning and evaluate program effectiveness” (p. 62). Koester, Hellendbrand and Piper (2005) identify sixteen principles of a learning-centred university that included, “a learning-centred university establishes learning outcomes for each of its programs, based on community needs, academic requirements, and previous assessments of learning outcomes” (p. 11). The university context differs from the college context, in that the primary responsibility of the faculty at college is to teach not to do research (Cohen & Brawer, 2003). Although the American postsecondary system differs from the Canadian college system, the Ontario CAAT's as mandated by the Ministry of Training, Colleges and Universities agree, identifying that students come first and will be provided with the best possible learning experience.

O’Banion (1997) argues that community colleges need a new model of education—a model that incorporates the best practices and philosophies of their past with the expanding base of new knowledge about learning and technology. Barr and Tagg (1995) describe a paradigm shift that involves a transition along the continuum from the “instruction paradigm” to the “learning paradigm” in which the “mission of the college is to produce learning” (p. 15). These authors describe characteristics and requirements for the learning paradigm such as: elicit student discovery; create powerful learning environments; judge success by the quality of student learning; collaboration; holistic learning and; varied learning experiences (p. 16). Levinson (2011) identifies the following principles that guide the learning college: the focus is on student learning; students are engaged in the learning process; there are many options for student learning; students are encouraged to participate in collaborative learning activities; the teacher is
defined as a coach; assessment is used as a means to demonstrate the achievement of learning outcomes (p. 102). Hubball and Burt (2004), state that “learning-centred curricula place emphases on learning communities, curriculum integration, diverse pedagogies and clearly defined learning outcomes” (p. 52). These scholars identify that “learning-centred curricula require a community of students/learners to be able to make choices within a responsive (that is, to diverse learners’ needs, critical teaching and learning issues and available resources) carefully structured, and guided learning environment” (p. 53).

In summary, the distinction between learning/learner-centred continues to be elusive. The intention of my study was not to debate the differences. Parallel characteristics exist, such as student engagement, options for learning, collaborative learning, teacher as the coach, among others. These features (and others) have been identified by adult learners as their preferred approach to learning, regardless of terminology.

The next section discusses the espoused theories and theories-in-action, and finally, the Principles of Adult Learning Scale (PALS) assessment tool will be reviewed.

**Espoused Theories and Theories-in-Action**

What one says and what one does, may or may not be congruent. Argyris and Schön (1974) pioneered the concept of theories of action. Theories of action are the repertoire of concepts, schemas and strategies that inform action to bring about desired outcomes (Argyris, Putnam and Smith, 1985). According to Argyris and Schön, theories of action exist on two levels; one's espoused theory (what one says) and one's theory-in-use (what one does). Argyris and Schön describe espoused theory as the values and beliefs upon which people believe their behaviour is based. For example, when a teacher is asked what their teaching style is, they are most likely responding based on what they believe their teaching style is (espoused theory).
Theory-in-use is described as “the theory that underpins action and determines behaviour…theory in use is the set of values suggested by action or the maps people use to take action, and there can be incongruence between espoused theory and theory-in-use” (Jones, 2009, p. 177). Lehman (2003) describes theories-in-use as “a person's assumptions, values and beliefs that she or he actually uses in practice” (p. 69). According to Bereiter and Scardamalia (1992), theories-in-use are harder to describe because they are unspoken.

Argyris and Schön (1974) contend that identifying theory-in-use can be difficult because some individuals may not be thinking about how they are behaving in any given moment. These theorists believe that an accurate depiction of what one does relies on observed behaviour, “an atmosphere that allows the individual to reveal his behavior to himself and others with minimal conscious distortion” (p. 39). The challenge is that observation of one's behaviour may result in distortion of behaviour or a distorted reflection of the behaviour. Astley (1985) writes, “our knowledge of objective reality is subjectively constructed” (p. 509). Argyris and Schön (1974) concur that identifying theory-in-use is complex because direct observation and interpretation of human behaviour is a skill set that some lack. Kelly's (1955) construct theory suggests that assumptions are formed based on past experiences and those assumptions guide actions. Lehman (2003) states that Kelly, “also believes that an individual's actions are guided by past experiences and, therefore, theory-in-use is a subjective construction based upon one’s experiential knowledge” (p. 77).

Scholars have found that incongruences exist between espoused theories and theories-in-use (Osterman, 1998; Robinson and Kochan, 1995; Lehman, 2003). Imel (1989) identifies that educators espouse that they follow the andragogical model of teaching, but in practice use pedagogical approaches. According to Fries (2012), “many educators support the concepts of
either a teacher-centred or a learner-centred teaching style; however, it takes critical self-reflection to determine if their classroom practices match their beliefs” (p. 24). Imel (1989) writes that “[t]he essence of effective practice in adult education is the ability to reflect in action. Reflective practice can be a tool for revealing discrepancies between espoused theories and theories-in-use” (p. 3). The Principals of Adult Learning Scale (PALS) is an “instrument [that] measures the frequency with which one practices teaching/learning principles that are described in the adult education literature” (cited in Galbraith, 2004, p. 79).

**Principles of Adult Learning Scale (PALS)**

The Principles of Adult Learning Scale (PALS) is a questionnaire that was developed and tested by Conti (1979, 1982, 1983, 1984, 2004) to assess whether faculty members practice teaching styles that are more teacher-centred or more learner-centred. Conti (1985) states that upon completion of the survey tool, “a teacher can gain a clearer understanding of his/her classroom behavior” (p. 10). The PALS can be self-administered and self-scored. As reviewed earlier, Argyris and Schön (1974) believe that observation of behaviour could determine whether espoused theories align with theories-in-use. PALS provides an opportunity for faculty to actively reflect on how they believe they work with adult learners (espoused) compared to their actual classroom behaviours with adult learners (in-use).

PALS is a 44-item survey which indicates whether faculty practice teaching styles that are more teacher-centred or more learner-centred. Scores range from 0 to 220. According to Conti, scores at or above 146 are more learner-centred, and scores below 146 are more teacher-centred. The historical mean (based on his considerable research) is 146 with a standard deviation of 20 (cited in Galbraith, 2004, p. 79). The PALS instrument asks, “for each item, please respond to the way you most frequently practice the action described in the item” (p. 87)
using a 6-point Likert scale ranging from Always, Almost Always, Often, Seldom, Almost Never, and Never.

**The seven factors.** PALS also provides data on seven separate factors that define particular classroom behaviours. The seven factors are: 1) learner-centred activities, 2) personalizing instruction, 3) relating to experience, 4) assessing student needs, 5) climate building, 6) participation in the learning process and 7) flexibility for personal development.

Following is a description of each factor as cited in Galbraith (2004, pp.80-82):

**Factor 1- learner-centred activities.** This factor assesses preference for evaluation by formal tests. Items for factor 1 relate “to evaluation by formal tests and to a comparison of students to outside standards” (p. 80). Low scores suggest that respondents use a teacher-centred approach with a preference for standardized testing. A low score in factor 1 also indicates that these teachers exercise control over their classroom, use disciplinary actions when needed and determine the educational objectives for each student. Teachers who score low on factor 1 also tend to practice one teaching method and believe that adults have a similar learning style.

On the other hand, faculty who score high on factor 1, tend to support collaborative methods of teaching, students initiating action and students taking responsibility for their own learning. Under factor 1, the classroom focus is on the learner. Scores on this factor range for 0 to 60 and the factor has a mean of 38 with a standard deviation of 8.3 (p. 91).

**Factor 2 - personalizing instruction.** This factor is about personalizing instruction to meet the varying needs of each learner. Faculty who score high on this factor tend to do a variety of things that personalize learning; objectives are based on individual motives and abilities, instruction is paced according to the learner, a variety of methods, materials and assignments are used, lectures are not considered a popular method of presenting material and “cooperation rather
than competition is encouraged” (p. 80). Scores for this factor range from 0 to 45 and the factor has a mean of 31 with a standard deviation of 6.8 (p. 91).

**Factor 3 - relating to experience.** This factor refers to planning learning that incorporates students’ prior experiences and encourages them to relate new learning to their experiences. Learning activities are very “real life” significant. “However, this focus is not just on coping with current problems or accepting the values of others. Instead, students are encouraged to ask basic questions about the nature of their society” (p. 81). Growth from dependence to independence is nurtured. The scores on this factor range from 0 to 30 and the factor has a mean of 21 with a standard deviation of 4.9 (p. 91).

**Factor 4 - assessing student needs.** This factor recognizes learners as adults. The higher faculty score on this factor the more they tend to treat learners as adults by exploring what each of them wants and need to know. Faculty rely on meeting individually and counselling students on existing gaps between a student’s goals and present level of performance, “then students are assisted in developing short-range as well as long-range objectives” (p.81). This factor has scores that range from 0 to 20, a mean of 14 and a standard deviation of 3.6 (p. 91).

**Factor 5 – climate building.** Faculty who score high in this domain prefer to set a friendly and informal climate in the learning process. Climate setting is demonstrated through the encouragement of dialogue and interaction among students, periodic breaks, risk-taking is encouraged, barriers are broken down through utilizing student competencies, errors are accepted as part of the process and used to direct future positive learning, students can experiment and explore elements related to themselves (e.g., self-concept, problem-solving techniques, interpersonal skills). The scores range from 0 to 20, and the factor has a mean of 16 with a standard deviation of 3.0 (p. 91).
**Factor 6 - participation in the learning process.** This factor focuses on the amount of involvement the student has in determining the nature and evaluation of content material. “While Factor 2 focuses on the broad location of authority within the classroom, this factor specifically addresses the amount of involvement of the student in determining the nature and evaluation of the content material” (p. 81). Faculty who score high on this factor prefer to let students identify problems they wish to solve and actively participate in making-decisions about the topics that will be addressed in class. Also, an adult-to-adult relationship is encouraged between teacher and student which involves supporting students to develop criteria for evaluating classroom performance. The scores in this factor range from 0 to 20 and the factor has a mean of 13 with a standard deviation of 3.5 (p. 91).

**Factor 7 – flexibility for personal development.** This last factor is about how faculty see themselves. Low scores in this domain suggest that faculty tend to view themselves as providers of knowledge rather than facilitators in the learning process. Faculty see their role as determining and sticking to instructional objectives (regardless of student needs), managing a well-disciplined classroom to reduce interferences to learning, dialogue that is considered controversial (value judgements) or relate to student's self-concept is avoided. Faculty who score high in this domain are flexible, view personal fulfilment as an aim in education and issues related to values are encouraged to promote growth and development. The scores range from 0 to 25, and the factor has a mean of 13 with a standard deviation of 3.9 (p. 91).

**History and past use.** According to Conti (1982), “PALS is a valid and reliable instrument” (p. 145). Content and criterion-related validity were established through a field test to identify teacher and learner-centred collaborative models with 57 practitioners in six states who completed the scale (Conti, 1982). Content validity was determined by Pearson product
moment correlations. According to Strout (2015) “Conti’s results indicated Pearson product moment correlations of $r=.85$ on the Teacher Response ratio; $r=79$ on the Teacher Question ratio; and $r=82$ on the Pupil Initiation Ratio” (p.99). Criterion-validity was established by comparing the scores of the participants who scored two standard deviations from the mean to the scores on the Flanders' Interaction Analysis Categories (FIAC). “The FIAC ratio scores confirmed the existence of a high degree of congruency between professing a teaching-learning mode on PALS and actually practicing behaviours characteristics of the mode in the classroom” (Conti, 1982, p. 142). Reliability was the test-retest method. Twenty-three practitioners participated and utilizing the Pearson product correlation, and results yielded a “Reliability co-efficient of .92” (p. 142). Internal consistency at .89 was measured using Cronbach’s alpha and according to Fries (2012), “analysis of 778 cases indicated that descriptive statistics for PALS are stable” (p. 47). Further detail on validity and reliability is discussed in Chapter three.

PALS was initially developed for basic adult education (Conti, 1978; Roberson, 2002; Spoon, 1996), but it has been used extensively for three decades in different settings and/or populations. Some examples include: baccalaureate and graduate programs (Lee, 2004; Stover, 2006; Taylor-King, 2001; Totin-Meyer, 2002) and continuing education (Conti, 1989; Notle, 1994; Scotney, 1986; Wegge, 1991). According to Conti (1998) “the normative scores for PALS have remained constant across various groups” (p. 77).

The Principles of Adult Learning Scale (PALS) has been utilized independently in almost 100 studies in adult education. In particular, studies have been published on adult higher education (Ahmed, 2006; Barden, 2000; Brosseau, 2000; Bryant, 2012; Lee, 2004; Moore, 2010; Ringler, 2004; Smith, 2008; Taylor-King, 2001; Weigandt, 2005; Weitkamp, 2005; West, 2008); community colleges (Barrett, 2004; Natale, 2007; Osborne, 2008; Roberson, 2002; Rogers, 2009); dental hygiene (Bearor, 2012); continuing and distance education (Liaros, 2000); distance learning (Wang, 2002); nursing (Quillin, 2004; Totin Meyer, 2002); paramedic educators (DeVito, 2008); physical therapy (Karges, 2003); and facilitators of workplace learning (Fitzgibbon, 2002; Robinson, 2012; Stover, 2006).

Scope and Limitation of the Literature Reviewed

The literature reviewed provided insight into adult learning, philosophies of adult education, teaching styles, espoused theories and theories-in-action, and finally, Conti’s Principles of Adult Learning Scale. Although I found an abundance of content, most of the literature was from American scholars. A few leading scholars, including MacKeracher and Cranton, were Canadian. Many more, including Brookfield, Caffarella, Cross, Merriam, Rogers, Knowles, Conti and Wlodkowski were American. Regardless of country of origin, the literature I reviewed were consistent in best practices for teaching adult learners.

Another limitation was that some of the literature was dated; however, the pioneers and leading theorist were referenced throughout all the literature, regardless of dates. For example some of the literature related to the philosophies of adult education were dated; however, the philosophies have not changed and continue to be relevant today. More recent scholars, such as Zinn, Merriam and Caffarella, referenced scholars from the 1920s and on, in their work.
Finally, I did not find any limitations in the literature related to Conti’s Principles of Adult Learning Scale (PALS) as it relates to racial/ethnic diversity of participants. There were many references to PALS, but always relative to the use of it as an efficient tool to measure teaching styles.

Summary

In conclusion, this chapter reviewed literature that explored adult learning, philosophies of adult education, and teaching styles related to teacher-centred and learner-centred practice. As well, literature that addressed Argyris' and Schön's (1974) espoused theories and theories-in-action, and Conti's (1982) Principles of Adult Learning Scale were reviewed. Chapter three explains the methodological approach utilized to implement this study. Chapter four discusses findings that answered the first two research questions, and in chapter five I present the findings for research questions three and four. Finally, chapter six presents conclusions, policy implications, considerations for the theoretical framework that this study was grounded in and suggestions for further research.
Chapter Three: Research Design and Methodology

The purpose of this research study was to explore the practiced teaching styles of faculty at Loyalist College, one of Ontario’s 24 Colleges of Applied Arts and Technology (CAAT). Furthermore, this study explored how the teaching styles practiced by participating faculty at Loyalist College compared to their demographic profile, including educational philosophy and professional development. Finally, this study explored how practiced teaching styles of participating faculty compared to the espoused approach to adult learning articulated in college documents, as perceived by participating academic deans and faculty. In this chapter, I present the research design and methodology, site selection, participant selection, data collection and analysis, established credibility, methodological limitations and assumptions, and finally, ethical considerations.

Research Questions

This research study addressed the overall question of: How do the teaching styles practiced by participating faculty at Loyalist College compare to their demographic profile including, educational philosophy and professional development, and the espoused approach to teaching adult learners at Loyalist College? The specific research questions that drove this study were:

Research Question #1. What is the espoused approach to teaching adult learners at Loyalist College, based on college documents, and the perceptions of participating academic deans and faculty?

Research Question #2. What are the self-reported practiced teaching styles of participating faculty at Loyalist College, as assessed against a modified version of Conti’s Principles of Adult Learning Scale?
**Research Question #3.** How do the demographic profiles, educational philosophies and professional development of participating faculty at Loyalist College compare to their self-reported practiced teaching styles?

**Research Question #4.** How do the participating faculty’s self-reported practiced teaching styles compare with the espoused approach to teaching adult learners at Loyalist College?

**Research Design and Methodology**

Initially I chose an exploratory, descriptive research design and mixed methods for data collection to explore, describe, analyze and compare the approach to teaching adult learners at Loyalist College. For this reason, my data collection materials and consent forms (see Appendix) all went out under that description. However, in the final oral exam, the examiners suggested that calling it a case study was more appropriate and I have made that revision accordingly.

**Research Design.** Brown (2006) explains that exploratory research “tends to tackle new problems on which little or no previous research has been done” (p. 43). In my review of the literature, I found no evidence that approaches for teaching adults had been researched at Loyalist College, nor in any of the Ontario Colleges. For this reason, an exploratory, descriptive research design was initially deemed appropriate for my study. This study was designed to explore and describe the teaching styles of participating faculty and compare those with the espoused teaching approaches articulated in College documents and as perceived by participating academic deans and faculty in only one Ontario college, that is Loyalist College. For this reason, it was appropriate to change the description of the research design to a case study of that one aspect of the study College.
Gay, Mills and Airasian (2006) define case study research as “the in-depth investigation of one unit (e.g., individual, group, institution, organization, program or document)” (p. 595). Yin (2013) concurs stating case study is “an in-depth inquiry into a specific and complex phenomenon (the ‘case’), set within its real-world context” (p. 321). To gain a deeper understanding of the espoused approach to teaching adult learners, existing college documents, interviews with academic deans and qualitative responses from participating faculty at one institution, Loyalist College, were analyzed. Creswell (2009) identifies that the purpose of case studies is not to generalize the findings, but to gain deeper understanding of the phenomenon. To compare the espoused approach (qualitative analysis) with the practiced approach (quantitative analysis) a mixed methods strategy was employed. Yin (1999) states, “quantitative as well as qualitative data can be part of the same case study, leading to the likelihood that most case studies will rely on multiple types of data collection” (p. 1211).

**Methodology.** In this study I used a convergent parallel mixed methods strategy “in which the researcher collects both quantitative and qualitative data, analyzes them separately, and then compares the results to see if the findings confirm or disconfirm each other” (Creswell, 2014, p. 219). Symbaluk and Bereska (2016) describe convergent design as one that “employs at least one qualitative and one quantitative method at the same time in order to compare different perspectives as part of the overall data integration” (p. 43).

Johnson and Onwuegbuzie (2004), describe mixed methods research strategy as “a class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (p. 17). McCoy (as cited in Stage & Manning, 2016, p. 97) explains that researchers use
mixed-methods data collection because it “presents an opportunity for divergent or contradictory views to be expressed”, and Creswell (2009) states that the researcher “converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem” (p. 14). My research study explored whether there was dissonance or congruence between the espoused and practiced approaches to adult learning at Loyalist College.

Faculty surveys provided “a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (Creswell, 2014, p. 155). Data for qualitative analysis were collected through document analysis and perceptions of both academic deans and faculty. Creswell (2014) states that “qualitative researchers typically gather multiple forms of data, such as interviews, observations, documents, and audiovisual information….” (p. 185).

Creswell (2014) describes several approaches to merge databases. The approach I utilized was the “side-by-side comparison.” Creswell states “the researcher might start with the qualitative findings and then compare them to the quantitative results. This is considered a side-by-side approach because the researcher makes the comparison within a discussion, presenting first one set of findings and then the other” (p. 222). Figure 2 depicts the approach taken based upon guidelines specifically for mixed methods design (Creswell, 2014).

I believe the breadth and depth of inquiry needed in my study warranted a mixed-methods design. Although the sample size of faculty to manager was not the same, according to Creswell (2014) this does not have to be a concern. He states that “one other approach by some mixed methods researchers is not to consider the unequal sample sizes as a problem” and that “the intention of research is to gain an in-depth perspective through qualitative data and to
generalize to a population through quantitative data” (p. 222). My research provided an in-depth perspective of the espoused approach to adult learning at Loyalist College through analysis of existing documentation, interviews with participating academic deans and responses by participating faculty to open-ended questions, including demographic data and examples of practiced teaching style questions on the modified PALS.

![Diagram: Convergent Parallel Mixed Methods](image)

**Figure 2: Convergent Parallel Mixed Methods**


According to Gay, et al. (2006), quantitative studies are good at establishing the “what”, but qualitative data help us to understand the “how” or “why” a program succeeds or fails (p. 490). Based on the scores of participating faculty members the quantitative data portion of the modified PALs survey measured “what” type or types of teaching styles were practiced at Loyalist College. Qualitative data provided by both the participating faculty and participating academic deans and articulated in college documents provided in-depth insights into the “how or why” of approaches to teaching adult learners at Loyalist College.

A limitation of the mixed methods methodology is that researchers must have a thorough understanding of both qualitative and quantitative methodology (Gay et al., 2006; Creswell, 2009; Creswell & Plano Clark, 2007; Tashakkori & Teddlie, 2003). Stage and Manning (2006) identify this difficulty in mixed methods methodology as the challenge of “expertise to explore a
phenomenon simultaneously while employing multiple research methodologies” (p. 101).

Balancing the importance of qualitative and quantitative data can be challenging. Creswell and Plano Clark (2007) believe that qualitative and quantitative research can have equal significance. Another challenge in mixed methods design is parallel data analysis and integration of the results and findings, especially if the results and findings diverge (Stage & Manning, 2016). As mentioned, the approach I chose to merge the two databases in my research was the side-by-side approach. My study was designed to explore and describe the results from the qualitative data compared with the results from the quantitative data collected. Divergence or congruency are discussed in the interpretation of the data.

An additional limitation to convergent parallel mixed methods designs is that there can be different participants and sample sizes for the quantitative and qualitative data collection. Creswell (2014) recognizes that “unquestionably, the data for qualitative data collection will be smaller than that for the quantitative data collection” (p. 222). Some researchers argue that there is a difference in the intent of quantitative and qualitative research and each approach provides an adequate count (Creswell, 2014, p. 222). The quantitative data came from the faculty responses to the survey which was a larger group than those interviewed: each source of data-enriched the findings of this study.

**Site Selection**

I selected Loyalist College as the study site because I am familiar with the College and its programs, which is both a strength and a limitation. Loyalist College was readily accessible to me since I am employed by the College. Although I had to be more cognizant of the fact that my experiences as a faculty member and coordinator for 15 years at Loyalist College might interfere with my objectivity in the analysis of the data.
Iacono, Brown and Holtham (2009) state, “ultimately it is incumbent upon the researcher to keep the subjectivity in check and present and analyse the evidence objectively” (p. 41). I also saw my employment status as an advantage because I had access to faculty and academic deans. Iacono et al. also state, “it is incumbent upon the researcher to build a relationship based on trust, and collect, analyse and display the evidence objectively” (p. 42). I do believe that faculty completed the survey and academic deans met with me based on trusting me and knowing that I would make every effort to be objective in my analysis. Wolcott (1994) argues that the interpretation of results in qualitative research is important because it matters to those being studied. Gay, et al., (2006) state, “In addition, the process of interpretation is important because it can challenge qualitative researchers’ taken-for-granted assumptions and beliefs about the educational process they have investigated” (p. 479).

To address the potential for subjectivity, I made a conscious effort to reflect on and check my interpretation of the findings throughout the analysis of the data. To validate my findings, I had two external objective colleagues (did not participate in the survey) who were familiar with the college system review my analysis for accuracy in identification of themes, they concurred with my analysis. Finally, I followed Creswell’s (2014) six steps for qualitative data analysis (p. 200).

Loyalist College is located on the territory of the Huron-Wendat, the Anishnaabeg, and the Haudenosaunee people, directly adjacent to the Kanien’keha:ka (Mohawk) community of Tyendinaga (Loyalist College, Indigenous Studies, 2019). The College is comprised of one main campus and a satellite campus, and both campuses are located in Hastings County, in Eastern Ontario. This study was limited to the main campus of the College because the satellite campus only offers distance education and/or part-time programs on weekends and evenings. The main
campus of the College opened in 1967 when the Ontario colleges were created; it is situated on more than 200 acres of property and at the time of this research, had 66 full-time programs with approximately 3,000 full-time equivalent (FTE) students, and at the time of this study, there were a total of 148 faculty, including contract faculty, teaching at Loyalist College.

Colleges Ontario (2019) reports that the proportion of college students of Aboriginal identity in Ontario Colleges is 5% (p. 21) and 44% of college students are “other than Caucasian” (p. 17). I also found a comment in one of the articles in Colleges Ontario (2019) that the diversity of students in the colleges was as diverse as the population in Ontario. In my review of all relevant documents I found no mention of the racial profile of students at Loyalist College; identify by race or ethnicity is not required of students or employees.

At the time of this study, there were eight academic divisions at Loyalist College: Biosciences, Building Sciences, Business, Health Sciences, Human Studies, Justice Studies, Media, and, Skills and Trades. Faculty and academic deans in each of the eight divisions were invited to participate in this study. I contacted the President of Loyalist College through e-mail requesting administrative consent to conduct my research study and approval to name the College (Appendix A) which I subsequently received (Appendices B and C).

Participant Selection

After I received University of Toronto Research Ethics Board approval, and Loyalist College’s administrative consent and Ethics Approval, I invited all full and contract faculty (n=148) and all four of the present academic deans to participate as key informants in this study.

I did not ask participants to self-identify by race or ethnicity as this was not a variable in the analysis of the PALS data. However, it is reasonable to assume that the profile of employees
at Loyalist College is diverse given that the following statement is included in all academic job postings:

In support of a diverse and inclusive college community, Loyalist College encourages applications from women, persons with disabilities, racial/visible minorities, and Indigenous persons. In accordance with the Accessibility for Ontarians with Disabilities Act (AODA), Loyalist College is committed to accommodating applicants with disabilities throughout the hiring process. At any stage of the hiring process, Human Resource Services will work with applicants requesting accommodation. (Loyalist College, Work at Loyalist, 2018)

**Recruitment of faculty.** I sent the recruitment e-mail and Informed Consent form to Human Resources to request them to invite, on my behalf, all faculty at Loyalist College to participate in my study (Appendix D), which they subsequently did (Appendix E).

My recruitment e-mail (Appendix F) to faculty participants described the purpose of the research, invited them to review the attached information letter and consent form (Appendix G), and requested their consent to participate. The information provided explained in detail what was involved and their rights as participants in this study.

All 148 faculty members at Loyalist College at the time of this study, regardless of the number of years of teaching experience, age, gender or part/partial/sessional/full-time status or program they were teaching in, were invited to participate in the survey. A second e-mailed memo was sent, by Human Resources (Appendix H) on my behalf, three weeks later thanking participants who had completed the online questionnaire and advising those who still wished to participate in my study of the approaching closing date (Appendix I). Nine more faculty responded to the survey after the reminder e-mail, resulting in a total of 33 faculty who
consented and completed the survey, which is a 22.3% response rate.

**Recruitment of academic deans.** Because I was not in any position of authority over any of the academic deans, I sent a recruitment e-mail to all four of the academic deans (Appendix J) at Loyalist College requesting they participate in my study. My recruitment e-mail to academic deans described the purpose of the research, invited them to review the attached information letter (Appendix K) and requested their participation in my study. The information letter explained in detail what was involved in participation in this study, including that faculty were being asked to complete an online questionnaire and that all the academic deans were being asked to participate in an interview with me. Loyalist College has managers and chairs, but they were excluded from the study because they all report to a dean. Three of the four academic deans agreed to participate. The fourth dean had accepted an acting role in another position.

**Data Collection and Recording**

Gay, et al. (2006, p.11) state that, “descriptive research data are mainly collected through a questionnaire survey, an interview, or observation.” As seen in Table 3, data were collected from three different sources for the purpose of triangulation. These sources and methods were: college document analysis, an online survey questionnaire completed by faculty, and interviews with academic deans. According to Gay, et al., (2006) triangulation is the use of multiple sources and methods to get a complete picture of what is being studied. These authors describe “data collection strategies and data sources” as methodologies used for triangulation. Creswell (2014) suggests that it is important to,

triangulate different data sources of information by examining evidence from the sources and using it to build a coherent justification for themes. If themes are established based
on convergence of several sources of data or perspectives from participants, then this process can be claimed as adding to the validity of the study (p. 201).

McCoy (as cited in Stage & Manning, 2016) defines triangulation as “combining and comparing multiple data sources, data collection and analysis, methods, and inferences at a study's conclusion” (p. 107). Triangulation allows for a deeper understanding by studying the topic of interest from at least three different perspectives. In this study, the three perspectives were: document analysis, faculty self-reports, and perceptions of academic deans.

**Phase one: document analysis.** I analyzed and critiqued relevant publicly accessible documents including Loyalist College’s 2017-2018 Annual Report, 2017-2020 Strategic Mandate Agreement, and the 2016-2020 Academic Plan, as they related to the focus of this research study. I analyzed primary source documents to assess the espoused approach articulated for teaching adult learners at Loyalist College. Argyris and Schön (1974) state that espoused theories are the worldview and values that people believe their behaviour is based upon whereas theories in action are the worldview and values implied by their behaviour. Creswell (2014) describes documents as “an unobtrusive source of information” (p. 192).

**Phase two: faculty online survey questionnaire.** Phase two consisted of faculty participants’ completion of the modified PALs on-line survey that sought mainly quantitative data but provided some options for qualitative comments. According to Creswell (2014) “from the sample results, the researcher generalizes or draws inferences to the population” (pp 155-156). The modified PALs survey questionnaire sought both quantitative and qualitative data on the practiced teaching styles of participating faculty, their educational philosophy, and their level of participation in professional development activities.
**Instrumentation.** The teaching styles of faculty at Loyalist College were surveyed through self-report using a modified version of Conti's (1982) Principles of Adult Learning Scale (PALS) tool (Appendix M). This tool measures teaching practices that are teacher-centred, learner-centred, or eclectic in style. Byrd (2010), stated “PALS has been used in approximately 100 dissertations and for numerous published research studies” (p. 91) In my review of the tool I did not find any discussion of the racialized context in which the tool had previously been used. Given the multi-cultural context of higher education in the US, it is reasonable to assume that participants who completed the Conti PALS were diverse and not solely white Caucasians.

Teacher-centred instruction is defined by Conti (2009) and others (Huba & Freed, 2000; Cranton, 2000; Weimer, 2002; Bosch, et al., 2008) as an approach that is teacher directed, follows a formal structure, and follows specific steps towards clearly defined learning outcomes. In this approach, the teacher controls everything in the learning environment (Tagg, 2003). On the other hand, learner-centred teaching encourages learners to participate in the learning, and focuses teaching based on the needs of the learner (Knowles, Holton & Swanson, 2011).

PALS scores range from 0 to 220, and based on Conti's testing of the tool, the mean score is 146 with a standard deviation of 20 points. The tool does not purport to assess a rigid dichotomy of teacher-centred compared to learner-centred teaching strategies. Rather, the scores are based on the standard deviation from the mean and therefore assess the tendency of participants to lean increasingly more to one or the other point in the continuum. Furthermore, the qualitative descriptions of their teaching activities made by participants on the PALs also allow them to reflect this continuum.
Scores above 146 are considered more learner-centred, scores below 146 are considered more teacher-centred; scores in the middle range suggest both learner-centred and teacher-centred practices, indicating an eclectic approach (cited in Galbraith, 2004). Conti describes,

This 44-item instrument measures the frequency with which one practices teaching/learning principles that are described in the adult education literature. High scores on PALS indicate support for a learner-centred approach to teaching. Low scores reveal support for a teacher-centred approach. Scores in the middle range disclose an eclectic approach that draws on behaviours from each extreme. (p. 79)

In Conti’s words, the “score can be interpreted by relating to the average score for the instrument” (p. 79).

Based on my concern as identified by Gay, et al. (2006) that a lengthy questionnaire would negatively affect the response rate, I removed questions related to Factors 4 and 5. I had already added demographic questions including educational philosophy and professional development activities in addition to nine qualitative questions. Modification of the PALS (by removing factors 4 and 5) required deducting the items under these factors from the total score of PALS. Both factors 4 and 5 had four items, with a maximum of 5 points per item on the Likert Scale, for a total of 20 points. The combined total of 40 points was deducted on the modified PALS, resulting in a range for my study from 0 to 180. Modifying the PALS resulted in an average (mean) score of 107 compared to Conti’s original PALS mean score of 147.

Participating faculty who scored above 107 tended to support more learner-centred approach to teaching and faculty who scored below 107 tended to support more teacher-centred approach to teaching. Factor scores were not modified for my study, Conti (cited in Galbraith, 2004, Adult Learning Methods) stated,
The total score indicates the overall teaching style and the strength of the teacher's support for this style. While this score is useful for providing a general label for the instructor's teaching style, it does not identify the specific classroom behaviours that make up this style. However, the overall PALS score can be divided into seven factors. Each factor contains a similar group of items that make up a significant component of teaching style. (pp. 79-80)

Table 3 is an overview of the meaning of the score for each factor, as described in *Adult Learning Methods* used in my study. Detailed description was provided in Chapter 2.

**Permission to use and modify the PALS tool.** Global permission to use PALS by any researcher or practitioner was given by its creator, Gary J. Conti in the third edition of *Adult Learning Methods*, edited by Galbraith (2004). Conti, as cited in Galbraith (2004) states, “Note: Dr. Gary J. Conti hereby grants permission for practitioners and researchers to reproduce and use the Principles of Adult Learning Scale in their work” (p. 91). The PALS is described in detail in chapter two.

I tried several times to contact Dr. Conti to request his permission to adapt the PALS tool as appropriate to the Ontario College context, but I was told that he was unable to be reached at the time. For that reason, I contacted Strout (2015), to see if she could forward my request to Dr. Conti for me and she informed me, that for Dr. Conti’s personal reasons, it was no longer possible to connect with him directly but that he had previously given permission to other researchers for modification to PALS.
Table 3: *Brief overview of Factors*

<table>
<thead>
<tr>
<th>Factor 1: Learner-Centred Activities</th>
<th>Low scores: prefer determining educational objectives for all students, use formal testing methods and believe adults have a similar learning style. High scores: practice collaborative teaching methods, encourage students to initiate action and to take responsibility for their learning.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 2: Personalizing instruction</td>
<td>Low scores: use lectures as their best approach to teaching, determine the pace of instruction, do not employ different teaching strategies, and do not discourage competition against one another. High scores: approach to teaching is based on the students’ motivation and abilities, pace instruction according to the students, employ multiple teaching strategies, and encourage students to cooperate rather than compete.</td>
</tr>
<tr>
<td>Factor 3: Relating to experience</td>
<td>Low scores: do not take their students’ prior learning into consideration, do not foster growth or independence, discourage questions about the nature of society, and are not concerned with students’ everyday lives. High scores: plan learning activities that incorporate the students’ prior experiences and help students relate new learning to prior experiences. Learning activities in this approach tend to be significant to the problems encountered in everyday living. Students are encouraged to grow and be independent while challenging the nature of their society.</td>
</tr>
<tr>
<td>Factor 4: Assessing Student Needs;</td>
<td>Questions related to Factor 4 were included in the qualitative questions, to isolate this data from the quantitative data. Factor 4 measures the extent to which faculty explore with adult learners what they want and need to know.</td>
</tr>
<tr>
<td>Factor 5: Climate Building</td>
<td>Question related to Factor 5 were included in the qualitative questions, to isolate this data from the quantitative data. Factor 5 refers to the learning climate and the atmosphere in the learning process.</td>
</tr>
<tr>
<td>Factor 6: Participating in the learning process</td>
<td>Low scores: do not allow students to develop criteria for evaluating their performance, arrange their classroom so that students interact easily, and allow students to decide on covered topics and problems to be solved. High scores: supports students to identify the problems they wish to solve, participate in making decisions about topics covered in class, encourage adult-to-adult relationship between teacher and students and involve students in developing criteria for evaluating classroom performance.</td>
</tr>
<tr>
<td>Factor 7: Flexibility for personal development</td>
<td>Low scores: role is to disseminate knowledge, stick to instructional objectives, avoid discussions of controversial subjects, avoid issues related to student’s self-concept and maintain rigid rules. High scores: encourage dialogue regarding students’ self-concept, view personal fulfillment as a central aim in education, adjust classroom environment and curricular content to meet the changing needs of students, student values are addressed to stimulate understanding and future personal growth.</td>
</tr>
</tbody>
</table>

*Low Scores = Teacher-centred teaching style/High Scores = Learner-centred teaching style*
In a letter to Strout (2014) that she shared with me by email, Conti states:

PALS has been published in ERIC, in several journals, and in Adult Learning Methods by Michael Galbraith so that researchers like you can use it at no cost. There is a note at the bottom of page 91 of the chapter in the third edition of Adult Learning Methods that grants permission to use the instrument. Therefore, feel free to use PALS in the ways you believe are most appropriate; since I am the copyright holder for PALS, you may consider this letter as your formal permission to reproduce PALS and to modify it in any way you need for your research. (Conti, 2014)

With the encouragement of my thesis committee, and in consultation with Strout, I developed an online questionnaire using adapted questions from Conti’s (1982) PALS. Modifications to PALS included removing questions related to assessing student needs and climate building; instead, I added similar qualitative questions that permitted more in-depth exploration. Removal of these questions from the quantitative data was based on my concern that the questionnaire would be too long after I added demographic questions, including educational philosophy and professional development activities, and nine qualitative questions to explore practiced teaching practices. Amendments to PALS for this study did not measure new attitudes or opinions; Section 2 was added, which included demographic information, participation in professional development activities and educational philosophy. And Section 3 was added, which included faculty examples of activities related to adult learning (Appendix M).

I did consider adding Zinn’s (1983) Philosophy of Adult Education Inventory to the survey tool but that would have added 75 more quantitative questions to Conti’s modified PALS. Based on the work of Issac and Michael (1995) a survey that contains over 130 questions risks survey fatigue and potentially reduced participation. Furthermore, Gay et al. (2006) warn that
lengthy questions, especially those requiring written responses, can negatively impact the response rate.

To avoid survey fatigue, I did not add Zinn’s (1983) inventory. Instead, to capture faculty’s philosophy of education, participants were asked to choose from a list of five descriptions of unnamed philosophies that most closely aligned with their beliefs and interpretations of adult education. The list of five descriptions aligned with distinct philosophies of education including liberal, behavioural, progressive, humanistic and radical. Faculty participants were given the option to choose more than one philosophy (Appendix M). An open-ended question was added (Section 2) to the modified PALS which asked faculty to identify the professional development activities in which they had participated over the past five years.

Finally, eight questions were added to the modified PALS (Section 3) asking faculty to give examples of practiced teaching style, as they relate to the adult learning principles.

**Phase three: academic dean interviews.** Phase three consisted of individual interviews (Appendix N) with participating academic deans. I conducted the interviews to explore the perceptions of academic deans regarding Loyalist College’s espoused approach (Argyris and Schön, 1974) to adult learning. In addition, individual interviews addressed academic deans’ perceptions of actual faculty teaching styles.

With their consent (Appendix O), interviews with academic deans were audio-recorded by me and externally transcribed by a professional transcriptionist who signed a confidentiality agreement (Appendix P). A consideration when someone who was not present during the interviews, transcribes the interviews, is “to ensure there is no gap between the narrative told and narrative reported” (Gay et al., 2006, p. 435). To address this risk, I compared the transcriptions to my notes and audio-recorded interviews, then asked academic deans to review their transcripts.
and report any edits, questions, concerns (Appendix Q). Gay et al. state, “one of the tests of trustworthiness of the narrative account is participants' validation of the restored account as being representative of the individual's lived experiences as relayed in the interviews” (p. 435). Creswell (2014) concurs, stressing the importance of validating the accuracy of data with participants. No revisions to the transcribed interviews were requested.

Table 4 represents the data sources used to address each research question.

**Establishing Credibility of the Findings**

I now discuss the establishment of credibility through the use of content, construct and predictive/criterion validity testing of the modified PALS tool and reliability of the data collection process.

**Table 4: Data Sources to Answer the Research Questions.**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data to Answer the Question</th>
</tr>
</thead>
</table>
| **Research Question #1.** What is the espoused approach to teaching adult learners at Loyalist College, based on College documents, and the perceptions of participating academic deans and faculty? | 2017-2108 Annual Report  
2017-2020 Strategic Mandate Agreement  
2016-2020 Academic Plan  
Academic Deans Interview Questions (Appendix N)  
Survey Questionnaire Questions - Section 3* (Appendix M) |
| **Research Question #2.** What are the self-reported practiced teaching styles of participating faculty at Loyalist College, as assessed against a modified version of Conti’s Principles of Adult Learning Scale? | Survey Questionnaire Questions - All (Appendix M)  
Survey Questionnaire Questions - Factor Analysis  
Factor 1 - Questions 2, 4, 11, 12, 13, 16, 19, 21, 29, 30, 38 and 40; Factor 2 - Questions 3, 9, 17, 24, 32, 35, 37, 41 and 42; Factor 3 - Questions 14, 31, 34, 39, 43, 44; Factor 6 - Questions 1, 10, 15, 36; Factor 7 - 6, 7, 26, 27, 33 |
| **Research Question #3.** How do the demographic profiles, educational philosophies and professional development of participating faculty at Loyalist College compare to their self-reported practiced teaching styles? | Survey Questionnaire Questions - Section 2* (Appendix M) |
| **Research Question #4.** How do the participating faculty’s self-reported practiced teaching styles compare with the espoused approach to teaching adult learners at Loyalist College? | Survey Questionnaire Questions – All (Appendix M)  
Survey Questionnaire Questions - Sections 1 and 3 (Appendix M)  
Academic Deans Interview Questions (Appendix N) |
Validity. Validity is concerned with establishing the credibility of the findings and how confident the researcher can be in the relevance of the data collected to the research questions explored. Conti (1982) reports that PALS “has been successfully used with minor modifications for adult education workshops; training directors, hospital educators, continuing education instructors, and doctoral studies with applicable use in a wide variety of settings showing generalizability to varied settings” (p. 6) as described in detail in chapter two.

According to Creswell (2014) there are three traditional forms of validity: construct validity (items measure hypothetical constructs or concepts); content validity (item measures the intended content); predictive or concurrent validity (scores predict a criterion measure, and results correlate with other results) (p. 160).

Construct validity testing. Construct validity of the PALS was originally established by the testimony of juries of adult educators. The first jury was comprised of three adult educators from Northern Illinois University. This jury “analyzed the items, commented on the validity of the constructs in the items and suggested improvement for various items” (Conti, 1982, p.139). After revisions, PALS was submitted to a second panel comprised of national pioneers and scholars in the field of adult learning. The national panel testified to the validity of the construct in each item (Conti, 1982). According to Byrd (2010) one of the jurors on the national panel was Malcolm Knowles, a pioneer in adult learning principles. Creswell (2014) cites Humbley and Zumbo (1996) position that “In more recent studies, construct validity has become the overriding objective in validity, and it has focused on whether the scores serve a useful purpose and have positive consequences when they are used in practice” (p. 160).

Content validity testing. Content validity of PALS included nine field tests with basic education practitioners. Field testing was divided into two phases. Phase 1 identified items that
discriminated between supporters and non-supporters of the collaborative model. Phase 1 produced an instrument with potentially discriminating items that were used in Phase 2. Fifty-seven practitioners were given the instrument in Phase 2. Scores were pooled and analyzed and “content validity was determined by Pearson correlations which measured the relationship between each individual item and the total score for each participant” (Conti, 1982, p. 140). Gay et al. (2006) define content validity as “the degree to which a test measures what it is intended to measure” (p. 603).

To establish content validity of the modified PALS, I pilot tested (Appendices R & S) the modified survey questionnaire and guided interview questions. Even though I had not changed the wording of the Principles of Adult Learning Scale survey, before pilot testing the tool, I had removed some questions and added some descriptive terms representative of the Canadian College context. The survey and guided interview questions were piloted by four retired college faculty who understood the Ontario College context well. Their data were not included in the study findings. The pilot testing was also a means to establish content validity of the semi-structured interview questions. Finally, the pilot testing provided an estimate of the time to complete both the online questionnaire and guided questions semi-structured interview.

**Face validity testing.** The purpose of face validity testing is to assure that the “test appears to measure what it claims to measure” (Gay et al., 2006, p. 597). Conti (1982) interviewed faculty and determined that their scores measured what PALS claims to measure. He found that faculty had understood and interpreted all statements as intended. The modified PALS was pilot tested for face validity with retired faculty who were not participants in the study but who were familiar with terms and able to understand and interpret all statements as intended. In the face validity testing, I asked the same retired faculty to identify any questions that were
unclear or misleading by the wording or the sequence of the questions. No changes were requested as a result of face validity testing.

**Predictive/criterion validity testing.** According to Conti (1982), criterion validity of PALS was measured against the Flanders Interaction Analysis Categories (FIAC). This tool used direct observation of teaching and the results indicated that faculty practiced as they indicated on PALS. Gay, et al. (2006) definition of criterion validity is “validity that is determined by relating performance on a test to performance on another criterion (e.g., a second test or measure)” (p. 596). PALS (performance on a test) indicated that faculty practiced their teaching-style (another criterion).

**Reliability.** Reliability is “the degree to which a test consistently measures whatever it is measuring” (Gay, 1996, p. 145). Conti (1982) advises that the reliability of PALS was established by the test-retest method which according to Gay (1996), refers to the consistency of scores on the same test over time. After Phase 2 of the field test, the instrument was administered with a group of 23 adult practitioners and then administered again seven days later. The Pearson correlation yielded a reliability coefficient of .92 (Conti, 1982, p. 142). Conti (1982) has maintained that although PALS was originally designed for the use in adult basic education settings, the normative scores remain consistent across various groups.

The mean score from my study was 107 with a standard deviation of 14.6. Internal consistency at .79 was measured using Cronbach’s alpha. According to Gay, et al., (2006), $0.7 ≤ \alpha < 0.8$ is acceptable. The majority of participating faculty responses (n=20; 60.1%) were within one standard deviation from the mean. Although my study used a modified PALS, these results are consistent with Conti’s validity and reliability testing that “most scores will be within one standard deviation of the mean” (Galbraith, 2004, p. 79).


Credibility of findings related to the PALS teaching styles factors. I now compare the norm mean and standard deviation from PALS scores for each factor, with each of the five factors in my modified version of the PALS. Table 4 presents the established PALS scores (Conti, 1982) compared with the modified PALS scores for my study. Factors were not modified for my study; however, two factors were not included as described above. Factor scores were independent of each other; therefore, scoring one factor did not impact the results of another factor. Consequently, removing factors 4 and 5 did not impact the results of the other factor scores. Conti (cited in Galbraith, 2004) “normative scores for PALS have remained consistent across various groups that practice adult education…most scores will be within one standard deviation of the mean (p. 79).”

Conti’s factors are independent of each other (all of them add up to make the overall teaching style, and so removing two of them [i.e., Factors 4 & 5] has no impact on the validity of the tool). I calculated the faculty scores from my study and compared the norm mean and the mean of my study for each factor. All were consistent with Conti’s statement that scores should be within one standard deviation. The scores of participating faculty were within one standard deviation for both the norm mean and the study mean for each of the factors assessed.

Learner-centred activities (Factor 1) had a norm mean of 38; a standard deviation of 8.3; and a possible range between zero and 60 on the PALS. The mean score of Factor 1 in my study was 40.3, slightly higher than the PALS mean of 38; with a standard deviation of 5.7, which is lower than the PALS standard deviation of 8.3; and a range between 24 and 49.5. In comparing the norm mean score for Factor 1, my study findings were 2.3 value points lower and 2.6 points outside of the norm’s standard deviation of 8.3. The majority of participating faculty responses (n=24) were within one standard deviation of the norm mean. The majority of
participating faculty responses (n=23) were within one standard deviation of the study mean. Findings from my participating faculty scores were consistent with Conti's normative mean except for one faculty member.

**Personalizing instruction (Factor 2)** had a norm mean of 31; standard deviation of 6.8; and a possible range from zero to 45. The mean for Factor 2 in my study was 23.2, lower than the PALS mean of 31; a standard deviation of five, lower than the PALS standard deviation of 6.8; and a range between 15 and 33. In comparing the norm mean score for Factor 2, my study was 7.8 value points lower and 1.2 value points outside of the norm's standard deviation of 6.8. The majority of participating faculty responses (n=17; 51.5%) were within one standard deviation of the norm mean. The majority of participating faculty responses (n=21) were within one standard deviation of the study mean. Although by a slight majority at 51.5%, participating faculty were within one standard deviation of the norm mean, consistent with Conti’s statement that most scores would be within one standard deviation. Four more faculty scored within one standard deviation of the study mean compared to the norm mean.

**Relating to experience (Factor 3)** had a norm mean of 21; a standard deviation of 4.9; and a possible range from zero to 30 on the PALS. The mean score from my study was 21 (same as the PALS mean) with a standard deviation of 4.6, slightly lower than the PALS standard deviation of 4.9; and a range from 10 to 29. The majority of participating faculty responses (n=24) were within one standard deviation of the norm and study mean, consistent with Conti’s validity and reliability testing.

**Assessing student needs (Factor 4)** was omitted as described above.

**Climate building (Factor 5)** was omitted as described above.
Participation in the learning process (Factor 6) had a norm mean of 13, a standard deviation of 3.5, and a possible range from zero to 20. The mean from my study was 10, lower than the PALS mean of 13; a standard deviation of 3.3, slightly lower than the PALS standard deviation of 3.5; and a range of 2.5 to 16.5. In comparing the norm mean score for Factor 6, my study was three value points lower. Twenty-two (66.7%) of participating faculty were within one standard deviation of the norm mean, and twenty-one (63.6%) of participating faculty were within one standard deviation of the study mean. Except for one faculty score, most participating faculty scored within Conti’s range of one standard deviation for both norm and study mean thus findings for Factor 6 are comparable.

Flexibility for personal development (Factor 7) had a norm mean of 13, a standard deviation of 3.9, and a possible range from zero to 25. The mean from my study was the same mean (13); a standard deviation of 3.2, slightly lower than the PALS standard deviation of 3.9; and a range between 4 and 19. Factor 7 had the same mean as the norm. The majority of participating faculty (n=23) were within one standard deviation of the norm and study mean which is consistent with Conti’s validity and reliability testing.

Table 5: Comparison of PALS Factor Scores

<table>
<thead>
<tr>
<th>Factor</th>
<th>Conti PALS Established</th>
<th>My study</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learner-Centred Activities</td>
<td>M 38 SD 8.3</td>
<td>M 40.3 SD 5.7</td>
<td>M 2.3 SD 2.6</td>
</tr>
<tr>
<td>2. Personalized Instruction</td>
<td>M 31 SD 6.8</td>
<td>M 23.2 SD 5</td>
<td>M 8 SD 1.8</td>
</tr>
<tr>
<td>3. Relating to Experience</td>
<td>M 21 SD 4.9</td>
<td>M 21.4 SD 4.6</td>
<td>M 0 SD 0.3</td>
</tr>
<tr>
<td>6. Participation in Learning Process</td>
<td>M 13 SD 3.5</td>
<td>M 10 SD 3.3</td>
<td>M 3 SD 0.2</td>
</tr>
<tr>
<td>7. Flexibility for Personal Development</td>
<td>M 13 SD 3.9</td>
<td>M 13 SD 3.2</td>
<td>M 0 SD 0.7</td>
</tr>
</tbody>
</table>
Data Analysis

I now describe my analysis of the quantitative and qualitative data and my comparison of these two types of data.

Quantitative data analysis. The survey data were collected using survey Wizard 2, an online survey program hosted on a secure Canadian server at the University of Toronto. Survey responses were exported by Wizard 2 to an excel spreadsheet for analyzing. The quantitative data were then reviewed to ensure all data were in numerical coding. To analyze the quantitative data, I calculated the scores from the self-reported modified PALS questionnaire (Appendix M) according to Conti’s instructions (cited in Galbraith, 2004, pp. 90-91). By following Conti's scoring instructions, it was not necessary to use a statistical software program for scoring faculty responses. Each of the 33 faculty respondents was coded, starting at Faculty 1 (coded as F1) and continuing through to Faculty 33 (coded as F33). Because the survey was anonymous and codes were used, there were no risks of any participating faculty being identified. Once scoring was complete, I calculated the mean and standard deviation for the modified PALS and for each factor score. Before data analysis began, to authenticate calculations, a neutral second party independently followed Conti’s instructions and scored each faculty survey. In addition, the neutral second party calculated the mean and standard deviation for the modified PALS and each factor score. To confirm accuracy, the neutral second party and I verified that we had the same scores, the same mean and standard deviation for the modified PALS and, the same mean and standard deviation for each factor score. Analysis of data included identification of extreme (3SD), very strong (2SD) and increased (1SD) for teacher or learner-centred teaching style based on mean and standard deviation. Eclectic teaching style was based on the exact score of the mean.
Qualitative data analysis. Qualitative open-ended questions form the PALS survey were embedded in the spreadsheet that downloaded Wizard 2 data and were exported to a separate excel spreadsheet for analysis. I reported and compared relevant themes I identified in my review of the qualitative data in the documents analyzed, the qualitative data in the survey responses and the academic manager interviews, consistent with Creswell’s six steps (Creswell, 2014, p. 200).

I reviewed and started recording my thoughts and interpretations of the data for a general sense of information and an idea of overall meaning. Text data were organized broadly under categories that represented the guided interview questions from academic deans, the open-ended qualitative questions on the modified PALS and the college documents analyzed. I identified and coded themes related to learner-centred teaching style, teacher-centred teaching style and a combination of both learner and teacher-centred teaching style. Additionally, I also calculated responses related to faculty age, gender, educational attainment, years of teaching experience, part/partial/sessional or full-time status, educational philosophy and participation in professional development. The calculations of variables and themes I identified were then reviewed and validated by two past colleagues who were not participating in the survey (retired) but familiar with the Ontario College context. Themes were described in detail to render a small number of categories for headings, “these themes are the ones that appear as major findings in qualitative studies and are often used as headings in the findings sections of studies (or in the findings section of a dissertation or thesis) of studies” (Creswell, 2014, p. 200). The themes were then analyzed for similarities and differences between academic deans, faculty and college documents. Subthemes, multiple perspectives and quotations were included in the descriptive narrative. Narrative data were interpreted through the lens of adult learning and “when qualitative researchers use a theoretical lens, they can form interpretations that call for action
agendas for reform and change” (Creswell, 2014, p. 200). I present the analysis of the quantitative and qualitative data in chapters four and five.

**Methodological Limitations and Assumptions**

A methodological limitation of the data collection process used in this study is that the data provided by participating faculty were self-reported on the modified PALS assessment tool. Self-reported data are limited in that they cannot be independently verified and therefore responses must be taken at face value (Price & Murnan, 2004). In addition, participants can choose not to answer questions which results in missing data. Teo (2013) recognizes that missing data are part of the data collection process. In scoring Conti’s (1982) Principles of Adult Learning Scale, he assigns a neutral value of 2.5 for omitted questions. In my analysis, I followed Conti's scoring instructions and assigned a neutral value of 2.5 for omitted questions.

Another limitation of self-reported data is limitation of participant recall over time. As I am not in a position to exert any undue influence on any faculty and/or academic dean participant at Loyalist College, it is reasonable that I assume participants have answered honestly and would have advised me if they did not know or recall an answer to any question I posed. Participating faculty gave written responses to open-ended questions on the modified PALS assessment tool. Interestingly, one faculty respondent wrote, “I am not sure if I answered your question the way it’s supposed to be” (F2), suggesting that they were trying to respond in terms of what was expected rather than their honest perception. Although academic deans were thoughtful about their responses during the guided interview, they did not appear hesitant to respond to any questions posed. The participant sample size (33 faculty and only three academic deans,) was also a limitation. Repeating this study with a much larger sample size from the Ontario CAATS is an implication for further research.
A further limitation is that voluntary participation may have attracted faculty who were already interested in exploring their teaching styles and not those who were not interested or concerned. Faculty participants were advised that their responses would be anonymous. Furthermore, there was nothing to gain or lose by participating in the study and finally that their participation is voluntary. Therefore, it is reasonable to assume that responses on the modified PALS including the demographic, espoused educational philosophy and professional development data were reported accurately.

Another limitation is the following exclusion of demographic variables that may impact teaching styles, namely: gender, race/ethnicity and teaching discipline such as, business, health, humanities, math and sciences and media, to name a few, of participating faculty. Furthermore, most respondents were female. Further research on the impact of these variables is warranted.

Academic deans were advised that their responses to the interview questions were confidential; that their participation was voluntary and finally that there is nothing to gain or lose by participating in the study. As such, it was reasonable to assume that their responses to the interview questions were as reflective of their true perspectives given their length of tenure in their position at Loyalist College. Only one academic dean was new to Loyalist College. The other two academic deans reported being at Loyalist for over 15 years each, first as faculty then as dean.

Ethical Issues and Considerations

Participant contact and data collection began only after receipt of formal approvals of the study protocol from the Research Ethics Board of the University of Toronto and that of Loyalist College. The letter of information (Appendix G) advised faculty that participation in this study was completely voluntary and that the survey was entirely anonymous and would take
approximately 30 minutes to complete. They were assured that no participants would be identifiable to me, and no individual scores or responses of the modified PALS assessment would be reported - only aggregated scores of the modified PALS data would be reported in any publications or presentations of the findings in appropriate professional presentations. Faculty were assured that no identifiable information would be requested and that there were no known risks associated with this study. They were informed that if they wished to withdraw from the study after beginning the survey, they should simply close the survey before clicking on “submit” and all of the data would be deleted and not included in the study findings. They were informed that after they clicked on submit it would not be possible to delete their information since the survey was anonymous.

When faculty clicked on the URL embedded in the information letter, they were able to access the online questionnaire (Appendix M). At the beginning of the questionnaire, the main ethical issues were restated, such as voluntary participation, anonymity, the right to decline or withdraw without explanation, and because of anonymity, data could not be deleted once submitted. Participants were asked to click on the “Agree” icon if they agreed to participate, or the “Do NOT Agree” icon if they did not. If they clicked on “Agree” they were able to access the modified PALS questionnaire. If they clicked on “Do NOT agree” the site was closed, and they had no access to the questionnaire.

Four academic deans were sent a recruitment e-mail (Appendix J) inviting them to participate in a confidential interview with me to describe their perception of Loyalist College’s espoused approach to adult learning, their perception of faculty practiced teaching styles at Loyalist College. The information letter and consent (Appendices K & O) explained that the interview would be confidential, non-identifiable pseudonyms would be used for interview
participants; participation was entirely voluntary, the interview was anticipated to take about 45 minutes and would be held at a time and location mutually agreed upon. However, since there were only four academic deans in the college at the time and only three of them participated in the interviews, a limitation is that, because of the few academic deans and the identifiability of the college, it may be possible for individuals who are familiar with Loyalist College to identify the interviewees, however, comments made by interviewees are nonidentifiable. With their consent, the interviews with me would be audio-recorded and transcribed by a professional external transcriptionist who has signed a confidentiality agreement (Appendix P) before accessing any of the data. The audio-recordings were erased immediately after the interviews were transcribed.

Both faculty and academic deans were informed that all data would be kept confidential and secure, accessible only to my Thesis Supervisor and me. Digital data would be kept on a personal password-protected computer and encrypted consistent with the University of Toronto policies; all data in hard copy would be kept in a securely locked space and accessible only by me. All hard copy data would be shredded, and digital data deleted five years after the study is completed (Appendices G & K).

The three academic deans who agreed to participate in the individual interview were sent an e-mail that thanked them, confirmed the date and time of our interview, the questions that would guide our interview and informed consent (Appendices L, N & O). A hard copy of the informed consent (Appendix O) that included specific consent to audio-record the interview, was reviewed with them at the time of the interview, those who wished to participate in the study then signed the consent form, and a hard copy was given to them. All participating academic deans signed the consent form.
There was no risk of perceived undue influence to participate because all the academic deans were in a position of authority over me. Interview participants were advised that I would stop the interview if at any time they felt uncomfortable. No academic dean stopped the interview at any time during the interview. Interview participants were given the opportunity to review their own transcripts and make any changes they wished before the data was included in the study (Appendix Q). No academic dean made any changes. Finally, they were informed that if they wished to withdraw from the study, they need only leave the interview session without explanation of any kind, or, after the interview, they could inform me by any means, and any information shared before that would be deleted from the study. However, if they withdrew after data aggregation had begun, it would not be possible to delete their data (Appendix N). No participating academic dean left the interview or withdrew from the study.

Finally, the email and phone contact information for my Thesis Supervisor and myself, the Research Ethics Board Offices at the University of Toronto, and at Loyalist College were provided to all participants for them to contact if they required any further information about the study or had questions about their rights as research participants (Appendices F, G, J, and K).

**Summary**

Chapter three described the research design and methodology, site and participant selection and the data and analysis methodology used in this study. The establishment of credibility, methodological assumptions and limitations were identified and finally, ethical considerations were discussed.

Chapter four and five present quantitative, qualitative, and comparative findings and analysis of findings explicitly related to each of the research questions and interpreted in light of the literature and theoretical frameworks that grounded this study. Chapter six presents the
conclusions, implications for policy development, considerations for the theoretical framework that this study was grounded in, and recommendations for future research.
Chapter Four: Findings Related to Research Questions One and Two

In this chapter, I present the response rate and demographic profile of participating faculty, followed by a discussion of the findings and how they relate to the themes I identified in the literature reviewed and the theories that grounded the study. In this chapter, I describe the findings that answered the first two research questions, and in chapter five I present the findings for research questions three and four.

Faculty Response Rate on the Modified Principles of Adult Learning Scale (PALS) Survey

I invited all 148 full-time, partial-load, part-time, and sessional faculty members employed at the time of the survey at Loyalist College, to participate in this study\(^1\). Burns and Grove (2009) state that most questionnaires yield between a 25% and 30% response rate. Thirty-three faculty members completed this survey, resulting in a response rate of 22.3%, which is just below the expected average. I acknowledge that the topic of my study and other factors such as the timing of the survey in the academic calendar can affect response rate.

In this survey, 42 of the 148 faculty members (28.4%) invited to participate began the questionnaire; however, nine (6.1%) did not submit their responses. There are several possible explanations as to why these nine participants did not complete the survey. For example, the Letter of Information indicated that the survey would take between 20 and 30 minutes to complete, and faculty may have decided that they could not commit to a survey of this duration, given that it was distributed toward the end of the semester when teachers tend to be busier than usual. My survey also required written responses, and Gay et al. (2006) warn that lengthy

\(^{1}\) As defined by the Ontario Colleges of Applied Arts and Technology, Academic Employees Collective Agreement (2017-2021), part-time teachers teach under six hours per week; partial-load teachers teach more than six hours and up to and including 12 hours per week; sessional teachers teach over 12 hours per week, and full-time faculty teaching hours are negotiated on a Standard Workload Formula (SWF). Their duties include the daily operation of their program, and they work up to 44 hours per week.
questions, especially those requiring written responses, can negatively impact the response rate. Alternatively, some faculty may not have completed the survey due to technical issues preventing access. According to Fan and Yan (2009), issues with computer literacy, complications with internet connection, or problems with the browser often arise with web surveys. As a final consideration, participants who started but did not submit the survey may have done so simply because they changed their mind about participating, as the consent form indicated that participants were free to omit answers to any questions, to choose not to share their experiences, or to withdraw from the study at any point by not submitting their responses. In any case, there were no data entered by the nine faculty members who opened but did not continue the survey.

**Demographic Profile of Faculty Respondents on the Modified PALS Survey**

The modified PALS survey (Conti, 1982) that I used in this study collected data for six demographic factors: gender, age, employment status, education level, years of teaching experience, and educational philosophy. Identifiers of race, culture and religion were beyond the scope of my study.

I also asked participants to list on the modified PALS survey the professional activities related to teaching and learning that they have participated in over the last five years. I wanted to compare teaching styles with participation in professional development activities to assess if any specific professional activities promoted more learner, teacher or eclectic teaching styles.

**Gender.** The survey was distributed to 71 (48%) female and 77 (52%) male faculty. Most of the 33 respondents (22.3% response rate) were female (n=23; 69.7%) compared to the number of male (n=10; 30.3%) respondents. Response rates were not reflective of demographics at Loyalist College. An observation to note is that Loyalist College has gender balance in faculty
but the response rate was skewed toward women. Figure 3 displays the gender distribution of faculty identified by the survey participants in my study.

![Gender Distribution of Faculty Respondents](image)

*Figure 3: Gender of Faculty Respondents (n=33).*

**Age.** More than half of the respondents (n=18; 54.5%), reported they were over the age of 50. Thirteen (39.4%) of the faculty respondents were between the ages of 31 and 50 years. Only two (6.1%) faculty respondents were between 20 and 30 years. While I did not have access to the age profile of all faculty at Loyalist College, this is consistent with my observations of the age distribution of Loyalist College faculty. Figure 4 displays the age distribution identified by faculty participants in my study.

![Age Distribution of Faculty Respondents](image)

*Figure 4: Age of Faculty Respondents (n=33).*

**Employment status.** Most participants, (n=25;75.7%), indicated their employment status was full-time, and eight (24.3%) were not employed full-time. While it was not possible to know the distribution of the survey by employment status, by comparison, the employment profile of all faculty at Loyalist College was 109 full-time; 14 partial-load; and 41 part-time. Data
pertaining to sessional faculty were unavailable. Data pertaining to other than full-time faculty employed during the time of the study (Spring semester) were not available. However, according to Colleges Ontario (2019), the total head count for Academic staff in Ontario colleges in 2017-2018 was 23,861, which was comprised of 7,624 full-time faculty (32%) and 16,237 part-time faculty (68.1%). In comparison, my study had more full-time (75.7%) participants than the provincial average. Figure 5 displays the employment status identified by the faculty participants in my study.

**Figure 5**: Employment Status of Faculty Respondents (n=33).

**Level of education.** The majority (n=19; 57.6%) of faculty respondents held master’s degrees as their highest level of education. Three (9.1%) reported holding PhD degrees, and on the other end of the educational spectrum, the same number reported having earned a college diploma as their highest level of education. Data pertaining to the educational profile of all faculty members at Loyalist College was not available for comparison. Figure 6 displays the level of education identified by the faculty participants in my study.
Figure 6: Level of Education of Faculty Respondents (n=33).

**Years of teaching experience.** Just over half of the respondents (n=17; 51.5%) had taught ten years or less and six (18.2%) had taught more than 20 years. I did not have access to data pertaining to the years of teaching experience profile of faculty members at Loyalist College for comparison. Figure 7 displays the years of teaching experience as identified by the faculty participants in my study.

![Diagram showing level of education](image)

**Figure 7: Years of Teaching Experience of Faculty Respondents (n=33).**

**Educational philosophy.** How teachers view their role in the classroom, how they interpret the student-teacher relationship and the methods they use to teach all reflect the teacher's philosophy and beliefs about education (Petress, 2003). Elias & Merriam (1995) explain, if a teacher is more authoritarian (teacher-centred) they tend to lean more towards Liberal and Behavioural philosophy; if a teacher is more egalitarian (learner-centred), they tend
to lean more towards Humanistic and Radical philosophy. The teacher who practices a more eclectic teaching style tends to hold more Progressive beliefs about education.

The modified PALS survey provided a list of descriptions without titles for five educational philosophies, and participants were asked to select the description of the philosophy or combination thereof that best described what they perceived to be their own approach to adult education. Table 5 shows that, based on the categories of philosophies set by the modified PALS tool, the most frequently chosen philosophy, reported by 9 (27.3%) participants was Progressive; The least frequently reported philosophies reported by only one (3%) participant was Radical. A total of nine (27.3%) of the 33 participants chose a combination of two or more educational philosophies.

Table 6: *Educational Philosophy Self-identified by Faculty Respondents* (n=33)

<table>
<thead>
<tr>
<th>Educational Philosophy</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal</td>
<td>6</td>
<td>18.2</td>
</tr>
<tr>
<td>Behavioural</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>Progressive</td>
<td>9</td>
<td>27.3</td>
</tr>
<tr>
<td>Humanistic</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>Radical</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

*Combination Educational philosophy*

<table>
<thead>
<tr>
<th>Combination Educational philosophy*</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal, Progressive, Humanistic, Radical</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Liberal, Behavioural</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Behavioural, Progressive</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Progressive, Humanistic</td>
<td>2</td>
<td>6.1</td>
</tr>
<tr>
<td>Progressive, Humanistic, Radical</td>
<td>2</td>
<td>6.1</td>
</tr>
<tr>
<td>Liberal, Progressive, Humanistic, Radical</td>
<td>2</td>
<td>6.1</td>
</tr>
</tbody>
</table>

**Total**                                      | **33** | **100%**   |

*Respondents selected descriptions of two or more philosophies based on modified PALS classifications.

**Professional development.** All but one of the 33 participating faculty members reported having engaged in professional development activities related to teaching and learning within the
previous five years. Activities related to teaching and learning included: taking part in discussion
groups at Loyalist College, attending in-house and external conferences, going to new teacher
professional development sessions, taking courses credentialed towards undergraduate or
graduate degrees, using textbooks and other resources (web, articles, journals) related to teaching
style, focusing on professional development at team meetings, and participating in webinars,
workshops, certificate programs (e.g., Prior Learning, Assessment and Recognition, Mental
Health First Aid, Diversity training, and Cultural Inclusivity).

**Summary of demographics.** Overall, 33 (22.3% of the 148 faculty members invited)
faculty members completed the modified PALS survey. Most respondents (n=23; 69.7%) were
female and most of the participating faculty were over the age of 50 (n=18; 54.6%). Most (n=25;
75.7%) were employed full-time at Loyalist College and held a master’s degree (n=19; 57.6%) as
their highest level of education. Just over half (n=17; 51.5%) of the 33 respondents, had less than
ten years of teaching experience at the time of the survey, and the predominant description of the
participants' educational philosophy of the faculty members was or included the Progressive
(n=17; 51.5%) category. Finally, all but one respondent (n=3; 97%) reported having participated
in professional development activities related to teaching and learning in the previous five years.
In hindsight, it would have been useful to ask participating faculty the discipline they teach in.
This issue is presented as an implication for further research in chapter six.

I now report the findings and analysis of the findings related to research Questions one
and two.

**Research Question #1** asked, *What is the espoused approach to teaching adult learners at
Loyalist College, based on College documents, and the perceptions of participating
academic deans and faculty?*
As discussed in Chapter 2, Argyris and Schön (1974) pioneered the theory that what is believed (espoused) may not be congruent with what is (practiced). Data related to the espoused approach to teaching adult learners at Loyalist College were collected from a variety of sources posted on Ontario.ca, and the college’s website including, an analysis of the 2017-2018 Annual Report, the 2016-2020 Academic Plan, the 2017-2020 Strategic Mandate Agreement (SMA), interviews with participating academic deans, and online questionnaire responses from participating faculty. A comparison of how the espoused approach to teaching adult learners compares to participating faculty’s self-reported practiced teaching styles is analyzed in research question four.

**Document Analysis**

I analyzed the following reports to identify themes that related to the formal, articulated commitment to teaching Loyalist College students: 2017-2018 Annual Report; 2016-2020 Academic Plan and; 2017-2020 Strategic Mandate Agreement.

**2017-2018 Annual Report.** The annual report presents Loyalist College's vision, mission, and values; a message from the President; and strategic commitments. Each of these sections were analyzed to determine the College's espoused approach to adult learning.

**Vision, mission, values.** According to the 2017-2018 annual report, the espoused vision\(^2\) of Loyalist College is, “Loyalist will be Ontario’s destination college, known locally, nationally and internationally as a deliberate choice of students and community for quality programs, student engagement and applied research, enabled by a creative, innovative and supportive organizational and learning culture”, Furthermore the espoused mission statement is that,

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\(^2\) Loyalist College is currently revising their Strategic Mandate Agreement and therefore at the time of the Annual Report the Board of Governors had not approved vision and mission statements.
Loyalist College exists to support the economic, social and cultural fabric of the surrounding region through the delivery of quality education and training programs, diversity and effectiveness of student engagement and providing relevant applied research and technology transfer to business, community and industry. To accomplish this, Loyalist College reaches globally to lead locally and provides employers with job-ready graduates. (Loyalist College, Annual Report, p. 1)

The espoused vision describes practices consistent with learner-centred, such as “student engagement” and “supportive organizational and learning culture”, (which is consistent with descriptions of learner-centred practices). Similarly, the espoused mission uses learner-centred statements such as, “diversity and effectiveness of student engagement” (p. 1), and “relevant applied research and technology….” (p. 1). The values identified by Loyalist College (identifies the following values) such as, “to support, sustain and fulfill [their] mission, [they] act with: Respect, Integrity, Transparency, Commitment to excellence, Innovation, Responsibility/Accountability, Sustainable stewardship of economic, human and environmental resources, responsiveness and flexibility” (p. 1) are values that adult learners desire in their learning environment (Lieb, 1991; Rogers, 1993; MacKeracher, 2004; Knowles, Holton & Swanson, 2011; Cranton, 2012).

Literature on a learner-centred approach to teaching is extensive and, has been reviewed in Chapter 2. It references adult learning principles including the necessity of engaging students in the learning process (Brookfield, 2013; Kuh, 2003; Yazzie-Mintz, 2007; Pascarella & Terenzini, 2005), and the need for a supportive organizational culture (O’Banion 1997; Brosseau, 2000; Emes & Cleveland-Innes 2003; Hodge, 2010; Alexander, 2014; Austin, 2014; Allen, Withey, Lawton & Aquino, 2016; Rege Colet, 2017). The distinction between learner and
learning centred has also been reviewed in Chapter 2. To summarize, O’Banion (1997), in *A Learning College for the 21st Century*, stated,

Colleges that change their basic systems to focus on learning by expanding learning options for students, by engaging students as full partners in the learning process, by designing educational structures to meet learner needs, and by defining the roles of learning facilitators based on the needs of the learners, will create an educational enterprise that will help students make passionate connections to learning, one whose accomplishments will be worth great celebration in the institution and throughout the society. The learning college that places learning first and provides educational experiences for learners any way, any place, any time, has great potential for fulfilling this dream. (p. 249)

O’Banion describes *learner-centred* approaches to be a *learning centred* institution in six key principles that the learning college is based on:

- The learning college creates substantive change in individual learners.
- The learning college engages learners as full partners in the learning process, with learners assuming primary responsibility for their own choices.
- The learning college creates and offers as many options for learning as possible.
- The learning college assists learners to form and participate in collaborative learning activities.
- The learning college defines the role of learning facilitators by the needs of the learners.
- The learning college and its learning facilitators succeed only when improved and expanded learning can be documented for its learners. (p. 47)
Loyalist College’s values echo many messages from leaders in the field of adult learning, (Galbraith, 2004; Cross, 2005; Wlodkowski, 2008; Knowles, Holton & Swanson, 2011; Brookfield, 2013) advocating that adult learners want to be treated with respect and integrity, are committed to their learning, expect quality in the learning experience, are innovative, and are responsible and accountable learners. The vision and mission statements at Loyalist College endorse a learner-centred foundation. The values to fulfil the mission at Loyalist College align with how adult learners want to be treated. According to the vision, mission and values, the espoused approach to teaching adult learners at Loyalist College is aligned with learner-centred practices.

**President’s message.** The President’s message at the beginning of the Annual Report does not use the term “learner-centred”, however implicit references to learner-centred practices appear throughout the text. For example, the message states, “the Loyalist community moved forward with important initiatives to support student success, while developing new programming, with new pathways through articulation agreements to provide more opportunities for our graduates” and “the Human Simulation Lab where students and community partners use virtual simulation technology to participate in interactive learning” (p. 3). Cranton (2000) and Brookfield (2013) identify the importance of adults being self-directed, learning having relevancy, and the importance of different options for learners to access learning.

**Strategic commitments.** The annual report presents Loyalist College’s strategic commitments in three areas: Academic Excellence; Service and Systems Excellence; and Sustainability and Capacity Building.

**Academic Excellence.** In the annual report, the brief description of Academic Excellence is of a learning-centre. In the case of Ontario College of Applied Arts and Technology
(CAAT’s), learning outcomes are mandated by the Ministry of Training, Colleges and Universities and learning-centred institutions establish learning outcomes for each of its programs based on community and academic requirements (Koester, Hellenbrand & Piper, 2005). The description, as written in the annual report, states that “Loyalist College embraces a learning-centred approach in offering excellence in applied education. We provide students with an exceptional experience guided by highly-skilled employees and supported by curriculum and resources reflecting industry trends” (p. 5). The narrative speaks to “embracing a learning-centred approach” using learner-centred methodology such as “guiding and supporting students”. Simon (2001) explains,

Instructors know that teaching goes on both inside and outside of class, and they welcome questions from students who want to learn and succeed. Most professors are eager to help you with class-related questions, something you don’t understand from a lecture, an assignment that is giving you trouble, or a deadline you can’t meet. (p. 29)

To add, Loyalist College’s outcome objectives address how adult learners want to be treated in an adult learning institution (presented were representative of learner-centred approach qualities) including a

- focus on the student experience, ensuring that every student has the opportunity to pursue multiple pathways while on a personal journey to their destination; offer a five-star student support experience including the continuum of learning from pre-application to graduate, through a 24/7 operation, and a flexible delivery structure; respond to the marketplace with highly-integrated, technology-enabled, experiential and entrepreneurial teaching and learning; through leadership and collaboration, […] ensure access for all students, and support student and graduate mobility; and proactive partnerships which
create opportunities and pathways for secondary school students, mature learners through Prior Learning Assessment Recognition (PLAR), transfer credits, and university articulations. (pp. 6-8)

A learner-centred approach to academic excellence is indicated in the literature by describing the importance of learner experience, respect for diverse learners and ways of learning, flexible delivery, real-world application/relevancy, lifelong learning, and accessible pathways for learners is presented in the literature (; Huba and Freed, 2000; Knowles, Holton & Swanson, 2011; Merriam & Bierema, 2014; Brookfield, 2013).

Service and Systems Excellence. In the annual report, the introductory narrative of Service and Systems Excellence describes learner-centred approaches even though the term is not used. The description states that Loyalist offers “exceptional Student Care strategies that meet students where they are and support[s] them in meeting their academic individual goals (Individual Learning Plans)” (p. 9), and that “Student Services will capitalize on cross-disciplinary expertise, and work to increase intercultural understanding and communication, creating an inclusive and collaborative approach to learning” (p. 9). The outcome objectives included statements indicating that the College “[i]ntroduced new services for part-time day students to feel more connected to Loyalist College “ (p. 9); [l]aunched After Hours Technical Support service for students” (p. 9); [l]aunch[ed]…several Student Engagement/Wellness initiatives…” (p.11); deliver[ed]…stress and resiliency building workshops into academic programming” (p. 11); performed “[i]ntial design and planning of more student focused initiatives…” (p. 11); implemented “[a] wide spectrum of strategies to support success, one learner at a time through the introductions of a new collaborative success plan approach in support of students at risk” (p. 12). Research on student engagement (Pascarella & Terenzini,
acknowledged that many factors impact student persistence, including collaborating with students to provide options for their best learning. The consistent conclusion is that students are more inclined to stay in college when they report a positive connection with their faculty and peers. Many scholars (Forest III & Patterson, 2006; Knowles et al., 1998, Ozuah, 2005; Yoshimoto, Inenaga and Yamada, 2007) believe that adult learners will invest a considerable amount of resources (time, energy, etc.) when learning is of value to them. Muirhead (2007) asserted that adults need to be actively involved in learning and desire to learn subjects that are relevant to their personal life. Schlossberg, et al., (1989) stated that educators must “focus less on own concerns and more on our students – how motivated they are and how much time and energy they devote to the learning process” (p. 30). Muirhead (2007) states that “adult learners are self-directed and motivated to learn and require to be involved in the process and development of their education” (p. 180). Loyalist College’s efforts to meet students where they are and support them in meeting their individual academic goals, create an inclusive and collaborative learning environment, and implement resiliency and wellness initiatives are all examples of a learner-centred approach. Brookfield (2005) concurs that adults seek a supportive culture that is collaborative and cooperative. This includes not just their interactions with faculty, but with all staff including student services professionals.

**2016-2020 Academic Plan.** Loyalist College’s 2016-2020 Academic Plan (Loyalist College, Academic Plan, 2016-2020) is organized by categories related to educational philosophy, student experience, pillars of academic activity and strategic academic priorities.

**Educational philosophy.** Loyalist College’s introduction of the educational philosophy states: “The following is provided to briefly illustrate the philosophy at the core of Loyalist College’s commitment to a learner-centred, outcomes-based and accessible educational
experience for all its students” (p.3). Statements that describe Loyalist College’s learning-centred approach include the following (and I quote):

- The primary role of faculty as teachers is to facilitate a learning-centred environment.
- Power and responsibility in the learning environment is shared between the faculty and the student.
- The role of content is more than to impart knowledge. The learning facilitates the practice of using content in inquiry and in solving real-world problems.
- Through this approach, students develop skills as life-long learners and can self-assess their own learning.
- Assessments are authentic and measure the achievement of the learning outcomes. (p.4).

By way of comparison, Table 6 highlights some of the differences between the learner and teacher-centred approach to teaching adults, including the learning environment and teaching approach.

The educational philosophy statement and supporting statements in Loyalist College's academic plan espouse a learning culture and teaching approach that is favourable to adult learning. Sparks (1999) describes the distinction between learning-centred and learner-centred as different kinds of learners (visual, auditory, kinesthetic) benefit from teaching methods that match their learning style. As such “learning-centred teaching therefore involves adopting teaching methods, such as ‘student-centred learning’, ‘active learning’, ‘didactic teaching’, ‘problem-based learning’, etc., where they are appropriate, but not where they are inappropriate” (p. 183). According to Merriam and Caffarella (1999) a learning-centred environment that is conducive to adult learning is facilitated in a manner that encourages learners to participate in
designing course outcomes and class activities, and where learners have input in evaluating the outcomes of learning.

Table 7: Differences between learner and teacher-centred approach to teaching adults

<table>
<thead>
<tr>
<th><strong>Teacher-Centred</strong></th>
<th><strong>Learner-Centred</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Single discipline approach</td>
<td>Multidiscipline approach</td>
</tr>
<tr>
<td>Competitive and individualistic learning environment</td>
<td>Cooperative, collaborative, supportive learning environment</td>
</tr>
<tr>
<td>Students are the learners</td>
<td>Learning is shared between teachers and students</td>
</tr>
<tr>
<td>Teachers transmit knowledge to students</td>
<td>Students construct knowledge from the learning experience</td>
</tr>
<tr>
<td>Students are passive recipients of information given by teachers</td>
<td>Students are active participants in acquiring information</td>
</tr>
<tr>
<td>Knowledge acquisition is the emphasis regardless of context</td>
<td>Knowledge is relevant and indicative of problems in real life context</td>
</tr>
<tr>
<td>Teachers are the primary source of information and their role is to impart knowledge</td>
<td>Teachers coach and facilitate students to acquire information</td>
</tr>
<tr>
<td>Teachers assess learning</td>
<td>Students actively participate in assessing their learning.</td>
</tr>
</tbody>
</table>

Adapted from Merriam & Caffarella, 1999; Henson, 2003; Huba & Freed, 2000; Vega & Tayler, 2005.

Daley (2003) concurs that within the learner-focused environment, the teacher shares the control of the curriculum with the learners and establishes a cooperative and collaborative relationship. Henson (2003) describes the classroom where the educator and the learner connect learning to real-life contexts. The educator is a facilitator assisting learners (learner-centred) in the learning process (learning-centred), and the outcome is more about understanding process opposed to getting right answers (Huba & Freed, 2000; Vega & Tayler, 2005). Stage, Muller, Kinzie and Simmons (1999) stress that the learning environment that addresses individual
academic readiness of learners, including their motivation, previous experiences and relevancy to the learning (learner-centred practices), help learners become self-efficient.

The last section of the Educational Philosophy in the 2016-2020 Academic Plan includes a description of Maximizing Student Growth and Achievement, and it states:

Maximizing student growth and achievement refers to several factors. The concept of differentiated learning stresses that approaches like assessment for learning to serve to meet students where they are. By considering the student's prior knowledge and skills, learning can be more effectively facilitated for each student. This principle would also include quantitative metrics such as student success, graduation rates and employment rates. Loyalist’s commitment to maximizing student engagement through a robust array of educational pathways will enhance student growth and achievement. (p. 4)

Meeting students where they are, considering students’ prior knowledge and skills, and maximizing student engagement through a robust array of educational pathways are all learner-centred approaches to adult learning (Knowles, 1998; Caffarella, 2002; Cranton, 2006a; Brookfield, 2013).

Student experience. After defining the educational philosophy, the academic plan speaks to the student experience identifying seven deliverables including: outcomes-based learning, authentic learning opportunities, diverse delivery modes, experiential learning, an interdisciplinary approach, promotion of an international/global perspective, and strategic integration of technology (p. 5). Avis (1995) and Maehl (2000) identify that adult learners are interested in learning that is applicable (outcomes-based and authentic), and fits into their busy lives (diverse delivery modes). Kolb (2006) identify applied learning (experiential learning) as a component of how adults learn best in educational settings. In addition, Knowles, Holton, and Swanson (2011)
note that one of the reasons adults enter higher education is to live their life in a more satisfying way (international/global perspective). Finally, Huba and Freed (2000) identify that adult learners are interested in interdisciplinary learning. Literature supports that Loyalist College’s identified deliverables for the student experience correspond with a learner-centred approach to teaching adult learners.

**Pillars of academic activity.** The following section of the academic plan describes five pillars of academic activity, which include access, excellence, recruitment, retention, and student success. Although all pillars are relevant to learners, the pillar that captures the essence of all the pillars is student success as a top priority which states that it, “…is the essential ‘raison d’etre’ for everything [they] do at the College. [Their] learners become part of the Loyalist College community because they wish to achieve their post-secondary goals. [The college’s] first priority is to do everything [it] can within [its] capability and resources to facilitate the achievement of [its] learners’ goals” (p. 6).

Seminal theorist Pace (1979) pioneered student engagement theory. He believes that “all learning and development requires an investment of time and effort by the student. What students can gain from the variety of events depends on the amount, scope and quality of their engagement. As these encounters broaden and deepen, the students’ capacity for growth is enhanced” (p. 127). Today scholars still believe that persistence in academics is relative to the quality of connection learners feel to the learning environment (Pascarella & Terenzini, 2005; Caffarella, 2002; Merriam, Cafferella & Baumgartner, 2007).

Brookfield (2005) believes that engagement of the adult student happens when they can identify their learning goals, talk about their experiences, determine what they will gain from the learning, have preconceived goals and timelines and have the flexibility to meet their learning
needs. Theorists have spent their entire careers studying what motivates adults, and many agree that adults seek self-actualization (Rogers, 1969; Maslow, 1968; Wilson & Hayes, 2000). Literature is abundant on the human pursuit of goals. Lieb (1991) identifies that adults are goal oriented and that they enrol in colleges because they have a goal and are seeking a specific outcome.

Loyalist College’s pillar on student success espouses a learner-centred approach to teaching adult learners by indicating that learners are part of the Loyalist College community, and as an institution, the college is doing everything within capability and resources to facilitate achievement of learners’ goals.

**Strategic academic priorities.** The last section of the academic plan describes ten priorities which include responsive programming, alternative learning, enhancement of resources to support student learning, professional development, strategic enrolment plan, international strategic plan, student support services, educational institutions/community/economic/ business and government partnerships, campus enhancements and, integrated sustainability plan.

**Responsive programming.** This priority is not specific to teaching adult learners, but it does identify quality assurance, relevance and opportunity as factors in assessing sustainability.

**Alternative learning.** This priority details online, distance and alternative learning opportunities. The most learner-centred reference is point ‘d’ which states that the college “[c]ontinue to explore and develop online and alternative learning options for all programs in a manner that promotes flexible and transferable learning opportunities while maintaining quality and the needs of learners as major criteria” (p. 8). An institutional barrier identified by Cross (1981) is accessibility to learning. Learning that is accessible in a flexible and accommodating timeframe is a learner-centred approach to teaching adult learners.
**Enhancement of resources.** This priority describes the continuation of high-quality resources to support student learning. All points are learner-centred stating, “innovative application of technology to enhance the learning process for all students [and] application of simulation and virtual technology [lastly] high-quality online and collection library resources” (p. 8). The challenge faced by adult educators is how to use technology without diminishing the learning experience. Burge and Roberts (1993) caution that “technology in and of itself does not promote learning” (p. 35). Technology can enhance adult learning, depending on how it is used, by increasing accessibility to adult educators and discussions with peers, reducing feelings of isolation by promoting constructivist, collaborative learning and increasing learner autonomy (Burge 1994; Cahoon 1998; Eastmond 1998; Field 1997).

**Professional development.** This priority references professional development of faculty and staff. It sanctions the “Office of Teaching and Learning, in collaboration with the Learning Technologies Office, continuously explore the most effective means to support the PD of faculty and staff in a manner that benefits the learner and best meets their learning needs” (p. 9). This priority also identifies the exploration of “a mandatory Teaching Certificate” (p. 9). Bearor’s (2012) position on professional development is that “for both new hires and for continuing clinical faculty, a variety of professional development programs such as workshops, in-services, conferences, and formal training programs should be offered routinely to address the specific identified shortcomings of a clinical faculty member and facilitate continued growth for all other” (p. 113). Although I would argue the message that professional development is to address identified shortcomings, professional development, in a variety of formats, should be routinely available and, accessible to full and contract faculty. Currently, all faculty can access evening professional development sessions that are targeted at best practices in teaching and learning.
These sessions appear popular with other than full-time faculty. Full-time faculty can also access professional development in their discipline from industry sponsored events. Finally, new faculty are mandated to attend professional development during their probation period.

**Strategic enrolment plan.** The goal of the strategic enrolment plan is to “achieve optimal enrolment for each program in the College” (p. 9). Six of the ten identified goals pertain to the learner but, more in the context of meeting the institutional needs to increase enrolment. Goals 3, 4, and 5, are more specific to the learner needs and characteristic of learner-centred practices.

Goal #7 is neutral in description and does not indicate whether it is student or teacher centred stating, “Loyalist College will provide a comprehensive academic support and student life model” (p. 9). Comprehensive academic support could be either teacher or learner-centred, and although relevant to persistence, student life model is not the focus of this analysis. Goal #3 states “create enhanced cross-campus transitional opportunities” (p. 9). The practicality of being able to change programs for adult learners is learner-centred. Adult learners can enter postsecondary with a focus or goal that may require adjusting due to competing demands (Schlossberg, et al., 1989). The option to transition from one program to another gives adult learners the flexibility to manage other demands in their lives but not at the expense of their academics. Goal 4 “promote the financial literacy of post-secondary students and address the financial needs of its diverse student body” (p. 9). Financial stresses can be a burden on adult learners. Many of them are working full/part-time jobs while going to school (Schlossberg, et al., 1989). Any resources that can assist adults to manage their financial stress, allowing them to focus on their academics, is learner-centred. Lastly, goal #5 actually uses *student-centred* in identification of the strategic academic priority stating, “enact student-centred approaches to ensure seamless and transparent services” (p. 9). Adults are self-directed, expect to take
responsibility for decisions, and need to be involved in the planning of their instruction (Knowles, 1984).

**International strategic plan.** This section of the strategic academic priorities is related to recruiting, curriculum partnerships and branch campus opportunities with international student institutions. This section is about the process of recruiting nondomestic learners. The international strategic plan was outside of the scope of my research. My study did not differentiate between domestic and non-domestic adult learners. This is presented as an implication for further research in chapter six.

**Student support services.** This section states, “Loyalist College will provide optimal support services to students by ‘meeting them where they are,’ thus allowing them to maximize their opportunities for success” (p. 11). Carney-Crompton and Tan (2002) describe the non-traditional (adult) student performing better compared to traditional students despite not having the same supports. Identification that the adult learner may perform better regardless of support is not an excuse for limiting support services. Loyalist College’s strategy to ‘meet them where they are at’ and the pledge to provide optimal support is a learner-centred response to adult learners.

**Partnerships.** Through partnerships, Loyalist College plans to enhance pathways and transfer opportunities for all learners. Adult learners benefit from this commitment because they may attend college directly from university, seeking a second career, are most interested in subjects that have immediate relevance and impact to their job or personal life and are problem-centred rather than content-centred (Workload Task Force, 2005; Knowles, 1984).

**Campus enhancements.** Like all sections, this section also prioritizes the learner. Commitment to “work and study space for students [and] facilitate the planning process for
equipment expenditures that will respond to the needs of learners in every program [and] academic space that is developed to respond to the needs of the AP [Academic Plan]” (p.12).

Integrated sustainability plan. The last section of the 2016-2020 academic plan did not give any details other than the statement that, “All academic programs will maintain a commitment to the integrated Sustainability Plan while promoting sustainability as a key element of the College’s internal Program Quality Assurance process” (p. 12).

The actual word “learner/student-centred” is only mentioned twice in the 2016-2020 Academic Plan for Loyalist College; however, the prevalent message in the plan is that Loyalist College faculty facilitate a learning environment that shares the power and responsibility of learning with students. According to the Glossary of Education Reform, “the term student-centered learning refers to a wide variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students and groups of students” (Student Centered Learning, 2014). Weimer (2002) provided a similar definition including “conditions under which the student is learning” (p. xvi). In the context of adult learning literature, Loyalist College espouses a learner-centred approach to teaching adult learners in the 2016-2020 Academic Plan.

2017-2020 Strategic Mandate Agreement. Data related to the espoused approach to teaching adult learners at Loyalist College in the Strategic Mandate Agreement (SMA) were accessed from the Government of Ontario (Ontario.ca) website. The preamble states: “This Strategic Mandate Agreement between the Ministry of Advanced Education and Skills Development and Loyalist College outlines the role the College currently performs in Ontario’s postsecondary education system and how it will build on its current strengths to achieve its
vision and help drive system-wide objectives and government priorities” (Strategic Mandate Agreement: Loyalist College of Applied Arts and Technology, 2017-2018, p. 1). The mission and vision statements were analyzed in the 2017-2018 Annual Report section. The following is an analysis of the sections related to student experience, innovation in teaching and learning excellence, access and equity, and applied research excellence and impact.

Student experience. According to the SMA, this section captures institutional strengths in improving student experience, outcomes and success. This section recognizes institutions for measuring the broader learning environment, such as continuity of learning pathways; retention; student satisfaction; co-curricular activities and records; career preparedness; and student services and supports. (p. 3)

The following is an analysis of Loyalist College’s intended approach to improving student experience. This section outlines five aspects of the student experience. First, is branding Loyalist College as a destination college. Loyalist College intends to enhance facilities, diversify the student community, and offer a vibrant student experience. Second is career preparedness. This aspect addresses helping students to thrive, be resilient, gain employability, and gain life skills in a changing economy and workplace. Loyalist College plans to offer mandated and strategically positioned elective courses, thread defined competencies and outcomes across curricula, and establish a badging system that recognizes competencies. The third aspect of student experience is to continue to expand Prior Learning Assessment and Recognition (PLAR). According to the SMA, “Loyalist will continue to expand its use of PLAR and transfer credits to enable students to successfully complete credentials” (p. 4). Fourth is the development of health and wellness services and supports to build resilience in students and employees. Strategies and
action have been developed to enable services including, developing a capacity for assistance in residence, with evening and weekend support. The fifth aspect is implementing strategies to support student retention including peer tutoring, customized timetables, remedial course options, opportunity to move to part-time status, and customized modules that support skill development for success. Loyalist College’s SMA examples of institutional initiatives indicate the following commitments:

- Continue to improve internal processes that eliminate barriers and enable students to move easily between different areas of Loyalist and through the college system
- Using the developed three-year strategic enrolment plan, implement opportunities for alternative delivery methods, increased offerings and new program offerings
- Develop a work-integrated learning strategy that includes a formal co-curricular record and digital badging, based on the top attributes of graduates and rooted in fundamental skills that are integrated throughout Loyalist
- Introduce a formal mechanism for student feedback on student success department services to improve Loyalist’s proactive approach to addressing student needs
- Establish and implement an institutional teaching and learning framework that will ensure students are exposed to real-world applications of their knowledge through technology, learning activities and experiential learning; ensure faculty are provided with learning opportunities that enhance their teaching and optimize student engagement in the curriculum. (p. 5)

Loyalist College espouses commitment and strategies that are learner-centred in their SMA. Examples of commitment include diversifying the student community, use of PLAR for transfer credits, evening and weekend access to support services, customized timetables,
remedial course options and providing students with the choice to move to part-time status. Examples of strategies include improving pathways to move within different areas of Loyalist, implementing opportunities for alternative delivery methods, offering more and new programs, creating mechanisms for student feedback to improve student needs, and a teaching and learning framework that exposes students to real-world applications of their knowledge and ensures faculty are supported to enhance their teaching and optimize student engagement.

Seminal leader in adult education, McClenney (1998) summarizes findings from studies of undergraduate students and noted that students are no longer entering college on a strictly full-time basis. Many are enrolled part-time, and some are working full-time jobs. Students may no longer seek traditional relationships with their colleges, and they do not want to pay for anything they are not using. Students now want “terrific service. [They] want convenience. [They] want quality control. Give [them] classes 24 hours a day and give [them] in-class parking if possible” (p.2). Cross (1981) identifies institutional barriers that may exist for the adult learner in college such as, restrictive classroom schedules, inadequate library hours, proscribed accessibility to labs, lack of child-care services, and lack of access to faculty. Prior Learning Assessment and Recognition (PLAR) affords adults the opportunity to demonstrate learning from non-academic experiences. Osbourne (2008) states: “Assessment may be based on institutional or standardized examinations, credit recommendations for planned learning experiences, course approved by licensing bodies, or portfolios that document learning achievements” (pp. 15-16). Loyalist College’s SMA commitment espouses breaking down potential barriers for adult learners.

**Innovation in teaching and learning excellence.** According to the SMA,

This section focuses on innovative efforts including pedagogical approaches, program delivery and student services that contribute to a highly skilled workforce and ensure
positive student outcomes…Institutional strengths in delivering high-quality learning experiences, such as experiential, entrepreneurial, personalized and digital learning, to prepare students for rewarding careers. It includes recognition of student competencies that improve employability. (p. 5)

The following is an analysis of Loyalist College’s intended approach to innovation in teaching and learning excellence. Before presenting initiatives, the SMA acknowledges that Loyalist College has “developed an educational philosophy that articulates its learning-centred approach to outcomes-based education” (p. 6). The educational philosophy was analyzed in the 2016-2020 Academic Plan section.

The SMA indicated that “through an enhanced variety of modalities and delivery methodologies, Loyalist will support further experiential learning inside and outside the classroom through the use of simulation labs, virtual excursions and technology-enhanced seminars” (p. 6). The list of Loyalist College’s distance and continuing education (CE) offerings includes 35 programs in an online format, 25 local Board of Governor Certificates in a variety of subject areas, three Ontario College Certificates and six Ontario College Diplomas. In addition, online credit recovery opportunities are offered for on-campus students, and as a result, many are able to graduate (p.6). The SMA acknowledged that “The majority of distance education and CE students are mature and indirect, allowing Loyalist to reach and provide access to a different segment of the population” (p. 6). Colleges Ontario (2018) cited that 73% of students do not attend college directly from high school (non-direct) and the average age of non-direct applicants is 25.6, the average age of learners returning to school under Second Career funding is 41 years old, and the average applicant age is 24 years. These statistics indicate that most students in college are adult learners and non-direct entries.
Loyalist College’s intended approach to innovation in teaching and learning excellence includes formalizing a professional development strategy for faculty to enhance their teaching practices, ensuring that 50% of programs provide full exposure to industry/community supported applied projects, traditional placements migrate to paid co-ops or applied projects (where feasible), and all students will experience at least one hybrid course delivery and one other alternative delivery methodology (pp. 6-7). At the time of my study, Loyalist College’s professional development plan for faculty was limited to mandatory training for new full-time faculty and optional attendance at training events for full-time and other-than-full-time faculty. While the *Innovation in Teaching and Learning Excellence* section in Loyalist College’s SMA did not give detailed descriptions of the pedagogical approach to teaching, it did espouse a learner-centred approach to teaching adult learners.

**Access and equity.** This section highlights that “institutions play an important role in providing equitable and inclusive environments that make it possible for students from diverse communities to thrive and succeed” (p. 7), and that creating equitable access opportunities that can include multiple entrance pathways and flexible policies and programming, with the focus on students who, without interventions and support, would not otherwise participate in postsecondary education. Examples include outreach to marginalized youth, transition, bridging and access programs for adults with atypical education histories and who did not meet admissions requirements. (p. 7)

An abundance of literature suggests that adult learners come from very diverse communities and with extensive experience; they seek higher education for a reason and are motivated to succeed; and adults require flexibility and support from their institution to access pathways to learning
Two examples of institutional initiatives given in the SMA that are adult learner friendly include “increas[ing] the number of January and May intakes for the 2016-2017 academic year for full-time programming to provide increased opportunities for students to begin their studies” and making available “[t]he Career and College Prep (Academic and Career Entrance Certificate) for mature students to earn their grade 12 equivalency…” (p. 9). Considerable references to what scholars have said in the literature regarding accessibility and increased opportunities for learners has been reviewed. Interestingly, under access and equity, the SMA uses the term “mature students” but does not describe what is meant. According to Colleges Ontario (2018) 60% of learners are over the age of 21 years. One could argue that most learners attending postsecondary in Ontario are “mature students.”

**Applied research excellence and impact.** The last learner-centred reference analyzed in Loyalist College's SMA is related to building internal capacity for “supporting student success through applied learning initiatives incorporated into college curricula” (p. 12). Cross (2005) studied the needs of adult learners in the classroom, including effective teaching methods for adult educators in community colleges. Her research supports the need for applied learning. She indicated that adults want to incorporate their life experience in learning, they expect learning to help with real-life issues, and adults are task focused. Lieb (1991) contends that adults are practical and will focus on the learning that is most useful in their life experience. Smith (2018) concurs that learners regard learning as relating parts of subject matter to each other and to the real world and understanding the world by reinterpreting knowledge. If we go back to 1965, when the Honourable William G. Davis (then Minister of Education) introduced Bill 153 (an act
to give an alternative to University - Colleges of Applied Arts and Technology), the purpose was
to give students who did not have the interest, finances and/or skills to attend University an
opportunity for an applied education (Davis, 1991). Kolb (2006) identifies applied learning as a
component of how adults learn best in educational settings.

To conclude, in the context of adult learning literature, Loyalist College espouses a
learner-centred approach to teaching adult learners in the 2017-2020 Strategic Mandate
Agreement.

**Interviews with Academic Deans**

Perceptions of participating academic deans regarding the espoused approach to teaching
adult learners at Loyalist College informed this section. Participant responses to individual face-
to-face interview questions (Appendix N) provided some of the answers to research question
one. Four academic deans were invited to participate in the data collection; however only three
responded to the request. It is probable that the fourth did not respond because they were in
another role at Loyalist College during the period of my study. For clarity in the analysis of the
qualitative data, the academic deans are identified as Deanone, Deantwo and Deanthree. To
maintain anonymity, the pronoun used is they. Combined, the participating academic deans have
36 years of experience at Loyalist College (teaching and management) and supervise
approximately 200 faculty members. The following is an analysis of academic deans’ response to
interview questions regarding learner-centred, personalized instruction, relating learning to
experience, assessing learning, building the learning climate, participation in the learning
process, and lastly assisting learners in personal development.

**Learner-centred.** Participating academic deans were asked how they believed Loyalist
College is learner-centred. A predominant theme identified was experiential/applied learning
including community projects, simulations, placement, job shadows, major projects, case studies, role-plays, culminating activities, portfolio development. Deanone identified that they believed Loyalist College demonstrated being learner-centred by giving “opportunity for students to take what they have learned and really apply it.”

Another theme identified was working with learners from a holistic approach, including integrating different learning strategies in the classroom to meet different learning styles, including reflective practice in curriculum, providing learners with choices (how, what, and even where they want to learn content) and using universal design in content delivery. Deantwo commented that faculty are “meeting the learner where they are at.”

Academic deans also indicated outcome-based learning and authentic assessment were how they believed Loyalist was learner-centred. Deanthree stated, “the student needs to have a multitude of opportunities to meet the outcomes.” Authentic assessment included flexibility and application of learning. Deantwo stated, “…a variety of assessments…, [and] also looking at flexibility that meets the learner’s style.” One academic dean commented that “we’re not really sure if we’re learner or learning centred” (Deanone). I would suggest we are both. The approaches to being a learning centred institution have some of the same characteristics as being a learner-centred faculty. Setting learning outcomes does not contradict with being learner-centred; it makes us responsible for working with students to be employable upon graduation. Postsecondary institutions are not designed to let students decide what learning outcomes should be; that is why faculty who are experts in their field are hired. How faculty interact with students to reach the learning outcomes is based on how faculty view their role, as guides and coaches to meet the learning outcomes or as the sage giving knowledge to dependent learners. Best practices conclude that adult learners prefer the guide and coach route.
Personalized instruction. Participating academic deans were asked how they believed faculty personalized instruction. All deans identified that lecture format was not the most effective means, and that faculty try to facilitate learning that includes learner’s experiences. Academic deans were consistent in their responses that alternative and multiple means of delivery methodologies were encouraged, including hybrid; online; experiential; on weekends; and face-to-face learning. In addition, recognition that their role is to help faculty recognize their important role of facilitation of education. Deanthree described the process as follows: “The magic that happens in the classroom is about inspiring and engaging students in the classroom.” They recognized that for quality assurance Ministry standards must be met but acknowledged that the process of meeting those standards is dependent on the faculty and the “manner that they feel comfortable with” (Deanthree).

Academic deans also identified recognizing the uniqueness of students and helping those at risk by “putting appropriate services in place” (Deanone). Academic deans agreed that program quality assurance is critical and believe that “we’re offering a variety of learning opportunities, different assessments, different evaluation methodology, different ways of presenting curriculum or different ways of, of putting students in an opportunity to practice” (Deanone). One of the academic deans identified formative assessment as part of the process of personalizing instruction, stating that “there may be a bit of information disseminated at the outset, but its formative feedback where students are then putting that learning into hands-on tasks” (Deantwo). Another academic dean acknowledged that experience level of faculty can impact personalizing instruction (Deanthree).

Relating learning to experience. All participating academic deans agreed on the importance of the learner’s experience. One academic dean spoke about relevancy in learning,
being current in the classroom, and using experience to ground the learning. This particular academic dean stated, “I was excited and intrigued to see that the faculty could literally say, you know, they could take whatever the instruction was and ground it directly into things that were happening today” (Deanthree). Another academic dean, Deanone, described bringing learner experience to the classroom as critically important. They described it as enriching the student experience stating, “you can, you can enrich, enrich the classroom and, and what’s going on because you know I’ve got (name removed to avoid identification) sitting here who’s done this, and I’ve got (name removed to avoid identification) sitting here who’s done that” (Deanone).

**Assessing learning.** The next question asked participating academic deans how they believed faculty assess learners’ needs. All participating academic deans were clear that they believed their faculty did assess student needs. For example:

It is a balance of, of knowing your learners, if they arrive with IEP’s, if they arrive with a predetermined challenge, faculty being aware of that, but also, as the semester unfolds, faculty being on top of students of concern…monitoring throughout the semester is essential…while preserving confidentiality. (Deantwo)

Deantwo also identified the importance of faculty communicating the learner’s needs to avoid working in isolation. They added, “to ensure that the learner is supported and we’re celebrating what works and evolving that, but also discussing what isn’t working.”Deantwo identified the importance of scaffolding the learning, understanding what is working with a learner and what is not working, recognizing when there is a gap of skill and helping the student to achieve the learning. Deanone stated,
that is the experience you are going to have here at Loyalist (name held for confidentiality) is that faculty get to know who you are, they know what you want, where you want to go, and then their expertise allows them to figure out how, how that goes.

They also stated that “I’m always impressed by how much they [faculty] do know, so I think it validates what I believe is happening, is that, that faculty are meeting students where they are.” Deanthree summarized their position stating, “that’s the centre of learner-centred education, you know, it’s huge…so, do I believe they assess learner needs? Every single day, on an ongoing basis.” Academic deans listed accessing internal support services (student success mentors, student counsellors), collaborative success plans, transparency among the faculty team to plan for student success, being mindful of students that may need more supports, and talking to students and monitoring progression (or lack of progression) as strategies they believed their faculty use to assess learner needs.

**Building the learning climate.** Participating academic deans responded to the question: How do you think faculty builds climate in the classroom? A few different examples were given such as: engaging learners in defining the learning community - “I’d like to see more of that discussion that formation of the learning community piece at the beginning of all programs” (Deanone); not letting time be a barrier to managing the learning community; setting a positive tone in the first class; sitting down with students talking and negotiating about what the classroom experience is going to look like; giving students choice by “…being learner-centred in that approach versus we’re going to….“ (Deanthree); mirroring the work world by clearly communicating consequences/steps in dealing with problematic behaviour; training faculty (who are hired as industry experts, not teachers) on strategies to build climate and; including marks on
student professionalism. One academic dean described the classroom as a soft environment: “you fall down, but you bounce right back up” (Deantwo).

**Participation in the learning process.** Questions about how faculty include learners in the learning process elicited many responses from the participating academic deans. One participating academic dean talked about transparency and the importance of learners knowing they are being assessed; peer review to help learners “understand they’re being assessed but understand they can do assessment as well” (Deantwo); allowing students to participate in developing assessments; evaluations; identification of expected classroom behaviour—“if you bring them into it, I think they take ownership of that entire learning process, and I think that’s critically important that faculty do that” (Deantwo); and building a sense of engagement, participation, and enthusiasm. Deantwo ended this question with: “I think if you do have student input, you’re going to have investment in the learning process. And if you’re talking about adult learning, if you’re assuming that they have a responsibility, like how do you get them to acknowledge that responsibility, you involve them in what they’re doing.” Another academic dean mentioned the following: that “there’s a breadth and depth of assessment ability that, that we haven’t tapped into…” (Deanthree).

Academic deans acknowledged that evaluator methodologies should be mapped effectively to the outcomes, letting students plan how they will demonstrate they have met the learning outcomes, students participating in the criteria for evaluating their performance, and giving students the “opportunity to have some input around what they deemed is the most important part of the learning there” (Deanthree). Lastly, an academic dean identified class discussion, dyads, triads, group work, project work, simulations, matching evaluations, and assessment of learning outcomes. Regarding letting students participate in developing evaluation
criteria, the academic dean responded: “I think it should be part of the learning experience, but I also don’t think most faculty are comfortable involving students in development and evaluation, especially rubrics” (Deanone).

Assisting learners in personal development. The last question that participating academic deans were asked was: How flexible do you think faculty are in assisting learners in personal development? Most believed that it was based on individual faculty comfort. Deanone replied, “I think we need to do a better job in providing professional development in this area, given many of our faculty are industry experts who have become or are working towards being strong facilitators of learning.” Deanone talked about some examples of amazing industry experts who are now amazing facilitators and that “we really need to showcase that.” Academic deans recognized that for some faculty it was an easier transition to support learners in personal development because they did this in their professional work. This was also acknowledged as a detriment at times because it can be a challenge to step away from the professional development role and into the academic role. Deantthree recognized that some programs are relational and stated, “because we are learner-centred and some of our programs are grounded in the relational approach…they thread and embed that personal development all through the curriculum.”

Deantwo identified that faculty manage issues that relate to students’ concept of themselves stating, “I think there’s always a balance between personal and professional, and I think faculty have to be respectful of that in dealing with young adult learners.” Deantwo also identified a line between personal and professional and acknowledged that line is not always clear. They stated, “I think as a faculty member or as an administrator, you can be friendly with someone but you’re not their friend.” They ended by mentioning the important role faculty play by modeling respect and providing a learning environment of possibility. Lastly, Deanone
responded that “I think specifically the students are engaged in, in learning experiences at the beginning of the first semester which provide opportunities for them to learn about themselves.” In addition, they commented that faculty “are really engaged in, in all aspects of the learner.”

To conclude, despite the acknowledgment of one academic dean regarding letting students participate in developing evaluation criteria, who responded “I think it should be part of the learning experience, but I also don't think most faculty are comfortable involving students in development and evaluation, especially rubrics” (Deanone), the predominant theme among all participating academic deans was their belief that faculty practiced more learner-centred approaches with learners compared to teacher-centred approaches. They identified that student-centred teaching is at the academic program, institutional, as well as the individual professor level (Huba & Freed, 2000). Poonwassie and Poonwassie (2001) state, “Instructors who are consistently empathic, genuine, accepting and respectful generally develop a more open and trusting relationship with students … the result is usually a climate of collaboration and mutual exchange in the learning process” (p. 150). The literature reviewed related to best practices for teaching adult learners is consistent with the perceptions of participating academic deans regarding the preferred approach at Loyalist College to teaching adult learners.

Faculty Responses to Conti’s Modified PALS Questionnaire

Perceptions of participating faculty regarding the espoused approach to teaching adult learners at Loyalist College informed this section. Participant responses to Conti’s modified PALS questionnaire, section three, provided some of the answers to research question one. Qualitative data on the modified PALS explored participating faculties perception of learner-centred teaching, teacher-centred teaching, personalizing instruction, relating learning to
experience, assessing learning, building the learning climate, learners participating in the learning process and, assisting learners in personal development.

**Learner-centred.** Participating faculty were asked what three key terms define learner-centred for them. Most faculty listed words or words like choice, relational, customized, reflective, experiential, self-directed, collaborative, relevant, interactive, inclusive and active. One faculty responded with, “focuses on learners needs with teacher as facilitator of their learning” (F5). Another faculty answered, “focused on individual learner, flexible, relational” (F12) and another faculty replied, “student first, multiple methods of delivery, accommodations” (F16). F18 stated, “Learner self-concept and needs, Learner prior experience, Learner goals. Lastly, F32 response was, “Personal Learning Plans, Reflective Practice, Student as Expert.”

The themes that emerged were learners are in control of their learning and of how their learning is assessed; learners are in a partnership with faculty in the learning; recognition of learner experiences and prior knowledge in the learning; creative and multiple methods of content delivery that aligns with students’ interest and passions; strength-based approach to learning; authentic assessment/evaluation. All faculty responses positively aligned with the learner-centred approach and all identified themes that are learner-centred.

Conti (as cited in Galbraith, 2004) describes the learner-centred teaching style to include using diverse teaching methods; not determining the students’ educational objectives; planning units that are relative to student experience; not confronting or challenging students in the presence of their peers; using written tests to indicate new directions for learning; and encouraging discussions/interactions, etc. Based on the data and the literature (Caffarella, 2002; Cross, 2005; Wlodkowski, 2008; Knowles, Holton, & Swanson, 2011; Cranton, 2012; Smart, Witt & Scott, 2012; Fries, 2012; Ahmed, 2013; Brookfield, 2013; Svinicki & McKeachie 2014;
Stage & Manning, 2016) all participating faculty that responded, appeared knowledgeable on what constitutes the learner-centred approach to teaching adult learners.

**Teacher-centred.** Participating faculty were asked what three key terms define teacher-centred for them. Most faculty identified words or words that included standards, lectures, institutional outcomes, didactic, reproducible, predictable, controlled, pre-planned, uniformity, self-centred, and time-bound. One faculty stated, “focuses on the teacher with the students getting what the teacher gives them” (F5). Another faculty response was, “Teacher as expert, Lecturer, Content more important than learner” (F18). F22 stated, “Full control of the classroom. Independent learning. Lack of community.” Finally, F24 responded with the popular adages, “Sage on the Stage. Chalk and Talk. Lecture.”

The themes that emerged were teachers as experts transmitting knowledge to learners; lack of a learning community; teacher preference/control over content delivery (single method of teaching and engagement); standardized assessments/evaluations; inflexible instruction based on curriculum that is not always relevant and disconnected from the real-world; boring/outdated/traditional classroom. Most faculty responses align with the teacher-centred approach to teaching except for a couple of faculty who used words such as resourceful, adaptable, communicative, value, competence, and efficient. One faculty (who scored increased teacher-centred approach) responded, “as an educator, it's the ability to give knowledge to students” (F14).

Conti (as described in Galbraith, 2004) describes teacher-centred teaching style to include some of the following teacher behaviours; determines educational objectives, are confrontational, does not use different techniques for diverse learners, uses one basic teaching method, and uses tests as primary method of evaluating students. Based on the data and the literature, most
participating faculty that responded appeared knowledgeable on what constituted the teacher-centred approach to teaching adult learners.

**Personalizing instruction.** Participating faculty were asked to give two examples of how they personalized instructions for learners. Themes that were identified include, awareness of who your students are (getting to know them); diverse presentation of content for diverse learning styles; learning that is relevant to present and future goals of your students; the significant role of learner choice and responsibility; formative feedback that is constructive and intended for development/growth; alternative processes for creating and demonstrating learning outcomes; reflective practices; and staying connected with your students. One faculty stated, “I get to know my students and let them use personal examples for discussion relating to the learning outcomes” (F10).

Another faculty responded,

I use both teacher-centred and student-centred approaches. In classrooms where I have to teach theory, I teach for 10 to 15 minutes and let the students do activities (mostly solve problems) for another 10 to 15 minutes. They are allowed to talk, discuss and help each other. In practical labs, I provide each student with a set of instructions to conduct the procedure in a set amount of time. I help them only when they ask for help. Some labs are structured such a way that they work in a group while in some other labs students work individually. (F17)

Another faculty stated, “I get to know my learners and what makes them tick” (F26). Another faculty described how they personalize instruction “through stories, sharing, input from learners, shared objectives, respect and validation of experience, prior learning, and current situation” (F31).
Some examples on Conti’s (cited in Galbraith, 2004) scale of personalizing instruction included, using different techniques to teach depending on the students being taught; letting each student work at their own rate; planning instructional objectives to match the individual students’ abilities and needs; and giving different assignments (pp. 87-89). The self-reported teaching styles of participating faculty at Loyalist College, as assessed against a modified version of Conti’s PALS factor 2, indicated that the majority (54.5%) of participating faculty scored learner-centred in their teaching style. Although all faculty who responded to this question gave examples on how to personalize instruction, it is notable that 15 participating faculty (45.5%) identified that they practiced a teacher-centred teaching style. This would indicate that many faculty know how to personalize instruction, but they do not practice what they know.

**Relating learning to experience.** Participating faculty were asked if they encourage learners to relate learning to their personal or professional experiences (or both) and to give two examples. Themes that emerged include, relevant examples used in academic content from past and present experiences (both faculty and students); scaffolding past learning to new learning; diverse strategies to demonstrate learning (portfolios, reflective assignments, discussions), and diverse strategies to teach content (experiential; student-generated case-studies, personal learning plans). One faculty reported that “when covering a new topic, I ask how it relates to individual experiences. If the student can’t think of how, I make suggestions to help them see it.” This same faculty also added: “I relate things to my own experiences to illustrate how what they are learning can fit into any situation” (F10). Another faculty said to “be open to examples of prior experiences and encourage learners to share them. Invite learners to reflect on their experiences and glean learning from them” (F18).
A consistent response among participating faculty in relating learning to experience was using reflective practice. Some examples on Conti’s (2004) scale to relating learning to experience included, planning lessons to take into account students’ prior experiences; planning activities that move students from dependence to greater independence; and encouraging students to ask questions related to their society. The self-reported teaching styles of participating faculty at Loyalist College, as assessed against a modified version of Conti’s PALS factor 3, indicated that the majority (54.5%) of participating faculty scored learner-centred in their teaching style. Although all faculty respondents gave examples on how to relate learner experience, 45.5% of faculty still scored teacher-centred.

**Assessing learning needs.** Participating faculty were asked to describe in the comment section how they assessed the learning needs of their learners (formative, summative, or both) and to give two examples. Definitions of formative and/or summative were not provided; however, faculty responses indicated they had a shared understanding of the meaning of both terms. Table 7 depicts faculty responses under formative, summative, and other strategies.

Faculty interpreted this question slightly differently. Some faculty responses were more from an evaluative perspective based on vocational and/or program learning outcomes, such as “unfortunately I usually design learning based on vocational outcomes rather than needs of learners. I do check-ins (stop, start, continue) at mid-semester and end of semester surveys.” Another faculty identified “multiple means: Small quizzes, discussion boards, online through Blackboard, group assignments, presentations” (11).

Another faculty acknowledged that they assess the learning needs of their students, “depending on the class and the assignments – sometimes I use traditional
testing, grading formal research, papers via rubrics. Other times I use a checklist; for some presentations, I encourage creativity, and as long as the course elements are included, the learner gets a check” (F20). This same faculty member also described using community people (industry experts) to evaluate students and then discussing with students whether they agree/disagree with the results.

Table 8: Participating Faculty Responses regarding Assessing Learning

<table>
<thead>
<tr>
<th>Formative</th>
<th>Summative</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>-assessing knowledge at beginning of course</td>
<td>- quizzes</td>
<td>-refer students to student services</td>
</tr>
<tr>
<td>- give feedback before, during and after assignments</td>
<td>- exams</td>
<td>-create a supportive atmosphere by talking with learners before and after class to offer them help</td>
</tr>
<tr>
<td>- practice presentations</td>
<td>- assignments</td>
<td>- informal counselling</td>
</tr>
<tr>
<td>- class discussions</td>
<td>- tests</td>
<td>- involve students in both summative and formative approaches</td>
</tr>
<tr>
<td>- self-assessments</td>
<td>- presentations</td>
<td>- student develop their learning goals</td>
</tr>
<tr>
<td>-journal writing</td>
<td>- projects</td>
<td></td>
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<tr>
<td>- discussion with learners about their learning objectives</td>
<td>- assessments</td>
<td></td>
</tr>
<tr>
<td>- polling technology</td>
<td>- role-plays</td>
<td></td>
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<tr>
<td>- identify common mistakes</td>
<td>- multiple choice</td>
<td></td>
</tr>
<tr>
<td>- assessing to see where students are at (gaps in their learning)</td>
<td>- accumulation of grades from smaller tests</td>
<td>- teach reflection and value all learning experiences</td>
</tr>
<tr>
<td>- demonstration</td>
<td>- objective structured exam with rubric</td>
<td>- introductory interviews as a class</td>
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<td></td>
<td></td>
<td>- information question sheets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- observe in class as well as on work to identify and address any issues</td>
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<td></td>
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<td>- constant check-ins</td>
</tr>
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</table>

Other faculty interpreted the question based on assessing what the learner needs to be successful such as, “We have Student Success office at the school that helps students identify their learning needs, and the results are conveyed to the teachers” (F2). F3 commented that they, “create a supportive atmosphere by talking to them before and after class (to) let them know I am open to helping them for tutorials, etc.” Another faculty gave an example of assessing learning needs as,
In class surveys asking for feedback on teaching and assessment style; open discussion throughout course on preferred method of learning and learning activities; start each class with a review of topics from the previous class to determine areas requiring clarification and additional discussion. (F23)

One faculty reported that “having them complete several self-study surveys to identify their learning styles/needs having them develop their own learning plans with goals, objectives, timelines, resources and results (SMART goals)” is how they assess the learning needs of their learners (F27). Lastly, F19’s process of assessing learner needs aligned with a learner-centred approach because they have a “discussion with learners about their current knowledge level and learning objectives and the summative results of their prior prerequisite courses.”

Conti’s examples for assessing student needs included faculty helping students identify the gaps between their goals and present level of performance, participating in informal counseling of students, and individual conference with students to help them identify their educational needs (cited in Galbraith, 2004). For my research, assessing student needs was not assessed on the modified Conti’s PALS, however, according to Conti and literature, participating faculty examples from those who interpreted this question as assessing what the learner needs to be successful are indicative of using learner-centred approaches.

**Building the learning climate.** Participating faculty were asked to provide two examples of how they built the teaching/learning climate for learners. Themed strategies included, role-modeling and communicating expectations (respect, open-discussion, professionalism, approachability, personable, empathetic, consistency, use of humour, flexibility, authentic); collaborating with learners (guidelines for building a learning community, setting the agenda, using preferred methods of assessment, using creativity, and providing feedback); consistent
formative assessment of the learning community throughout the semester; and offering a well-defined syllabus. One faculty stated, “taking opportunities to speak individually to students I know are struggling, creating an ‘open door’ policy” (F3).

One faculty commented that they “remove the ‘power’ position as much as possible by getting the adult learners involved in decision-making processes right off the bat” (F6). Another faculty identified that they “spend time in the first class setting the tone around a respective and inclusive climate. Have learners develop a respect contract with the class that they all helped create” (F9). One faculty mentioned: “I am very open with my students and respect them – I am very flexible – and able to ‘go with the flow’ if a discussion veers off topic, I still find a way to use it as a learning experience” (F10). F14 commented that they “build on respectful and engaged classrooms, arrange seating in groups or circles, create learning community norms together.” One faculty answered that they “create the conditions where learning will flourish, and learners feel respected and valued” (F18). A faculty who scored increased teacher-centred in their approach, although only three points from the mean (eclectic), stated,

I advise of learning objectives and assessment strategies from the outset I present a list of teaching/learning strategies for students in the first class and ask each individual to state their preference, then use that to plan for lessons for the semester. I check in with the class at mid semester if they have changed their mind re preferred strategies. (F21)

For this faculty, their overall teaching style is close to eclectic and is demonstrated by their example that they advise students of learning objectives and assessment strategies which is more teacher-centred in practice, however, they use student's teaching/learning strategies to plan for lessons, which is a learner-centred practice.
Another faculty, who was only three points out from scoring a very strong teacher-centred approach, stated,

I always provide a tentative schedule of the semester and marking scheme on the first day of class to provide a “punctual, open, fair” learning environment. I also state clearly my expectations during class and be consistent with it, such as No Talking in class. If someone talks, I would ask them if they have any questions, and if not please leave the room. (F2)

Finally, a faculty stated they “treat students with respect and they reciprocate. I advise students that my door is always open. Build rapport from day one, learn their [the students] names, remember details about them, consider their needs, etc.” (F25).

Examples given by Conti include encouraging dialogue among students, utilize the competencies adults already possess to achieve educational objectives, accept errors as a part of learning process (cited in Galbraith, 2004). For my research, climate building was not assessed on the modified Conti's PALS; however, according to Conti and the literature, most participating faculty responses are indicative of using learner-centred strategies to build the learning climate.

**Learners participating in the learning process.** Participating faculty were asked to provide two examples of how their learners participate in the learning process. Responses included, permission to change learning/evaluation schedules; class discussions; group work; question/answer periods; interactive videos; attending and being motivated; reflection; team-based assignments; self and peer assessment; sharing ideas and experiences from their own lives; encouraging formal and informal feedback; applying learning through authentic projects; providing choice in assignments; conducting projects; active-case studies; demonstrating/creating; role-playing; using work stations; creating material to share; offering
take-home assignments; learning from peers; sharing the teacher role; PAC (Program Advisory Committee) interacting with learners; flipping classroom [use of online for content and classroom for discussion]; and experiential capstones.

One faculty said: “I often have students mark their own assignments with the assignment rubric before they submit it. I sometimes have students mark each other's in-class assignments and give each other feedback” (F4). Another example that faculty identified of learners participating in the learning process was “my students tend to enjoy assisting in creating material whether it be articles they bring in to share, videos they see and feel they connect to material being discussed” (F16). F18 gave the example, “By becoming experiential learners…learning by doing. Hands-on, field-related projects and reflecting on them is one method.” Another faculty mentioned that,

Learners present their own research and teach the class about their own area of expertise gained through research assignments. 2nd year learners prepare full-day sessions with 1st year learners on various topics with the goal being an applied learning opportunity for one group and community building for the program. (F20)

One faculty (F21) admitted that they were “not sure what this question means?” but then they provided examples of engaged learners such as, “they attend class, they participate in class discussions, they participate in gaming-based lessons, they do online modules off class time.” Finally, one faculty stated,

It might sound like high school, but if there are ‘text’ sections I feel are vital, I will ask learners to read portions of it. It has the class hearing from a different voice than mine, and it allows me to comment or augment material from the text after student has read a section. I find this quite effective. After major assignments, I always have students write
a short self-evaluation, so they can reflect on what they think they did well and where their challenges still lie. Especially in early semesters, I find this quite effective. (F24)

Conti’s examples of involving learners in the learning process include involving learners in developing criteria for evaluating their performance in class, arranging classroom so students can interact, allow students to participate in deciding topics that will be covered, and having students identify their problems to be solved (cited in Galbraith, 2004). The self-reported teaching styles of participating faculty at Loyalist College, as assessed against a modified version of Conti’s PALS factor 6, indicated that the slight majority (51.5%) of participating faculty scored teacher-centred in their teaching style for learners participating in the learning process. It appears that some faculty may find it harder to relinquish some of the control in the classroom, regardless of knowing how and why they need to do so.

**Assisting learners in personal development.** Participating faculty were asked to provide two examples of how they assist learners in personal development. Themes that were identified included the use of reflective practice (journal writing, assignments; purposeful assignments to nurture self-development); personal and professional goal setting; constructive feedback to enhance self-awareness (faculty to student and student to student); leading by example (being flexible, respectful, encouraging); accessing student resources (counseling, student success mentors); being accessible outside of classroom time (informal counseling and academic counseling); staying connected with students after they graduate; use of motivational and engagement strategies; and encouraging them to join professional organizations/networking events/social gatherings to connect with the industry.
One faculty stated:

I encourage exceptional students to apply for university or higher education. I send them links to university fairs. I also send out job postings related to [their field] to students who are currently working part-time in retail, services, etc. (F2)

Another faculty member stated they assist learners with personal development by having, “discussions about long term goals, either personally or professionally. Using opportunities in class to discuss how learning can relate not only to professional employment but also in one’s personal life” (F9). Another faculty identified “honest and frank discussion, [and] providing constructive criticism and feedback” (F29) as examples of assisting learners in personal development. Finally, one faculty summed up how they assist learners in personal development with: “students set and evolve personal goals throughout the program and, are asked to reflect on these throughout the program. Many assignments are designed to nurture personal development” (F31).

Examples from Conti include being a resource person, offering flexibility with instructional objectives, encouraging discussions of controversial subjects, and embracing issues related to a student's concept of self (cited in Galbraith, 2004). The self-reported teaching styles of participating faculty at Loyalist College, as assessed against a modified version of Conti’s PALS factor 7, indicated that faculty were evenly distributed (42.4%) between learner-centred and teacher-centred teaching style and 5 (15.2%) faculty were eclectic in their teaching style for assisting learners in personal development.

Faculty were given an opportunity to include any additional comments, one participating faculty captured the reason the majority (57.6%) of participating faculty at Loyalist College were
within the increased range (one standard deviation) for teaching styles (either teacher or learner), and one faculty was eclectic (3%) by stating,

In sum, I believe that teaching and facilitating can co-exist as long as learner needs are met. Sometimes learners want to be ‘taught’ information and other times they want to engage in the process. The key for me is to be flexible and be prepared to ‘move’ when the learners need/want to do so. (F20)

Summary of Findings Related to Research Question #1

The data collected from college documents, perceptions from participating academic deans and perceptions from participating faculty on the PALS regarding the approach to teaching adult learners at Loyalist College indicated a learner-centred approach. Evidence in the college documents were congruent with adult learning principles such as commitment to engage learners, recognize and credit learner experience and prior learning, identification that teachers are facilitators and partners in learning, flexible delivery structures, real-world application/relevancy of content, accessible pathways for all learners, collaborative student success plans, institutional supports to meet individual academic goals, inclusive and collaborative learning environment, experiential learning opportunities and learners assessing their learning. Evidence from the participating academic deans included responses such as, “I’m aware of the ability of faculty, for the most part, in our school, to get to know the learners and get to know their learning styles, any challenges they have. I think we are working well toward understanding of universal design for learning.” (Deantwo). Another academic dean stated “Because when we’re truly learner-centred, we offer choice in an authentic way so that learners have a variety of means to get to their end point. So all of the programs have fully committed to those kind of processes” (Deantwo). Finally, Deanthree articulated that learning and learner-
centred have not really been well defined; however, faculty recognize that students have to do the work and that it is not about transfer of knowledge. Further research could examine the distinction between learner and learning centred.

The examples given by participating faculty from the online questionnaire demonstrated that faculty practiced learner-centred teaching style. Examples such as this faculty's response:

Teach and treat students the way I would also want to be treated. Do not talk down to them because they may know less about a subject. Offer office hours for students to meet with me. As a program, we facilitate various group activities that may not relate to learning (potluck, etc.) to have the opportunity to get to know students and allow them to get to know us. (F6)

One faculty member stated challenges yet still identified learner-centred practices:

personalizing instruction for learners is a challenge in my program. A (blank to avoid identification) program must prepare its graduates with the ability to be attentive to public safety and to practice within the standards of practice of the College (blank to avoid identification) of Ontario. Put simply, there are just some things that students have to learn. If a student is struggling with specific concepts, I meet individually with the student to determine why that person is having difficulty and work with him/her to set up a plan that supports success (e.g., A math tutor, a proof reader for essays, or a counsellor). (F32)

In conclusion, the answer to Research Question #1, is that based on college documents, and the perceptions of academic deans and faculty, Loyalist College aspires to be learner-centred and the institution is well on the way to doing so. College documents and participating academic deans espoused learner-centred practices though some academic deans acknowledged that
learner-centred approaches can be challenging for some faculty. Even though most faculty espoused learner-centred practices some recognized using teacher-centred approaches.

Research Question #2 asked, What are the self-reported practiced teaching styles of participating faculty at Loyalist College, as assessed against a modified version of Conti’s Principles of Adult Learning Scale?

Conti (cited in Galbraith, 2004) describes teaching style as “the distinct qualities displayed by a teacher that are persistent from situation to situation regardless of the content” (pp. 76-77). A learner-centred teaching style has been described as one that is, “responsive, collaborative, problem-centred and democratic in which both students and instructor decide how, what, and when learning occurs” (Dupin-Bryant, 2004, p. 42). In contrast, a teacher-centred teaching style has been described as “a style of instruction that is formal, controlled, and autocratic in which the instructor directs how, what and when students learn” (Dupin-Bryant, 2004, p. 42).

Teaching Styles. Survey data collected by the modified Principles of Adult Learning Scale (PALS) were used to answer Research Question 2 (Appendix M). A detailed description of Conti’s (1982) PALS is provided in Chapter 3. The range of scores attained by participants who completed the survey for my study was 78 to 139. Twenty (60.6%) participating faculty scored between 94 and 114, indicating an increased teacher or learner-centred approach, and one of the 20 were eclectic in their teaching style. Table 9 shows the range of scores attained by participating faculty on the modified PALS.

In this section, I describe the overall teaching styles of faculty as indicated by the scores reported by participating faculty on the modified PALS I used in this study. I do not include a
comparison in relation to the established PALS mean and standard deviation because the PALS tool I used was modified.

Table 9: *Range of Modified PALS Scores attained by Participating Faculty (n=33)*

<table>
<thead>
<tr>
<th>Range</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;77</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>78-90</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>94-106</td>
<td>15</td>
<td>45.5</td>
</tr>
<tr>
<td>107</td>
<td>1</td>
<td>3.0</td>
</tr>
<tr>
<td>109-114</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>122-133</td>
<td>8</td>
<td>24.2</td>
</tr>
<tr>
<td>&gt;134</td>
<td>1</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

As noted in Table 10, more than half of participating faculty, 19 (57.6%) reported practicing a teacher-centred teaching style, while 13 (39.4%) faculty reported a learner-centred style, and one (3%) practiced an eclectic teaching style. No faculty scored an extreme teacher-centred style, and only four (12.1%) out of the 33 participating faculty indicated a very strong teacher-centred style. Regarding learner-centred teaching style, eight (24.2%) of the 13 faculty scored a very strong learner-centred teaching style and one respondent (3%) scored an extreme learner-centred teaching style.

**Comparison of Self-reported Practiced Teaching Styles and PALS Factors**

The following section presents the teaching style scores for each of the five factors in my modified version of the PALS. Scoring of the five factors followed Conti’s instructions, and as per Conti’s description, the further the score was above or below the mean score, the more committed the respondent was to that specific behaviour (Conti, 1982).
Table 10: Practiced Teaching Styles Self-reported by Participating Faculty (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>15</td>
<td>45.5</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Styles</strong></td>
<td>19</td>
<td>57.6%</td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>1</td>
<td>3.0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>8</td>
<td>24.2</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>1</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Learner-Centre Styles</strong></td>
<td>13</td>
<td>39.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>33</td>
<td>100%</td>
</tr>
</tbody>
</table>

I now report the relationships found between practiced teaching styles and factors measured in the modified PALS tool as described in chapter three.

**Factor 1: Practiced teaching styles and learner-centred activities.** As indicated in Table 11, just over half of faculty, 18 (54.5%) scored a teacher-centred practice on the PALS, and just under half, 15 (45.5%) scored a learner-centred practice. Of the 18 teacher-centred faculty, one (3%) scored an extreme teacher-centred practice. In total 23 (69.7%) of the 33 participating faculty scored an increased practice of a teaching style; 10 (30.3%) learner-centred and 13 (39.4%) teacher-centred; which indicated 13 faculty preferred not to use learner-centred activities and the other ten did prefer to use them.

**Factor 2: Practiced teaching styles and personalizing instruction.** As presented in Table 12, 18 (54.5%) faculty reported a learner-centred practice on the modified PALS; 12 (36.4%) of which indicated an increased tendency, and six (18.2%) a very strong learner-centred approach. The data show that most, 21 (63.6%), faculty indicated an increased approach to a teaching style; 12 (36.4%) learner-centred and nine (27.3%) teacher-centred. The remaining 12 (36.4%) faculty scored very strong practices; six (18.2%) fell above the study mean for learner-
centred practiced teaching style, and six (18.2%) fell below the study mean for teacher-centred practiced teaching styles. No faculty had an extreme teacher or learner-centred practice of personalizing instruction.

Table 11: Practiced Teaching Styles and Learner-Centred Activities: Factor 1 (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>13</td>
<td>39.4%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>4</td>
<td>12.1%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>1</td>
<td>3.0%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>18</strong></td>
<td><strong>54.5%</strong></td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>10</td>
<td>30.3%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>5</td>
<td>15.2%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>15</strong></td>
<td><strong>45.5%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 12: Practiced Teaching Styles and Personalizing Instruction: Factor 2 (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>9</td>
<td>27.3%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>6</td>
<td>18.2%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>15</strong></td>
<td><strong>45.5%</strong></td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>12</td>
<td>36.4%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>6</td>
<td>18.2%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>18</strong></td>
<td><strong>54.5%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Factor 3: Practiced teaching styles and relating to experience.** As depicted in Table 13, 18 (54.5%) faculty practiced a learner-centred teaching style, and 15 (45.5%) respondents indicated they used a teacher-centred approach. The majority, 24 (72.7%) faculty members indicated an increased approach; 13 (39.4%) of whom fell above the study mean, and 11 (33.3%) fell below the study mean - indicating faculty leaned towards an increased appreciation of students’ experiences in the learning process. Five (15.2%) faculty indicated a very strong
practice of encouraging students to relate new learning to prior experiences. One (3\%) faculty did not see students’ experiences as relevant and scored an *extreme* teacher-centred teaching style.

Table 13: *Practiced Teaching Styles and Relating to Experience: Factor 3 (n=33)*

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>11</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>1</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>15</strong></td>
<td><strong>45.5%</strong></td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>13</td>
<td>39.4</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>18</strong></td>
<td><strong>54.5%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Factors 4 and 5** were omitted from the quantitative data collection and captured in the qualitative questions on the modified PALS. As described in Chapter 3, this was to avoid survey fatigue.

**Factor 6: Practiced teaching styles and participation in the learning process.** As seen in Table 14, the difference between teacher and learner-centred teaching styles was marginal – a difference of only 3\% overall, but in favour of teacher-centred teaching styles. Seventeen (51.5\%) of the participating faculty self-reported practicing a teacher-centred approach and 16 (48.5\%) participants reported practicing a learner-centred approach. Of the 21 (63.6\%) faculty that scored an *increased* approach above or below the study mean, 11 (33.3\%) leaned more towards an *increased* teacher-centred approach and 10 (30.3\%) leaned more towards an *increased* learner-centred approach, suggesting that students are supported to plan and evaluate course content and material to some degree. Two (6.1\%) faculty scored within an *extreme*
approach, one (3%) above and one (3%) below the study mean, indicating extreme opposite approaches to students participating in the learning process.

Table 14: Practiced Teaching Styles and Participation in the Learning Process: Factor 6 (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>11</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>1</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Styles</strong></td>
<td><strong>17</strong></td>
<td><strong>51.5%</strong></td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>10</td>
<td>30.3</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>1</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Styles</strong></td>
<td><strong>16</strong></td>
<td><strong>48.5%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Factor 7: Practiced teaching styles and flexibility for personal development. Table 15 shows that 14 (42.4%) participants fell below the study mean (teacher-centred), with nine (27.3%) faculty responses scoring an increased teacher-centred teaching style. The same number of participating faculty, 14 (42.4%), scored above the mean (learner-centred), with 10 (30.3%) having scored an increased learner-centred teaching style. These results suggest that 19 (57.6%) of the faculty have an increased (either teacher or learner) approach to being flexible with the changing needs of the learner. Two (6.1%) faculty scored an extreme teacher-centred practice when it comes to being flexible for personal development. No faculty scored an extreme learner-centred practice. Factor 7 was the only factor for which five (15.2%) faculty responses scored the study mean which indicated an eclectic teaching style.
Table 15: Practiced Teaching Styles and Flexibility for Personal Development: Factor 7 (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>9</td>
<td>27.3%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>3</td>
<td>9.1%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>2</td>
<td>6.1%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Styles</strong></td>
<td>14</td>
<td>42.4%</td>
</tr>
<tr>
<td><strong>Eclectic (mean)</strong></td>
<td><strong>5</strong></td>
<td><strong>15.2%</strong></td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>10</td>
<td>30.3%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>4</td>
<td>12.1%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Styles</strong></td>
<td><strong>14</strong></td>
<td><strong>42.4%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Summary of Findings Related to Research Question #2

Data collected from the modified PALS showed that the majority (n=19; 57.6%) of participating faculty at Loyalist College self-reported practiced teaching style of teacher-centred. Of those 19 faculty participants, the majority (n=15; 45.5%) of them scored an increased tendency to practice teacher-centred style; four (12.1%) scored a very strong tendency to practice teacher-centred style and; no participating faculty scored an extreme tendency to practice teacher-centred style on the modified PALS. Thirteen (39.4%) of the 33 faculty members surveyed had a score indicating practiced learner-centred teaching style, and the majority (n=8; 24.2%) of them scored a very strong tendency to practice learner-centred teaching style; four (12.1%) scored an increased tendency to practice learner-centred teaching style and; only one (3%) faculty in all scored an extreme tendency to practice learner-centred teaching style. In addition, only one (3%) of the 33 faculty members surveyed scored an eclectic approach to teaching.

Consistent with Conti’s (1982) scoring instructions, the majority (n=20; 60.6%) of faculty scores were within one standard deviation (increased/eclectic tendency). An interesting point is that eight faculty scored learner-centred practice within two standard deviations (very
strong tendency) and the one (3%) faculty scored within three standard deviations (the only participating faculty at Loyalist College with an extreme learner-centred practice). Compared to teacher-centred practice, where only four (12.1%) scored a very strong practice. This would indicate that the commitment to learner-centred is actually stronger than it may initially present. Although the majority (57.6%) of faculty scored teacher-centred when you analyze each standard deviation, very strong learner-centred teaching style ranked second (24.2%) in scoring and very strong teacher-centred and increased learner-centred teaching styles were even (12.1%) for third in ranking of scores. The majority of self-reported practiced teaching styles of participating faculty at Loyalist College may have scored teacher-centred, but overall, scores indicated a commitment to a practice that is closer to both teacher and learner-centred, with a total of 20 (60.6%) of the faculty scoring within one standard deviation above or below the study mean, including the one (3%) faculty who was the closest to both teacher and learner-centred with an eclectic teaching style. Lastly, 9 (27.3%) participating faculty scored learner-centred compared to 4 (12.1%) scoring teacher-centred.

Regarding factor scores, the majority (54.5%) of faculty surveyed scored and practiced teacher-centred teaching style for Factor 1 (learner-centred activities) and (51.5%) for Factor 6 (student participation in the learning process). The majority (54.5%) of faculty surveyed scored practiced learner-centred teaching style for Factor 2 (personalizing instruction) and Factor 3 (relating to student experience). Factor 7 (flexibility for personal development) tied at 14 (42.4%) each for teacher and learner-centred teaching style. And, for Factor 7, five (15.2%) faculty scored the mean, which indicated practiced eclectic teaching style (practiced teacher and learner-centred teaching style). Although Factor 1 and Factor 6 were practiced teacher-centred
teaching style, it is noted that the difference between scoring teacher-centred and learner-centred for Factor 1 was only 9% (3 faculty) and for Factor 6, an even less difference of 3% (1 faculty). Overall, the factor scores indicated a mixed result, leaning closer to a commitment to learner-centred than teacher-centred.

**Summary of Findings Related to Research Question #2 and the Literature**

Regardless of the evidence that a learner-centred environment better meets the needs of adult learners (Conti, 2004; Brookfield, 2013; Boyle and Rothstein, 2006; Caffarella, 2002; Galbraith, 2004; Knowles, Holton & Swanson, 2011; Merriam, Caffarella & Baumgartner, 2007), studies continue to indicate that faculty more often practice a teacher-centred approach in college and university settings (Barrett, 2004; Stover, 2006; Willson, 2006; Clow 1986, Wang, 2002). Liu, Qiao & Liu (2006) report that the espoused theory in the literature may be preference for learner-centred in higher education but the theory in action, based on their research, is still the traditional teacher-centred approach. Similarly, my study findings demonstrate that the overall predominant teaching style reported by the participants at Loyalist College was teacher-centred.

Regarding the five factors, the self-reports of participating faculty did align with the espoused theory of learner-centred teaching that is advocated for in the literature for three factors: 18 (54.5%) for Factor 2 (personalizing instruction), 18 (54.5%) for Factor 3 (relating to student experience), and although not the majority, 16 (48.5%) for Factor 6 (students participating in the learning process).

The responses of the 18 (54.5%) participating faculty who were *not* learner-centred for Factor 1 (learner-centred activities), aligned well with the results of a study by Liu et al. (2006) that suggest that the espoused theory is not the theory in action. The results for Factor 7
(flexibility for personal development) were evenly distributed for learner and teacher-centred styles and align with the theory that teaching style should be matched to the learner's maturation rather than chronological age (Knowles, Holton & Swanson, 2011). In addition, Factor 7 was the only factor for which 15.2% (n=5) of the faculty reported an eclectic approach, also align with Knowles et al. (2011) that best practice between pedagogy and andragogy are points on a continuum. It is important to acknowledge that there are also other influences at play. For example, what subject or discipline is taught which may lend itself more readily to one style than another; the lived experience of faculty, some of whom are new to teaching and; the teaching environment which may be more conducive to one style than another.

In Chapter four, I presented the response rate and demographics of faculty participants at Loyalist College. I then presented qualitative and comparative findings, quantitative and comparative findings, and analysis of these findings explicitly related to research questions one and two which were to explore and describe the espoused approach to teaching adult learners at Loyalist College and to identify the teaching styles practiced by participating faculty at Loyalist College.

Chapter five presents the qualitative and comparative findings, quantitative and comparative findings, and analysis of research questions three and four, which explored and compared the demographic profile, including educational philosophy and professional development of participating faculty and their practiced teaching style, and, how the espoused approach to teaching adult learners compared to the participating faculty’s self-reported practiced teaching styles.
Chapter Five: Findings Related to Research Questions Three and Four

This chapter presents an analysis of the findings related to Research Questions three and four.

Research Question #3 asked, How do the demographic profiles, educational philosophies and professional development of participating faculty at Loyalist College compare to their self-reported practiced teaching styles?

To answer this question, I compared the reported demographics of gender, age, employment status, level of education, years of teaching experience, educational philosophy, and professional development with the participants’ overall scores on the modified PALS, and with respect to the five factors reported in my research (Appendix M).

Gender and practiced teaching styles. In this section, I report the findings on gender and practiced teaching style as self-reported by participating faculty. Participants were asked to identify whether they were male or female. No other gender options were provided in the modified PALS tool.

Female Faculty. As noted in Table 16 of the 23 (69.7%) female faculty members who completed the survey, 14 (60.9% of female demographic; 42.4% of total participants) scored a teacher-centred practice and eight (34.8% of female demographic; 24.2% of total participants) female faculty scored a learner-centred practice. One (4.3% of female demographic; 3% of total participants) scored an eclectic teaching style, indicating both a teacher and learner-centred teaching style.
Table 16: *Female faculty and teaching styles* (n=23)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>12</td>
<td>52.2%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>2</td>
<td>8.7%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>14</strong></td>
<td><strong>60.9%</strong></td>
</tr>
<tr>
<td><em>Eclectic (mean)</em></td>
<td>1</td>
<td>4.3%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>4</td>
<td>17.4%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>4</td>
<td>17.4%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>8</strong></td>
<td><strong>34.8%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Male Faculty. Table 17 shows that of the 10 (30.3%) male faculty members surveyed, five (50% of male demographic; 15.2% of total participants) scored a teacher-centred practice, and the other half (five) scored a learner-centred practice. One of the male faculty (10% of the male demographic; 3% of total participants) indicated an *extreme* learning-centred teaching style.

Table 17: *Male faculty and teaching styles* (n=10)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>5</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td><em>Eclectic (mean)</em></td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>4</td>
<td>40%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>5</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
The self-reported practiced teaching styles of participating faculty compared to gender demographic showed that most of the participating faculty were female and teacher-centred.

**Factor 1: Gender, practiced teaching styles, learner-centred activities.** As seen in Table 18 in this section I report the findings related to practiced teaching styles and Factor 1: learner-centred activities, broken down by gender.

**Female faculty.** Sixteen (69.6% of female demographic; 48.5% of total participants) of the 23 female faculty scored a teacher-centred teaching style, and seven (30.4% of female demographic; 21.2% of total participants) scored a learner-centred teaching style. One (4.3% of female demographic; 3% of total participants) female faculty scored an extreme teacher-centred approach, indicating that she does not practice learner-centred activities.

**Male faculty.** A total of two (20% of male demographic; 6.1% of total participants) out of 10 participating male faculty scored a teacher-centred teaching style on the PALS scale, and the other eight (80% of male demographic; 24.2% of total participants) male faculty scored a learner-centred teaching style.

Table 18: Gender, teaching styles and Factor 1: learner-centred activities (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th># of Female (n=23)</th>
<th>%</th>
<th># of Male (n=10)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>12</td>
<td>52.2</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>3</td>
<td>13</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>1</td>
<td>4.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>16</strong></td>
<td><strong>69.6%</strong></td>
<td><strong>2</strong></td>
<td><strong>20%</strong></td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>4</td>
<td>17.4</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>3</td>
<td>13</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>7</strong></td>
<td><strong>30.4%</strong></td>
<td><strong>8</strong></td>
<td><strong>80%</strong></td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>
Factor 2: Gender, practiced teaching styles and personalizing instruction. In this section, as seen in Table 19, I report the findings related to practiced teaching styles and Factor 2: personalizing instruction by gender.

Female faculty. Ten (43.5% of female demographic; 30.3% of total participants) of the 23 participating female faculty members scored a teacher-centred approach to teaching, whereas 13 (56.5% of female demographic; 39.4% of total participants) scored a learner-centred approach to teaching.

Male faculty. Five (50% of male demographic; 15.2% of total participants) of the ten participating male faculty scored a teacher-centred practice, and the other five scored a learner-centred practice.

Table 19: Gender, teaching styles and Factor 2: personalizing instruction (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th># of Female (n=23)</th>
<th>%</th>
<th># of Male (n=10)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>6</td>
<td>26.1</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>4</td>
<td>17.4</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>10</td>
<td>43.5%</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>9</td>
<td>39.1</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>4</td>
<td>17.4</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>13</td>
<td>56.5%</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Factor 3: Gender, practiced teaching styles relating to experience. As indicated in Table 20, in this section I report the findings related to practiced teaching styles and Factor 3: relating to experience by gender.
Female participants. Ten (43.5% of female demographic; 30.3% of total participants) of the 23 participating female faculty scored a teacher-centred teaching style, and thirteen (56.5% of female demographic; 39.4% of total participants) scored a learner-centred teaching style.

Male participants. A total of five (50% of male demographic; 15.2% of total participants) participating male faculty members scored a teacher-centred teaching style, of whom one (10% of male demographic; 3% of total participants) scored an extreme teacher-centred practice, indicating he does not encourage learners to relate learning to their experiences. The other five participating male faculty indicated a learner-centred teaching style.

Table 20: Gender, teaching styles and Factor 3: relating to experience (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th># of Female (n=23)</th>
<th>%</th>
<th># of Male (n=10)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>9</td>
<td>39.1</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>1</td>
<td>4.3</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>10</strong></td>
<td><strong>43.4%</strong></td>
<td><strong>5</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>11</td>
<td>47.8</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>2</td>
<td>8.7</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>13</strong></td>
<td><strong>56.5</strong></td>
<td><strong>5</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23</td>
<td>100</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Factor 6: Gender, practiced teaching styles and participation in the learning process.

In this section, as seen in Table 21, I report the findings related to practiced teaching styles and Factor 6: participation in the learning process, by gender.

Female faculty. Thirteen (56.5% of female demographic; 39.4% of total participants) of the 23 participating female faculty scored a teacher-centred teaching style. Ten (43.5% of female
demographic; 30.3% of total participants) participating female faculty scored a learner-centred approach, and one (4.3% of female demographic; 3% of total participants) of them indicated an extreme learner-centred approach to supporting learners to participate in the learning process.

**Male faculty.** A total of four (40% of male demographic; 12.1% of participants) of the ten participating male faculty members scored a teacher-centred approach, of whom one (10% of male demographic; 3% of participants) indicated an extreme aversion to letting learners participate in the learning process. Six (60% of male demographic; 18.2% of participants) participating male faculty members scored a learner-centred teaching style.

Table 21: **Gender, teaching styles and Factor 6: participation in the learning process** (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th># of Female (n=23)</th>
<th>%</th>
<th># of Male (n=10)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>10</td>
<td>43.5</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>3</td>
<td>13</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>13</strong></td>
<td><strong>56.5%</strong></td>
<td><strong>4</strong></td>
<td><strong>40%</strong></td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>7</td>
<td>30.4</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>2</td>
<td>8.7</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>1</td>
<td>4.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>10</strong></td>
<td><strong>43.4%</strong></td>
<td><strong>6</strong></td>
<td><strong>60%</strong></td>
</tr>
<tr>
<td>Total</td>
<td><strong>23</strong></td>
<td><strong>100</strong></td>
<td><strong>10</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Factor 7: Gender, practiced teaching styles and flexibility for personal development.** As shown in Table 22, in this section I report the findings related to practiced teaching styles and Factor 7: flexibility for personal development, broken down by gender.

**Female faculty.** A total of 12 (52.2% of female demographic; 36.4% of total participants) of the 23 participating female faculty members scored a teacher-centred teaching style. Of the
12, two (8.7% of female demographic; 6.1% of total participants) indicated they do not have flexibility for learners’ personal development. Seven (30.4% of female demographic; 21.2% of participants) participating female faculty members scored a learner-centred teaching style and four (17.4% of female demographic; 12.1% of total participants) of the 23 participating female faculty members reported an eclectic practice, indicating that they practice both teacher and learner-centred approaches to flexibility for personal development.

*Male faculty.* Two (20% of male demographic; 6.1% of total participants) of the ten participating male faculty members scored a teacher-centred approach. Seven male faculty members scored learner-centred teaching style, and one (10% of male demographic; 3% of total participants) out of the ten participating male faculty reported an eclectic practice, indicating that he practices both teacher and learner-centred teaching styles with flexibility for personal development.

Table 22: *Gender, teaching styles and Factor 7: flexibility for personal development* (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th># of Female (n=23)</th>
<th>%</th>
<th># of Male (n=10)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>8</td>
<td>34.8</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>2</td>
<td>8.7</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>2</td>
<td>8.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td>12</td>
<td><strong>52.2%</strong></td>
<td>2</td>
<td><strong>20%</strong></td>
</tr>
<tr>
<td><em>Eclectic (Mean)</em></td>
<td>4</td>
<td>17.4%</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>5</td>
<td>21.7</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>2</td>
<td>8.7</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td>7</td>
<td><strong>30.4%</strong></td>
<td>7</td>
<td><strong>70%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23</td>
<td>100</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>
**Age and practiced teaching styles.** Next, as seen in Table 23, I report the findings organized around age group and practiced teaching style as reported by participating faculty. Participating faculty were asked to identify their age range; the options were: between 20 and 30; 31 and 40; 41 and 50; and over 50. Age demographics indicated that two (6.1%) participating faculty were between the ages of 20 and 30; six (18.2%) were between the ages of 31 and 40; seven (21.2%) were between the ages of 41 and 50; and the majority of faculty, 18 (54.5%) were over the age of 50.

**Faculty between ages 20 and 30.** Of the two (6.1%) participating faculty members who were between the ages of 20 and 30; one (50% of age demographic; 3% of total participants) scored a teacher-centred teaching style, and the other scored an eclectic teaching style.

**Faculty between ages 31 and 40.** Of the six (18.2%) faculty members between the ages of 31 and 40, four (66.7% of age demographic; 12.1% of total participants) scored a teacher-centred teaching style, and two (33.3% of age demographic; 6.1% of total participants) scored a learner-centred practice.

**Faculty between ages 41 and 50.** Regarding the seven (21.2%) faculty members who were between the ages of 41 and 50, two (28.6% of age demographic; 6.1% of total participants) scored a teacher-centred practice; and five (71.4% of demographic; 15.2% of total participants) scored a learner-centred practice.

**Faculty over the age of 50.** Of the 18 (54.5%) participating faculty who were over the age of 50, 12 (66.7% of age demographic; 36.4% of total participants) scored a teacher-centred practice and; six (33.3% of age demographic; 18.2% of total participants) faculty members scored a learner-centred practice, of whom one (5.6% of age demographic; 3% of total participants) indicated an extreme learner-centred practice.
The majority of faculty (n=18) were over the age of 50, and 12 (66.7%) of them scored practiced teacher-centred teaching style, while the other six (33.3%) scored practiced learner-centred teaching style.

Table 23: Age and teaching styles (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>20-30 (n=2)</th>
<th>%</th>
<th>31-40 (n=6)</th>
<th>%</th>
<th>41-50 (n=7)</th>
<th>%</th>
<th>&gt;50 (n=18)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>1</td>
<td>50</td>
<td>3</td>
<td>50</td>
<td>2</td>
<td>28.6</td>
<td>9</td>
<td>50</td>
</tr>
<tr>
<td>Very Strong Teacher Centred</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>16.7</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td>1</td>
<td>50%</td>
<td>4</td>
<td>66.7%</td>
<td>2</td>
<td>28.6%</td>
<td>12</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

Eclectic (Mean) 1 50% 0 0% 0 0% 0 0%

| Increased Learner-Centred      | 0           | 0   | 0           | 0   | 2           | 28.6| 2          | 11.1|
| Very Strong Learner Centred    | 0           | 0   | 2           | 33.3| 3           | 42.9| 3          | 16.7|
| Extreme Learner-Centred        | 0           | 0   | 0           | 0   | 0           | 0   | 1          | 5.6 |
| **Total Learner-Centred Style**| 0           | 0   | 2           | 33.3%| 5           | 71.4%| 6          | 33.3%|

Total 2 100 6 100 7 100 18 100

Factor 1: Age, practiced teaching styles and learner-centred activities. As seen in Table 24, in this section I report the findings related to practiced teaching style and Factor 1: learner-centred activities, organized by age range.

Faculty between ages 20 and 30. One (50% of age demographic; 3% of total participants) of the two faculty members between the ages of 20 and 30 reported a teacher centred approach, and the other one reported a learner-centred approach.
Faculty between ages 31 and 40. Out of the six (18.2%) faculty members between the ages of 31 and 40, two (33.3% of age demographic; 6.1% of total participants) practiced a teacher-centred approach and, four (66.7% of age demographic; 12.1% of total participants) faculty members practiced a learner-centred approach.

Faculty between ages 41 and 50. Three (42.9% of age demographic; 9.1% of total participants) faculty members between the ages of 41 and 50 scored a teacher-centred teaching style, and one (14.3% of age demographic; 3% of total participants) of them indicated an extreme teacher-centred approach, suggesting they do not participate in learner-centred activities. The other four (57.1% of age demographic; 12.1% of total participants) faculty members of this age demographic scored a learner-centred approach to teaching.

Faculty over the age of 50. Twelve (66.7% of age demographic; 36.4% of total participants) out of the 18 faculty members over the age of 50 reported a teacher-centred approach, and the majority, 10 (55.6% of age demographic; 30.3% of total participants) were within the increased domain. The learner-centred approach was reported by the other six (33.3% of age demographic; 18.2% of total participants) faculty members of this age demographic.

Factor 2: Age, practiced teaching styles and personalizing instruction. In this section, as seen in Table 25, I report the findings related to teaching style and Factor 2: personalizing instruction, by age range.

Faculty between ages 20 and 30. The two (100% of age demographic; 6.1% of total participants) faculty members between the ages of 20 and 30 scored a learner-centred teaching style.

Faculty between ages 31 and 40. Of the six faculty members between the ages of 31 and 40, four (66.7% of age demographic; 12.1% of total participants) scored a teacher-centred
Table 24: Age, teaching styles and Factor 1: learner-centred activities (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>20-30 (n=2)</th>
<th>31-40 (n=6)</th>
<th>41-50 (n=7)</th>
<th>&gt;50 (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>1 (50%)</td>
<td>1 (16.7%)</td>
<td>1 (14.3%)</td>
<td>10 (55.6%)</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0 (0%)</td>
<td>1 (16.7%)</td>
<td>1 (14.3%)</td>
<td>2 (11.1%)</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (14.3%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td>1 (50%)</td>
<td>2 (33.3%)</td>
<td>3 (42.9%)</td>
<td>12 (66.7%)</td>
</tr>
<tr>
<td><em>Eclectic (Mean)</em></td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>1 (50%)</td>
<td>3 (50%)</td>
<td>2 (28.6%)</td>
<td>4 (22.2%)</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0 (0%)</td>
<td>1 (16.7%)</td>
<td>2 (28.6%)</td>
<td>2 (11.1%)</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td>1 (50%)</td>
<td>4 (66.7%)</td>
<td>4 (57.1%)</td>
<td>6 (33.3%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>6</td>
<td>100</td>
<td>18</td>
</tr>
</tbody>
</table>

practice, while two (33.3% of age demographic; 6.1% of total participants) scored a learner-centred approach.

*Faculty between ages 41 and 50.* One (14.3% of age demographic; 3% of total participants) faculty between the ages of 41 and 50 scored a teacher-centred teaching style. The other six (85.7% of age demographic; 18.2% of total participants) faculty members scored a learner-centred teaching style.

*Faculty over the age of 50.* Ten (55.6% of age demographic; 30.3% of total participants) faculty members over the age of 50 scored a teacher-centred practice. The other eight (44.4% of age demographic; 24.2% of total participants) faculty members of this age demographic scored a learner-centred teaching style.
Table 25: Age, teaching styles and Factor 2: personalizing instruction (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>20-30 (n=2)</th>
<th>31-40 (n=6)</th>
<th>41-50 (n=7)</th>
<th>&gt;50 (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher Centred</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>2</td>
<td>100%</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>2</td>
<td>100%</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>100%</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

**Factor 3: Age, practiced teaching styles relating to experience.** As presented in Table 26 in this section I report the findings related to practiced teaching style and Factor 3: relating to experience, by age range.

*Faculty between ages 20 and 30.* Both (100% of age demographic; 6.1% of total participants) faculty members between the ages of 20 and 30 scored a teacher-centred teaching style.

*Faculty between ages 31 and 40.* There were two (33.3% of age demographic; 6.1% of total participants) faculty members between the ages of 31 and 40 who scored a teacher-centred practice: Four (66.7% of age demographic; 12.1% of total participants) faculty members of this age demographic scored a learner-centred teaching style.
Faculty between ages 41 and 50. One (14.3% of age demographic; 3% of total participants) faculty between the ages of 41 and 50 practiced a teacher-centred style. Six (85.7% of age demographic; 18.2% of total participants) faculty members of this age demographic scored a learner-centred practice to teaching.

Faculty over the age of 50. Ten (55.6% of age demographic; 30.3% of total participants) faculty members of this age demographic scored a teacher-centred practice; and one (5.6% of age demographic; 3% of total participants) indicated an extreme teacher-centred practice suggesting this faculty does not relate the learners’ experience in their teaching style. Eight (44.4% of age demographic; 24.2% of total participants) faculty members scored a learner-centred teaching style.

Table 26: Age, teaching styles and Factor 3: relating to experience (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>20-30 (n=2)</th>
<th>%</th>
<th>31-40 (n=6)</th>
<th>%</th>
<th>41-50 (n=7)</th>
<th>%</th>
<th>&gt;50 (n=18)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher Centred</td>
<td>2</td>
<td>100%</td>
<td>1</td>
<td>16.7%</td>
<td>1</td>
<td>14.3%</td>
<td>7</td>
<td>38.9%</td>
</tr>
<tr>
<td>Very Strong Teacher Centred</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>16.7%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>11.1%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>33.3%</td>
<td>1</td>
<td>14.3%</td>
<td>10</td>
<td>55.6%</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>3</td>
<td>50%</td>
<td>4</td>
<td>57.1%</td>
<td>6</td>
<td>33.3%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>16.7%</td>
<td>2</td>
<td>28.6%</td>
<td>2</td>
<td>11.1%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>0</td>
<td>0%</td>
<td>4</td>
<td>66.7%</td>
<td>6</td>
<td>85.7%</td>
<td>8</td>
<td>44.4%</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>100%</td>
<td>6</td>
<td>100%</td>
<td>7</td>
<td>100%</td>
<td>18</td>
<td>100%</td>
</tr>
</tbody>
</table>

Factor 6: Age, practiced teaching styles and participation in the learning process. In this section and, shown in Table 27, I report the findings related to practiced teaching style and Factor 6: participation in the learning process, organized by age range.
Faculty between ages 20 and 30. There were two (6.1%) faculty members between the ages of 20 and 30; one (50% of age demographic; 3% of total participants) scored a teacher-centred teaching style, and the other scored a learner-centred teaching style.

Faculty between ages 31 and 40. A total of four (66.7% of age demographic; 12.1% of total participants) faculty members scored a teacher-centred teaching style; three (50% of age demographic; 9.1% of total participants) of the four indicating an extreme position on not letting learners participate in the learning process. Only two (33.3% of age demographic; 6.1% of total participants) faculty of this age demographic practiced a learner-centred approach.

Faculty between ages 41 and 50. Three (42.9% of age demographic; 9.1% of total participants) faculty members between the ages of 41 and 50 scored a teacher-centred teaching style; one (14.3% of age demographic; 3% of total participants) indicated an extreme approach in not letting learners participate in the learning process. Four (57.1% of age demographic; 12.1% of total participants) faculty members of this age demographic scored a learner-centred practice, of whom one (14.3% of age demographic; 3% of total participants) indicated an extreme learner-centred approach suggesting that learners definitely participate in the learning process.

Faculty over the age of 50. A total of nine (50% of age demographic; 27.3% of total participants) faculty members over the age of 50 scored a teacher-centred teaching style. The other nine faculty members of this age demographic scored a learner-centred teaching style.

Factor 7: Age, practiced teaching styles and flexibility for personal development. Table 28 presents the findings related to practiced teaching style and Factor 7: flexibility for personal development, organized by age range.
Table 27: Age, teaching styles and Factor 6: participation in the learning process (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>20-30 (n=2)</th>
<th>%</th>
<th>31-40 (n=6)</th>
<th>%</th>
<th>41-50 (n=7)</th>
<th>%</th>
<th>&gt;50 (n=18)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>1</td>
<td>50</td>
<td>1</td>
<td>16.7</td>
<td>2</td>
<td>28.6</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>14.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>1</strong></td>
<td><strong>50%</strong></td>
<td><strong>4</strong></td>
<td><strong>66.7%</strong></td>
<td><strong>3</strong></td>
<td><strong>42.9%</strong></td>
<td><strong>9</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td><em>Eclectic (Mean)</em></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>1</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>14.3</td>
<td>8</td>
<td>44.4</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>33.3</td>
<td>2</td>
<td>28.6</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>14.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>1</strong></td>
<td><strong>50%</strong></td>
<td><strong>2</strong></td>
<td><strong>33.3%</strong></td>
<td><strong>4</strong></td>
<td><strong>57.1%</strong></td>
<td><strong>9</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>100</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
<td><strong>7</strong></td>
<td><strong>100</strong></td>
<td><strong>18</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Faculty between ages 20 and 30.* Both (100% of age demographic; 6.1% of total participants) faculty members between the ages of 20 and 30 scored teacher-centred teaching styles.

*Faculty between ages 31 and 40.* Only two (33.3% of age demographic; 6.1% of total participants) faculty members scored a teacher-centred practice, and one (16.7% of age demographic; 3% of total participants) of them indicated an *extreme* teacher-centred practice suggesting they do not offer any flexibility for learners’ personal development. The other four (66.7% of age demographic; 12.1% of total participants) faculty practiced a learner-centred teaching style.

*Faculty between ages 41 and 50.* A total of three (42.9% of age demographic; 9.1% of total participants) faculty members between the ages of 41 and 50 scored a teacher-centred
practice, one of which indicated an *extreme* teacher-centred approach suggesting they do not encourage any personal development among learners. Four (57.1% of age demographic; 12.1% of total participants) faculty members scored a learner-centred practice.

*Faculty over the age of 50.* A total of seven (38.9% of age demographic; 21.2% of total participants) faculty members of this age demographic scored a teacher-centred practice to teaching, whereas six (33.3% of age demographic; 18.2% of all ages) faculty scored a learner-centred practice. Five (27.8% of demographic; 15.2% of all faculty) faculty over the age of 50 scored an eclectic teaching style indicating that at times learners’ personal development is included in their practice.

Table 28: *Age, practiced teaching styles and Factor 7: flexibility for personal development* (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>20-30 (n=2)</th>
<th>%</th>
<th>31-40 (n=6)</th>
<th>%</th>
<th>41-50 (n=7)</th>
<th>%</th>
<th>&gt;50 (n=18)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher Centred</td>
<td>2</td>
<td>100%</td>
<td>1</td>
<td>16.7</td>
<td>1</td>
<td>14.3</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>14.3</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>16.7</td>
<td>1</td>
<td>14.3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>2</strong></td>
<td><strong>100%</strong></td>
<td><strong>2</strong></td>
<td><strong>33.3%</strong></td>
<td><strong>3</strong></td>
<td><strong>42.9%</strong></td>
<td><strong>7</strong></td>
<td><strong>38.9%</strong></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>5</td>
<td>27.8%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>33.3</td>
<td>4</td>
<td>57.1</td>
<td>4</td>
<td>22.2</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>33.3</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>4</strong></td>
<td><strong>66.7%</strong></td>
<td><strong>4</strong></td>
<td><strong>57.1%</strong></td>
<td><strong>6</strong></td>
<td><strong>33.3%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>100%</strong></td>
<td><strong>6</strong></td>
<td><strong>100%</strong></td>
<td><strong>7</strong></td>
<td><strong>100%</strong></td>
<td><strong>18</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Employment status and practiced teaching styles.** In this section, as indicated in Table 29, I report the findings for practiced teaching styles organized by employment status as scored by participating faculty. Participating faculty were asked whether they were employed full-time; part-time; partial load; or sessional-load. Twenty-five (75.8%) respondents were employed full-
time. Five (15.2%) respondents held partial-load positions (7-12 hours a week), and three (9.1%) held sessional (over 12 hours a week) positions. No part-time (up to 6 hours a week) faculty members submitted the survey.

Full-time faculty. Thirteen (52% of full-time demographic; 39.4% of total participants) of the full-time faculty scored teacher-centred practices. Twelve (48% of full-time demographic; 36.4% of total participants) full-time faculty scored learner-centred practices, one (4% of full-time faculty; 3% of total participants) of whom scored practices an extreme learner-centred teaching style.

Partial-load faculty. All five (100% of partial-load demographic; 15.2% of total participants) partial-load faculty scored a teacher-centred teaching style. No partial-load faculty scored a learner-centred approach.

Sessional-load faculty. Of the three sessional faculty, one (33.3% of sessional demographic; 3% of total participants) scored a teacher-centred teaching style; one (33.3% of sessional demographic; 3% of total participants) scored a learner-centred teaching style and the last (33.3% of sessional demographic; 3% of total participants) sessional-load faculty member scored an eclectic teaching style.

The self-reported practiced teaching styles of participating faculty compared to employment status showed that most of the participating faculty were employed full-time and by a small majority, scored teacher-centred.

Factor 1: Employment, practiced teaching styles and learner-centred activities. In this section and shown in Table 30, I report the findings related to practiced teaching style and Factor 1: learner-centred activities, by the employment status of the participants.
Table 29: *Employment status and practiced teaching styles* (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Full-time (n=25)</th>
<th>%</th>
<th>Part-time (n=0)</th>
<th>%</th>
<th>Partial-load (n=5)</th>
<th>%</th>
<th>Sessional (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher Centred</td>
<td>9</td>
<td>36%</td>
<td>0</td>
<td>0%</td>
<td>5</td>
<td>100%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>4</td>
<td>16%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>13</strong></td>
<td><strong>52%</strong></td>
<td>0</td>
<td>0%</td>
<td><strong>5</strong></td>
<td><strong>100%</strong></td>
<td>1</td>
<td><strong>33.3%</strong></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>4</td>
<td>16%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>7</td>
<td>28%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>1</td>
<td>4%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>12</strong></td>
<td><strong>48%</strong></td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td><strong>33.3%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>100%</strong></td>
<td>0</td>
<td>0%</td>
<td><strong>5</strong></td>
<td><strong>100%</strong></td>
<td><strong>3</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Full-time faculty.* Fourteen (56% of full-time demographic; 42.4% of total participants) full-time faculty members scored a teacher-centred teaching style. Eleven (44% of full-time demographic; 33.3% of total participants) full-time faculty members scored a learner-centred teaching style.

*Partial-load faculty.* Two (40% of partial-load demographic; 6.1% of total participants) of the five partial-load faculty members scored a teacher-centred practice. The other three (60% of partial-load demographic; 9.1% of total participants) faculty members of this demographic scored a learner-centred approach.

*Sessional faculty.* Two (66.7% of sessional faculty; 6.1% of total participants) sessional-load faculty members scored a teacher-centred approach, of whom one (33.3% of sessional
faculty; 3% of total participants) indicated an *extreme* practice suggesting they do not practice learner-centred activities. The other (33.3% of sessional faculty; 3% of total participants) sessional faculty member scored a learner-centred practice.

Table 30: *Employment, teaching styles and Factor 1: learner-centred activities* (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Full-time (n=25)</th>
<th>%</th>
<th>Part-time (n=0)</th>
<th>%</th>
<th>Partial-load (n=5)</th>
<th>%</th>
<th>Sessional (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher Centred</td>
<td>10</td>
<td>40%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>40%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>4</td>
<td>16%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>14</strong></td>
<td><strong>56%</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>2</strong></td>
<td><strong>40%</strong></td>
<td><strong>2</strong></td>
<td><strong>66.7%</strong></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>8</td>
<td>32%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>40%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>3</td>
<td>12%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>20%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>11</strong></td>
<td><strong>44%</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>3</strong></td>
<td><strong>60%</strong></td>
<td><strong>1</strong></td>
<td><strong>33.3%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>100%</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>5</strong></td>
<td><strong>100%</strong></td>
<td><strong>3</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Factor 2: Employment, practiced teaching styles and personalizing instruction.** As seen in Table 31, in this section I report the findings related to practiced teaching style and Factor 2: personalizing instruction, by the employment status of the participants.

*Full-time faculty.* Eleven (44% of full-time demographic; 33.3% of total participants) full-time faculty members practiced a teacher-centred teaching style. Fourteen (56% of full-time demographic; 42.4% of total participants) full-time faculty members scored a learner-centred teaching style.
Partial-load faculty. Four (80% of partial-load demographic; 12.1% of total participants) partial-load faculty members scored a teacher-centred teaching style, and one (20% of partial-load demographic; 3% of total participants) scored as learner-centred.

Sessional faculty. All three of the sessional-load faculty members scored a learner-centred teaching style.

Table 31: Employment, teaching styles and Factor 2: personalizing instruction (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Full-time (n=25)</th>
<th>%</th>
<th>Part-time (n=0)</th>
<th>%</th>
<th>Partial-load (n=5)</th>
<th>%</th>
<th>Sessional (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>6</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>60</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>5</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>11</td>
<td>44%</td>
<td>0</td>
<td>0%</td>
<td>4</td>
<td>80%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>9</td>
<td>36%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>20%</td>
<td>2</td>
<td>66.7</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>5</td>
<td>20%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>14</td>
<td>56%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>20%</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
<td>5</td>
<td>100%</td>
<td>3</td>
<td>100%</td>
</tr>
</tbody>
</table>

Factor 3: Employment, practiced teaching styles relating to experience. As seen in Table 32 in this section I report the findings related to practiced teaching style and Factor 3: relating to experience, organized by the employment status of the participants.

Full-time faculty. Eleven (44% of full-time demographic; 33.3% of total participants) full-time faculty members practiced a teacher-centred teaching style of whom one (4% of full-time demographic; 3% of total participants) scored an extreme teacher-centred practice. The
majority, 14 (56% of full-time demographic; 42.4% of total participants) full-time faculty practiced a learner-centred teaching style.

Partial-load faculty. Three (60% of partial-load demographic; 9.1% of total participants) partial-load faculty members scored a teacher-centred practice, and two (40% of partial-load demographic; 6.1% of total participants) scored a learner-centred practice.

Sessional faculty. One (33.3% of sessional demographic; 3% of total participants) sessional faculty member scored a teacher-centred teaching style; the other two (33.3% of sessional demographic; 3% of total participants) scored a learner-centred approach.

Table 32: Employment, teaching styles and Factor 3: relating to experience (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Full-time (n=25)</th>
<th>%</th>
<th>Part-time (n=0)</th>
<th>%</th>
<th>Partial-load (n=5)</th>
<th>%</th>
<th>Sessional (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>7</td>
<td>28%</td>
<td>0</td>
<td>0%</td>
<td>3</td>
<td>60%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>3</td>
<td>12%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>1</td>
<td>4%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>11</td>
<td>44%</td>
<td>0</td>
<td>0%</td>
<td>3</td>
<td>60%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>10</td>
<td>40%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>40%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>4</td>
<td>16%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>14</td>
<td>56%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>40%</td>
<td>2</td>
<td>66.7%</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
<td>5</td>
<td>100%</td>
<td>3</td>
<td>100%</td>
</tr>
</tbody>
</table>

Factor 6: Employment, practiced teaching styles and participation in the learning process. In this section, as indicated in Table 33, I report the findings related to practiced teaching style and Factor 6: participation in the learning process, by the employment status of the participants.
Full-time faculty. Twelve (48% of full-time demographic; 36.4% of total participants) full-time faculty members practiced a teacher-centred teaching style. Whereas, 13 (52% of full-time demographic; 39.4% of total participants) full-time faculty members practiced a learner-centred teaching style.

Partial-load faculty. Four (80% of partial-load demographic; 12.1% of total participants) partial-load faculty members scored a teacher-centred practice, one (20% of partial-load demographic; 3% of total participants) of whom scored an extreme teacher-centred practice. Only one (20% of partial-load demographic; 3% of total participants) partial-load faculty member scored a learner-centred teaching style.

Sessional faculty. One (33.3% of sessional demographic; 3% of total participants) sessional faculty member scored a teacher-centred practice. Two (33.3% of sessional demographic; 3% of participants) scored a learner-centred practice, one (33.3% of sessional demographic; 3% of total participants) of whom scored an extreme learner-centred approach.

Factor 7: Employment, practiced teaching styles and flexibility for personal development. As seen in Table 34, in this section I report the findings related to practiced teaching style and Factor 7: flexibility for personal development, by the employment status of the participants.

Full-time faculty. Eight (32% of full-time demographic; 24.2% of total participants) full-time faculty members practiced a teacher-centred teaching style, one (4% of full-time demographic; 3% of total participants) of whom scored an extreme position on no flexibility for personal development in their practice. Thirteen (52% of full-time demographic; 39.4% of total participants) full-time faculty members practiced a learner-centred teaching style. Finally, four (16% of full-time demographic; 12.1% of total participants) full-time faculty members indicated
an eclectic teaching style indicating there are times when they practice flexibility for personal development and other times where they do not.

Table 33: *Employment, teaching styles and Factor 6: participation in the learning process* (*n*=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Full-time (n=25)</th>
<th>%</th>
<th>Part-time (n=0)</th>
<th>%</th>
<th>Partial-load (n=5)</th>
<th>%</th>
<th>Sessional (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>9</td>
<td>36%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>20%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>3</td>
<td>12%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>40%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>20%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>12</strong></td>
<td><strong>48%</strong></td>
<td>0</td>
<td><strong>0%</strong></td>
<td><strong>4</strong></td>
<td><strong>80%</strong></td>
<td><strong>1</strong></td>
<td><strong>33.3%</strong></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>8</td>
<td>32%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>20%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>5</td>
<td>20%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>13</strong></td>
<td><strong>52%</strong></td>
<td>0</td>
<td><strong>0%</strong></td>
<td><strong>1</strong></td>
<td><strong>20%</strong></td>
<td><strong>2</strong></td>
<td><strong>66.7%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>100%</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>5</strong></td>
<td><strong>100%</strong></td>
<td><strong>3</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Partial-load faculty.* Three (60% of partial-load demographic; 9.1% of total participants) partial-load faculty members scored a teacher-centred practice, and one (20% of partial-load demographic; 3% of total participants) of them scored an extreme teacher-centred approach, indicating that person does not practice any flexibility for personal development. No partial-load faculty scored a learner-centred practice. However, one (20% of partial-load demographic; 3% of total participants) participant did score an eclectic practice indicating there are times when they practice flexibility for personal development and other times when they do not.

*Sessional faculty.* Two (66.7% of sessional demographic; 6.1% of total participants) sessional faculty member scored a teacher-centred style, and one (33.3% of sessional demographic; 3% of total participants) sessional faculty member scored a learner-centred
teaching style.

Table 34: Employment, teaching styles and Factor 7: flexibility for personal development (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Full-time (n=25)</th>
<th>Part-time (n=0)</th>
<th>Partial-load (n=5)</th>
<th>Sessional (n=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher Centred</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>20</td>
<td>0</td>
<td>60</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>33.3</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>4</td>
<td>0</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>8</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>16</td>
<td>0</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>36</td>
<td>0</td>
<td>0</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>4</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>52</td>
<td>0</td>
<td>0</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>0</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>%</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Level of educational attainment and practiced teaching styles. As illustrated in Table 35, in this section I report the findings organized around practiced teaching style and level of education as indicated by participating faculty. Participating faculty were asked to indicate their highest level of educational attainment. Three (9.1%) respondents indicated that they held PhD, nineteen (57.6%) indicated that they held a master’s degree, eight (24.2%) indicated a bachelor’s degree and three (9.1%) indicated a college diploma.

Faculty with a PhD. All three (100% of PhD demographic; 9.1% of total participants) faculty members who reported as having a PhD, scored a teacher-centred style. None of the faculty members who held a PhD scored a learner-centred practice.

Faculty with a master’s degree. Data showed that of the 19 (57.6%) faculty who held at most a master’s degree, nine (47.4% of master’s degree demographic; 27.3% of total
participants) scored a teacher-centred approach. An equal number of faculty with a master’s degree, nine (47.4% of master’s degree demographic; 27.3% of participants), scored a learner-centred teaching style; one (5.3% of master’s degree demographic; 3% of total participants) of whom indicated an extreme teacher-centred teaching style. One (5.3% of master’s degree demographic; 3% of total participants) of the faculty members with a master’s degree scored an eclectic teaching style indicating they use both learner and teacher-centred practices.

Faculty with a bachelor’s degree. Of the eight (24.2%) faculty members with a bachelor’s degree as their highest level of educational attainment, five (62.5% of bachelor’s degree demographic; 15.2% of total participants) scored a teacher-centred teaching style. Three (37.5% of bachelor’s degree demographic; 9.1% of total participants) faculty members who held a bachelor’s degree scored a learner-centred teaching style.

Faculty with a college diploma. Out of the three (9.1%) faculty members who indicated a college diploma as their highest level of educational attainment, two (66.7% of college diploma demographic; 6.1% of total participants) scored a teacher-centred practice, and one (33.3% of college diploma demographic; 3% of total participants) scored a learner-centred practice.

The self-reported practiced teaching styles of participating faculty compared to faculty education showed that most participating faculty held a master’s degree as their highest education and their scores were evenly distributed between those who practiced teacher-centred teaching styles and those that practiced learner-centred teaching styles.

Factor 1: Level of educational attainment, practiced teaching styles and learner-centred activities. In this section, indicated in Table 36, I report the findings related to practiced teaching styles and Factor 1: learner-centred activities, by the level of education attained by the participants.
Table 35: Level of educational attainment and teaching styles (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>PhD (n=3)</th>
<th>%</th>
<th>M (n=19)</th>
<th>%</th>
<th>B (n=8)</th>
<th>%</th>
<th>C (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>3</td>
<td>100</td>
<td>7</td>
<td>36.8</td>
<td>3</td>
<td>37.5</td>
<td>2</td>
<td>66.7</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10.5</td>
<td>2</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td>3</td>
<td>100</td>
<td>9</td>
<td>47.4</td>
<td>5</td>
<td>62.5</td>
<td>2</td>
<td>66.7</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>15.8</td>
<td>1</td>
<td>12.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>26.3</td>
<td>2</td>
<td>25</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
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<td>0</td>
<td>1</td>
<td>5.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>47.4</td>
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<tr>
<td><strong>Total</strong></td>
<td>3</td>
<td>100</td>
<td>19</td>
<td>100</td>
<td>8</td>
<td>100</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>

M=Masters; B=Bachelors; C=College

*Faculty with a PhD.* Regarding the three (9.1%) faculty members who held a PhD; one (33.3% of PhD demographic; 3% of total participants) practiced a teacher-centred teaching style, and two (66.7% of PhD demographic; 6.1% of total participants) practiced a learner-centred teaching style.

*Faculty with a master’s degree.* Of the 19 (57.6%) faculty members who held master’s degrees; eleven (57.9% of master’s degree demographic; 33.3% of total participants) practiced a teacher-centred teaching style and eight (42.1% of master’s degree demographic; 24.2% of total participants) faculty members practiced a learner-centred teaching style.

*Faculty with a bachelor’s degree.* Of the eight (24.2%) faculty who held a bachelor's degree, five (62.5% of bachelor's degree demographic; 15.2% of total participants) scored a teacher-centred practice, and three (37.5% of bachelor's degree demographic; 9.1% of total participants) faculty scored a learner-centred practice.
Faculty with a college diploma. Of the three (9.1%) faculty members who held a college diploma, one (33.3% of college diploma demographic; 3% of total participants) scored an extreme teacher-centred style, indicating no learner-centred activities. The other two (66.7% of college diploma demographic; 6.1% of participants) scored a learner-centred approach.

Table 36: Level of educational attainment, teaching styles and Factor 1: learner-centred activities (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>PhD (n=3)</th>
<th>%</th>
<th>M (n=19)</th>
<th>%</th>
<th>B (n=8)</th>
<th>%</th>
<th>C (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>1</td>
<td>33.3</td>
<td>9</td>
<td>47.4</td>
<td>3</td>
<td>37.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10.5</td>
<td>2</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>1</td>
<td>33.3%</td>
<td>11</td>
<td>57.9%</td>
<td>5</td>
<td>62.5%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>1</td>
<td>33.3</td>
<td>5</td>
<td>26.3</td>
<td>3</td>
<td>37.5</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>1</td>
<td>33.3</td>
<td>3</td>
<td>15.8</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>2</td>
<td>66.7%</td>
<td>8</td>
<td>42.1%</td>
<td>3</td>
<td>37.5%</td>
<td>2</td>
<td>66.7%</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>100</td>
<td>19</td>
<td>100</td>
<td>8</td>
<td>100</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>

M=Masters; B=Bachelors; C=College

Factor 2: Level of educational attainment, practiced teaching styles and personalizing instruction. Table 37 demonstrates the findings related to practiced teaching styles and Factor 2: personalizing instruction, by the level of education attained by the participants.

Faculty with a PhD. All three (100% of PhD demographic; 9.1% of total participants) faculty members who held a PhD reported a teacher-centred. No participating faculty who held a PhD scored a learner-centred practice for personalizing instruction.
Faculty with a master’s degree. Of the 19 (57.6%) faculty who held a master’s degree, seven (36.8% of master’s degree demographic; 21.2% of total participants) practiced a teacher-centred style. The remaining twelve (63.2% of master’s degree demographic; 36.4% of total participants) faculty members of this demographic practiced a learner-centred teaching style.

Faculty with a bachelor’s degree. Of the eight (24.2%) faculty members who held bachelor’s degrees, four (50% of bachelor’s degree demographic; 12.1% of total participants) scored a teacher-centred teaching style. The remaining four scored learner-centred.

Faculty with a college diploma. Of the three (9.1%) faculty who held a college diploma, one (33.3% of college diploma demographic; 3% of total participants) scored a teacher-centred practice; two (66.7% of college diploma demographic; 6.1% of total participants) scored a learner-centred practice.

Table 37: Level of educational attainment, teaching styles and Factor 2: personalizing instruction (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>PhD (n=3)</th>
<th>%</th>
<th>M (n=19)</th>
<th>%</th>
<th>B (n=8)</th>
<th>%</th>
<th>C (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>3</td>
<td>100</td>
<td>2</td>
<td>10.5</td>
<td>4</td>
<td>50</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>26.3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>3</strong></td>
<td><strong>100%</strong></td>
<td><strong>7</strong></td>
<td><strong>36.8%</strong></td>
<td><strong>4</strong></td>
<td><strong>50%</strong></td>
<td><strong>1</strong></td>
<td><strong>33.3%</strong></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>47.4</td>
<td>2</td>
<td>25</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>15.8</td>
<td>2</td>
<td>25</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>12</strong></td>
<td><strong>63.2%</strong></td>
<td><strong>4</strong></td>
<td><strong>50%</strong></td>
<td><strong>2</strong></td>
<td><strong>66.7%</strong></td>
</tr>
</tbody>
</table>

M=Masters; B=Bachelors; C=College
Factor 3: Level of educational attainment, practiced teaching styles relating to experience. As indicated in Table 38, in this section I report the findings related to practiced teaching styles and Factor 3: relating to experience, by the level of education attained by the participants.

Faculty with a PhD. Two of the three faculty members who held a PhD (66.7% of PhD demographic; 6.1% of total participants) practiced a teacher-centred teaching style, and the other (33.3% of PhD demographic; 3% of total participants) scored a learner-centred teaching style.

Faculty with a master’s degree. Of the 19 (57.6%) faculty members who held a master’s degree, nine (47.4% of master’s demographic; 27.3% of total participants) practiced teacher-centred style, one (5.3% of master’s degree demographic; 3% of total participants) of whom scored an extreme teacher-centred practice, indicating they do not allow for learners to relate to their experience. Ten (52.6% of master’s degree demographic; 30.3% of total participants) faculty members who held a master’s degree practiced a learner-centred teaching style.

Faculty with a bachelor’s degree. Of the eight (24.2%) faculty members who held a bachelor’s degree, half (50% of bachelor’s degree demographic; 12.1% of total participants) scored a teacher-centred practice, and the other half scored a learner-centred practice.

Faculty with a college diploma. None of the three (9.1%) faculty members who held a college diploma scored a teacher-centred practice; all three scored a learner-centred teaching style.

Factor 6: Level of education, practiced teaching styles and participation in the learning process. In this section, as seen in Table 39, I report the findings related to practiced teaching styles and Factor 6: participating in the learning process, organized by the level of education attained by the participants.
Faculty with a PhD. All three (100% of PhD demographic; 9.1% of total participants) faculty in this demographic scored a teacher-centred teaching style, and one of them scored an extreme teacher-centred teaching style, indicating that they do not support learners participating in the learning process. No faculty who held a PhD scored a learner-centred teaching style.

Faculty with a master’s degree. Of the 19 (57.6%) faculty who held a master’s degree, eight (42.1% of master’s degree demographic; 24.2% of total participants) scored a teacher-centred practice, whereas 11 (57.9% of master’s degree demographic; 33.3% of total participants) scored a learner-centred practice.

Faculty with a bachelor’s degree. Of the eight (24.2%) faculty who held bachelor’s degree, four (50% of bachelor’s degree demographic; 12.1% of total participants) scored a teacher-centred approach, and the other four faculty scored a learner-centred practice.
Faculty with a college diploma. Of the three (9.1%) faculty members who held a college diploma, two (66.7% of college diploma demographic; 6.1% of total participants) scored a teacher-centred practice. The other one (33.3% of college diploma demographic; 3% of total participants) faculty member who held a college diploma scored an extreme learner-centred teaching style, indicating this faculty member has an extreme practice of learners participating in the learning process.

Table 39: Level of educational attainment, teaching styles and Factor 6: participation in the learning process (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>PhD (n=3)</th>
<th>%</th>
<th>M (n=19)</th>
<th>%</th>
<th>B (n=8)</th>
<th>%</th>
<th>C (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher Centred</td>
<td>1</td>
<td>33.3</td>
<td>6</td>
<td>31.6</td>
<td>3</td>
<td>37.5</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>1</td>
<td>33.3</td>
<td>2</td>
<td>10.5</td>
<td>1</td>
<td>12.5</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>1</td>
<td>33.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>3</strong></td>
<td><strong>100%</strong></td>
<td><strong>8</strong></td>
<td><strong>42.1%</strong></td>
<td><strong>4</strong></td>
<td><strong>50%</strong></td>
<td><strong>2</strong></td>
<td><strong>66.7%</strong></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>7</td>
<td>36.8</td>
<td>3</td>
<td>37.5</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>11</strong></td>
<td><strong>57.9%</strong></td>
<td><strong>4</strong></td>
<td><strong>50%</strong></td>
<td><strong>1</strong></td>
<td><strong>33.3%</strong></td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>100%</td>
<td>19</td>
<td>100%</td>
<td>8</td>
<td>100%</td>
<td>3</td>
<td>100%</td>
</tr>
</tbody>
</table>

M=Masters; B=Bachelors; C=College

Factor 7: Level of education, practiced teaching styles and flexibility for personal development. In this section, as seen in Table 40, I report the practiced findings related to teaching styles and Factor 7: flexibility for personal development, organized by the level of education attained by the participants.
Faculty with a PhD. One (33.3% of PhD demographic; 3% of total participants) faculty member who held a PhD scored an eclectic teaching style, indicating that some of the times their practice includes flexibility for personal development but other times it does not. The other two (66.7% of PhD demographic; 6.1% of total participants) faculty members who held a PhD scored a teacher-centred practice.

Faculty with a master’s degree. A total of two (10.5% of master’s degree demographic; 6.1% of total participants) faculty who held a master’s degree scored an eclectic teaching style (both teacher and learner-centred in their practice), while six (31.6% of master’s degree demographic; 18.2% of total participants) reported practicing a teacher-centred practice, one (5.3% of master’s degree demographic; 3% of total participants) of whom scored an extreme teacher-centred practice, indicating that faculty does not allow flexibility in their practice for personal development. Eleven (57.9% of master’s degree demographic; 33.3% of total participants) faculty members who held a master’s degree scored a learner-centred practice.

Faculty with a bachelor’s degree. Two (25% of bachelor's degree demographic; 6.1% of total participants) faculty members who held a bachelor's degree scored an eclectic teaching style (both teacher and learner-centred). Four (50% of bachelor's degree demographic; 12.1% of total participants) faculty members who held a bachelor's degree scored a teacher-centred practice, and the remaining two (25% of bachelor's degree demographic; 6.1% of total participants) faculty of this demographic scored a learner-centred teaching style.

Faculty with a college diploma. Of the three (9.1%) faculty members who held a college diploma as their highest level of education, two (66.7% of total college diploma faculty; 6.1% of participants) scored a teacher-centred approach, of whom one (33.3% of college diploma demographic; 3% of total participants) scored an extreme teacher-centred approach, indicating
this faculty does not include flexibility for personal development in their teaching practice. One (33.3% of college diploma demographic; 3% of total participants) faculty of this demographic scored a learner-centred practice.

Table 40: Level of educational attainment, teaching styles and Factor 7: flexibility for personal development (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>PhD (n=3)</th>
<th>%</th>
<th>M (n=19)</th>
<th>%</th>
<th>B (n=8)</th>
<th>%</th>
<th>C (n=3)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>2</td>
<td>66.7%</td>
<td>4</td>
<td>21.1%</td>
<td>3</td>
<td>37.5%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>5.3%</td>
<td>1</td>
<td>12.5%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>5.3%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>2</strong></td>
<td><strong>66.7%</strong></td>
<td><strong>6</strong></td>
<td><strong>31.6%</strong></td>
<td><strong>4</strong></td>
<td><strong>50%</strong></td>
<td><strong>2</strong></td>
<td><strong>66.7%</strong></td>
</tr>
<tr>
<td>Eclectic (mean)</td>
<td>1</td>
<td>33.3%</td>
<td>2</td>
<td>10.5%</td>
<td>2</td>
<td>25%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>8</td>
<td>42.1%</td>
<td>1</td>
<td>12.5%</td>
<td>1</td>
<td>33.3%</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>3</td>
<td>15.8%</td>
<td>1</td>
<td>12.5%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>11</strong></td>
<td><strong>57.9%</strong></td>
<td><strong>2</strong></td>
<td><strong>25%</strong></td>
<td><strong>1</strong></td>
<td><strong>33.3%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
<td><strong>100%</strong></td>
<td><strong>19</strong></td>
<td><strong>100%</strong></td>
<td><strong>8</strong></td>
<td><strong>100%</strong></td>
<td><strong>3</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

M=Masters; B=Bachelors; C=College

Years of teaching experience and practiced teaching styles. In this section and seen in Table 41, I report the findings for practiced teaching style and years of teaching experience (YOE) as indicated by participating faculty. On the modified PALS, participating faculty were asked to indicate how many years of teaching experience they had accrued: one to five years, six to 10 years, 11 to 15 years, 16 to 20 years, and over 20 years.

Faculty with one to five years of experience. Of the eight (24.2%) faculty members who had taught between one and five years; five (62.5% of YOE demographic; 15.2% of total participants) scored as teacher-centred, and two (25% of YOE demographic; 6.1% of total
participants) scored as learner-centred and one (12.5% of YOE demographic; 3% of total participants) faculty scored an eclectic teaching style indicating they practice both teacher and learner-centred style.

*Faculty with six to 10 years of experience.* Out of the nine (27.3%) faculty who had taught between six and ten years, six (66.7% of YOE demographic; 18.2% of total participants) scored a teacher-centred teaching style. The other three (33.3% of YOE demographic; 9.1% of total participants) out of the nine participants of this demographic scored a learner-centred teaching style.

*Faculty with 11 to 15 years of experience.* There were eight (24.2%) faculty members who had taught between 11 and 15 years; five (62.5% of YOE demographic; 15.2% of total participants) of them scored a teacher-centred teaching style, and three (37.5% of YOE demographic; 9.1% of total participants) faculty members of this demographic scored a learner-centred teaching style.

*Faculty with 16 to 20 years of experience.* Only two (6.1%) faculty members had taught between 16 and 20 years, and both (100% of YOE demographic; 6.1% of total participants) scored a learner-centred teaching style.

*Faculty with more than 20 years of experience.* A total of six (18.2%) faculty members indicated having had over 20 years of teaching experience. Half (50% of YOE demographic; 9.1% of total participants) of the six scored a teacher-centred teaching style, and the other half scored a learner-centred teaching style.

The self-reported practiced teaching styles of participating faculty compared to years of teaching experience showed that the majority of faculty had taught over five years and regardless of years of teaching, majority of them scored practiced teacher-centred teaching style.
Table 41: Years of teaching experience and teaching styles (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>1-5 (n=8)</th>
<th>%</th>
<th>6-10 (n=9)</th>
<th>%</th>
<th>11-15 (n=8)</th>
<th>%</th>
<th>16-20 (n=2)</th>
<th>%</th>
<th>&gt;20 (n=6)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>5 62.5%</td>
<td>5 62.5%</td>
<td>3 37.5%</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>33.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>1 11.1%</td>
<td>2</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>5 62.5%</td>
<td>6 66.7%</td>
<td>5 62.5%</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>50%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>1 12.5%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Increased Learner Centred</td>
<td>0 0</td>
<td>1 11.1%</td>
<td>1</td>
<td>12.5</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>33.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>2</td>
<td>25</td>
<td>2</td>
<td>22.2</td>
<td>2</td>
<td>25</td>
<td>2</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>16.7%</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>2</td>
<td>25%</td>
<td>3</td>
<td>33.3%</td>
<td>3</td>
<td>37.5%</td>
<td>2</td>
<td>100%</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>100</td>
<td>9</td>
<td>100</td>
<td>8</td>
<td>100</td>
<td>2</td>
<td>100</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

**Factor 1: Years of teaching experience, practiced teaching styles and learner-centred activities.** As seen in Table 42, in this section I report the findings related to practiced teaching styles and Factor 1: learner-centred activities, by the participants’ years of teaching experience.

*Faculty with one to five years of experience.* Three (37.5% of YOE demographic; 9.1% of total participants) faculty members who had taught between one and five years scored their teaching practice as teacher-centred. Five (62.5% of YOE demographic; 15.2% of total participants) faculty members of this demographic scored a learner-centred approach.

*Faculty with six to 10 years of experience.* Out of the nine (27.3%) faculty members who had taught between six and 10 years, five (55.6% of YOE demographic; 15.2% of total participants) scored a teacher-centred teaching style, of whom one (11.1% of YOE demographic;
3% of total participants) indicated an extreme teacher-centred teaching style, indicating they do not practice any learner-centred activities. Four (44.4% of YOE demographic; 12.1% of total participants) faculty members scored a learner-centred practice.

*Faculty with 11 to 15 years of experience.* Eight (24.2%) faculty members had taught between 11 and 15 years, of whom six (75% of YOE demographic; 18.2% of total participants) scored a teacher-centred teaching style, and two (25% of YOE demographic; 6.1% of total participants) faculty members scored a learner-centred teaching style.

*Faculty with 16 to 20 years of experience.* Two (6.1%) participating faculty members had taught between 16 and 20 years, and both (100% of YOE demographic; 6.1% of total participants) scored a learner-centred teaching style.

*Faculty with more than 20 years of experience.* Six (18.2%) faculty members had taught for over 20 years, of whom four (66.7% of YOE demographic; 12.1% of total participants) scored a teacher-centred teaching style, and the other two (33.3% of demographic; 6.1% of total participants) faculty scored a learner-centred teaching style.

*Factor 2: Years of teaching experience (YOE), practiced teaching styles and personalizing instruction.* As seen in Table 43, in this section I report the findings related to practiced teaching styles and Factor 2: personalizing instruction, by the participants’ years of teaching experience.

*Faculty with one to five years of experience.* Four (50% of YOE demographic; 12.1% of total participants) faculty members who had taught between one and five years scored a teacher-centred practice. The other four (50% of YOE demographic; 6.1% of total participants) faculty members scored a learner-centred style.
Table 42: Years of teaching experience, teaching styles and Factor 1: learner-centred activities (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>1-5 (n=8)</th>
<th>6-10 (n=9)</th>
<th>11-15 (n=8)</th>
<th>16-20 (n=2)</th>
<th>&gt;20 (n=6)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>3 (37.5%)</td>
<td>2 (22.2%)</td>
<td>5 (62.5%)</td>
<td>0 (0%)</td>
<td>3 (50%)</td>
<td>8 (100%)</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0 (0%)</td>
<td>1 (12.5%)</td>
<td>6 (75%)</td>
<td>0 (0%)</td>
<td>1 (16.7%)</td>
<td>9 (100%)</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0 (0%)</td>
<td>1 (11.1%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (100%)</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td>3 (37.5%)</td>
<td>5 (55.6%)</td>
<td>6 (75%)</td>
<td>0 (0%)</td>
<td>4 (66.7%)</td>
<td>10 (100%)</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (25%)</td>
<td>2 (25%)</td>
<td>1 (100%)</td>
<td>6 (100%)</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>2 (25%)</td>
<td>4 (44.4%)</td>
<td>2 (25%)</td>
<td>1 (50%)</td>
<td>1 (16.7%)</td>
<td>8 (100%)</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>3 (37.5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (50%)</td>
<td>1 (16.7%)</td>
<td>5 (100%)</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td>5 (62.5%)</td>
<td>4 (44.4%)</td>
<td>2 (25%)</td>
<td>2 (100%)</td>
<td>2 (33.3%)</td>
<td>10 (100%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8 (100%)</td>
<td>9 (100%)</td>
<td>8 (100%)</td>
<td>2 (100%)</td>
<td>6 (100%)</td>
<td>30 (100%)</td>
</tr>
</tbody>
</table>

Faculty with six to 10 years of experience. Out of the nine (27.3%) faculty who had taught between six and ten years, four (44.4% of YOE demographic; 12.1% of total participants) scored a teacher-centred practice; and five (55.6% of YOE demographic; 15.2% of total participants) scored a learner-centred approach.

Faculty with 11 to 15 years of experience. Data for the eight (24.2%) faculty members who had taught between 11 and 15 years, were equal for teacher and learner-centred teaching styles. Four (50% of YOE demographic; 12.1% of total participants) participants scored a teacher-centred practice, and four participants scored a learner-centred practice.
Faculty with 16 to 20 years of experience. Two (6.1%) faculty members had taught between 16 and 20 years, and both (100% of YOE demographic; 6.1% of total participants) scored a learner-centred teaching style.

Faculty with more than 20 years of experience. Six (18.2%) faculty indicated that they had over 20 years of teaching experience; data for the six were equal for teacher and learner-centred teaching styles. Three (50% of YOE demographic; 9.1% of total participants) scored a teacher-centred practice, and three scored a learner-centred practice.

Table 43: Years of teaching experience, teaching styles and Factor 2: personalizing instruction (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>1-5 (n=8)</th>
<th></th>
<th>6-10 (n=9)</th>
<th></th>
<th>11-15 (n=8)</th>
<th></th>
<th>16-20 (n=2)</th>
<th></th>
<th>&gt;20 (n=6)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>2 (25%)</td>
<td></td>
<td>2 (22.2%)</td>
<td></td>
<td>3 (37.5%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>2 (33.3%)</td>
<td></td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>2 (25%)</td>
<td></td>
<td>2 (22.2%)</td>
<td></td>
<td>1 (12.5%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>1 (16.6%)</td>
<td></td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
</tr>
<tr>
<td>Total Teacher-Centred Style</td>
<td>4 (50%)</td>
<td></td>
<td>4 (44.4%)</td>
<td></td>
<td>4 (50%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>3 (50%)</td>
<td></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>3 (37.5%)</td>
<td></td>
<td>4 (44.4%)</td>
<td></td>
<td>3 (37.5%)</td>
<td></td>
<td>1 (50%)</td>
<td></td>
<td>1 (16.6%)</td>
<td></td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>1 (12.5%)</td>
<td></td>
<td>1 (11.1%)</td>
<td></td>
<td>1 (12.5%)</td>
<td></td>
<td>1 (50%)</td>
<td></td>
<td>2 (33.3%)</td>
<td></td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>4 (50%)</td>
<td></td>
<td>5 (55.6%)</td>
<td></td>
<td>4 (50%)</td>
<td></td>
<td>2 (100%)</td>
<td></td>
<td>3 (50%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8 (100%)</td>
<td></td>
<td>9 (100%)</td>
<td></td>
<td>8 (100%)</td>
<td></td>
<td>2 (100%)</td>
<td></td>
<td>6 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

Factor 3: Years of teaching experience, practiced teaching styles relating to experience. In this section and presented in Table 44, I report the findings related to practiced teaching styles and Factor 3: relating to experience, by the participants’ years of teaching experience.
Faculty with one to five years of experience. Three (37.5% of YOE demographic; 9.1% of total participants) faculty members who had taught between one and five years scored a teacher-centred practice; while five (62.5% of YOE demographic; 15.2% of total participants) scored a learner-centred practice.

Faculty with six to 10 years of experience. Out of the nine (27.3%) faculty who had taught between six and 10 years, four (44.4% of YOE demographic; 12.1% of total participants) practiced a teacher-centred teaching style, of whom one (11.1% of YOE demographic; 3% of total participants) scored an extreme teacher-centred practice, indicating they do not relate learning to experience. The remaining five (55.6% of YOE demographic; 15.2% of total participants) participating faculty scored a learner-centred teaching style.

Faculty with 11 to 15 years of experience. Of the eight (24.2%) faculty members who had taught between 11 and 15 years, five (62.5% of YOE demographic; 15.2% of total participants) scored a teacher-centred teaching style. The remaining three (37.5% of YOE demographic; 9.1% of total participants) faculty members of this demographic scored a learner-centred teaching style.

Faculty with 16 to 20 years of experience. Two (6.1%) faculty members had taught between 16 and 20 years, and both scored a learner-centred teaching style.

Faculty with more than 20 years of experience. Six (18.2%) faculty members indicated having over 20 years of teaching experience, of whom three (50% of YOE demographic; 9.1% of total participants) scored a teacher-centred teaching style; and the other three scored a learner-centred teaching style.
Table 44: *Years of teaching experience, teaching styles and Factor 3: relating to experience (n=33)*.

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>1-5 (n=8)</th>
<th>%</th>
<th>6-10 (n=9)</th>
<th>%</th>
<th>11-15 (n=8)</th>
<th>%</th>
<th>16-20 (n=2)</th>
<th>%</th>
<th>&gt;20 (n=6)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>3</td>
<td>37.5</td>
<td>2</td>
<td>22.2</td>
<td>3</td>
<td>37.5</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>11.1</td>
<td>2</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>11.1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
<td><strong>3</strong></td>
<td><strong>37.5%</strong></td>
<td><strong>4</strong></td>
<td><strong>44.4%</strong></td>
<td><strong>5</strong></td>
<td><strong>62.5%</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>3</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>4</td>
<td>50</td>
<td>4</td>
<td>44.4</td>
<td>2</td>
<td>25</td>
<td>1</td>
<td>50</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Learner-Centred</td>
<td>1</td>
<td>12.5</td>
<td>1</td>
<td>11.1</td>
<td>1</td>
<td>12.5</td>
<td>1</td>
<td>50</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Extreme Learner-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td><strong>5</strong></td>
<td><strong>62.5%</strong></td>
<td><strong>5</strong></td>
<td><strong>55.6%</strong></td>
<td><strong>3</strong></td>
<td><strong>37.5%</strong></td>
<td><strong>2</strong></td>
<td><strong>100%</strong></td>
<td><strong>3</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
<td><strong>100%</strong></td>
<td><strong>9</strong></td>
<td><strong>100%</strong></td>
<td><strong>8</strong></td>
<td><strong>100%</strong></td>
<td><strong>2</strong></td>
<td><strong>100%</strong></td>
<td><strong>6</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Factor 6: Years of teaching experience, practiced teaching styles and participation in the learning process.** In this section, indicated in Table 45, I report the findings related to practiced teaching styles and Factor 6: participation in the learning process by the participants’ years of teaching experience.

*Faculty with one to five years of experience.* Of the eight (24.2%) faculty who had taught between one and five years, a total of five (62.5% of YOE demographic; 15.2% of total participants) scored a teacher-centred approach, of whom one (12.5% of YOE demographic; 3% of total participants) scored an extreme teacher-centred practice, indicating that learners do not participate in the learning process. The other three (37.5% of YOE demographic; 9.1% of total participants) faculty members scored a learner-centred practice.
Faculty with six to 10 years of experience. Out of the nine (27.3%) faculty who had taught between six and 10 years, four (44.4% of YOE demographic; 12.1% of total participants) practiced a teacher-centred teaching style, and five (55.6% of YOE demographic; 15.2% of total participants) practiced a learner-centred teaching style, one (11.1% of YOE demographic; 3% of total participants) of whom scored an extreme learner-centred practice, indicating that learners are very participatory in the learning process.

Faculty with 11 to 15 years of experience. Three (37.5% of YOE demographic; 9.1% of total participants) of the eight (24.2%) faculty members who had taught between 11 and 15 years, scored a teacher-centred practice, while five (62.5% of YOE demographic; 15.2% of total participants) scored a learner-centred practice.

Faculty with 16 to 20 years of experience. Two (6.1%) faculty had taught between 16 and 20 years, of whom one (50% of YOE demographic; 3% of total participants) scored a teacher-centred practice, and the other scored a learner-centred practice.

Faculty with more than 20 years of experience. Four (66.7% of YOE demographic; 12.1% of total participants) of the six (18.2%) faculty who had over 20 years of teaching experience scored a teacher-centred teaching style. The other two (33.3% of YOE demographic; 6.1% of total participants) scored a learner-centred teaching style.

Factor 7: Years of teaching experience, practiced teaching styles and flexibility for personal development. As presented in Table 46, in this section I report the findings related to practiced teaching styles and Factor 7: flexibility for personal development by the participants’ years of teaching experience.
Table 45: Years of teaching experience, teaching styles and Factor 6: participation in the learning process (n=33).

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>1-5 (n=8)</th>
<th>%</th>
<th>6-10 (n=9)</th>
<th>%</th>
<th>11-15 (n=8)</th>
<th>%</th>
<th>16-20 (n=2)</th>
<th>%</th>
<th>&gt;20 (n=6)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>2</td>
<td>25</td>
<td>3</td>
<td>33.3</td>
<td>1</td>
<td>12.5</td>
<td>1</td>
<td>50</td>
<td>4</td>
<td>66.7</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>2</td>
<td>25</td>
<td>1</td>
<td>11.1</td>
<td>2</td>
<td>25</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
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<td>0</td>
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<tr>
<td>Total Teacher-Centred Style</td>
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<td>4</td>
<td>44.4</td>
<td>3</td>
<td>37.5</td>
<td>1</td>
<td>50</td>
<td>4</td>
<td>66.7</td>
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<tr>
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<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
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<td>33.3</td>
<td>3</td>
<td>37.5</td>
<td>1</td>
<td>50</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
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<td>1</td>
<td>11.1</td>
<td>2</td>
<td>25</td>
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<td>0</td>
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<td>16.7</td>
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<tr>
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<td>11.1</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
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<td>37.5</td>
<td>5</td>
<td>55.6</td>
<td>5</td>
<td>62.5</td>
<td>1</td>
<td>50</td>
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<td>100</td>
<td>2</td>
<td>100</td>
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Faculty with one to five years of experience. Six (75% of YOE demographic; 18.2% of total participants) of the eight (24.2%) faculty members who had taught between one and five years scored a teacher-centred practice, and one (12.5% of YOE demographic; 3% of total participants) of them scored an extreme teacher-centred approach, indicating they do not allow flexibility for personal development in their practice. The other two (25% of YOE demographic; 6.1% of total participants) participating faculty members of this demographic practiced a learner-centred style.

Faculty with six to 10 years of experience. Out of the nine (27.3%) faculty who had taught between six and 10 years, two (22.2% of YOE demographic; 6.1% of total participants) scored a teacher-centred practice; six (66.7% of YOE demographic; 18.2% of total participants)
faculty members from this demographic scored a learner-centred practice; and one (11.1% of YOE demographic; 3% of total participants) scored an eclectic teaching style indicating sometimes they are flexible with personal development and other times they are not.

Faculty with 11 to 15 years of experience. Of the eight (24.2%) faculty members who had taught between 11 and 15 years, three (37.5% of YOE demographic; 9.1% of total participants) scored a teacher-centred practice, one of whom scored an extreme teacher-centred approach, indicating they do not allow flexibility for personal development. Three (37.5% of YOE demographic; 9.1% of total participants) faculty members of this demographic scored a learner-centred practice. Finally, two (25% of YOE demographic; 6.1% of total participants) faculty members scored an eclectic style of teaching regarding flexibility for personal development.

Faculty with 16 to 20 years of experience. Two (6.1%) faculty members had taught between 16 and 20 years, and both (100% of YOE demographic; 6.1% of total participants) scored a learner-centred teaching style.

Faculty with more than 20 years of experience. Of the six (18.2%) faculty members who had taught over 20 years, three (50% of YOE demographic; 9.1% of total participants) scored a teacher-centred teaching style. Only one (16.7% of YOE demographic; 3% of total participants) faculty member of this demographic scored a learner-centred teaching style. Finally, two (33.3% of YOE demographic; 6.1% of total participants) participating faculty reported an eclectic style (both teacher and learner-centred practice) for Factor 7.

Educational philosophy and practiced teaching styles. Because of the large number of tables in this section, I present tables in Appendix T. In this section and presented in Tables T-1 (Appendix T), I report the findings organized around teaching style and educational philosophy. Participating faculty were asked to pick the educational philosophy or combination of
philosophies that best described their philosophy of adult education based on a descriptive list of five philosophies where the name of the philosophy was omitted.

Table 46: Years of teaching experience, teaching styles and Factor 7: flexibility for personal development (n=33)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>1-5 (n=8)</th>
<th>%</th>
<th>6-10 (n=9)</th>
<th>%</th>
<th>11-15 (n=8)</th>
<th>%</th>
<th>16-20 (n=2)</th>
<th>%</th>
<th>&gt;20 (n=6)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>5</td>
<td>62.5</td>
<td>1</td>
<td>11.1</td>
<td>1</td>
<td>12.5</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>11.1</td>
<td>1</td>
<td>12.5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>1</td>
<td>12.5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>12.5</td>
<td>0</td>
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<td>75%</td>
<td>2</td>
<td>22.2</td>
<td>3</td>
<td>37.5</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>Eclectic (Mean)</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>11.1</td>
<td>2</td>
<td>25%</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Increased Learner-Centred</td>
<td>1</td>
<td>12.5</td>
<td>5</td>
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<td>37.5</td>
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<td>0</td>
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<td>16.7</td>
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<tr>
<td>Very Strong Learner-Centred</td>
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<td>12.5</td>
<td>1</td>
<td>11.1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>100%0</td>
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</tr>
<tr>
<td>Extreme Learner-Centred</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Total Learner-Centred Style</td>
<td>2</td>
<td>25%</td>
<td>6</td>
<td>66.7</td>
<td>3</td>
<td>37.5</td>
<td>2</td>
<td>100%1</td>
<td>1</td>
<td>16.7%</td>
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</table>

*Liberal philosophy.* Six (18.2%) participating faculty members reported a Liberal philosophy. Four (66.7% of Liberal philosophy demographic; 12.1% of total participants) faculty members reported a teacher-centred approach. The other two (33.3% of Liberal philosophy demographic; 6.1% of total participants) faculty members reported a learner-centred approach.

*Behavioural philosophy.* Four (12.1%) faculty members reported a Behavioural philosophy, each of whom (100% of Behavioural philosophy demographic; 12.1% of total participants) scored a teacher-centred teaching style.

*Progressive philosophy.* The most reported educational philosophy was Progressive, with nine (27.3%) faculty members having indicated it as the philosophy that best matches their own.
Four (44.4% of Progressive philosophy demographic; 12.1% of participants) of the nine faculty members of this philosophy reported a teacher-centred approach; four (44.4% of Progressive philosophy demographic; 12.1% of participants) indicated a learner-centred approach, of whom three (33.3% of Progressive philosophy demographic; 9.1% of participants) scored a very strong learner-centred practice. One (11.1% of Progressive philosophy demographic; 3% of total participants) faculty member reported as eclectic in their teaching style.

*Humanistic philosophy.* All four (100% of Humanistic philosophy demographic; 12.1% of total participants) faculty members who reported a Humanistic philosophy reported a teacher-centred teaching style.

*Radical philosophy.* One (100% of Radical philosophy demographic; 3% of total participants) faculty member reported a Radical educational philosophy and this individual indicated a teacher-centred approach.

*Combination of philosophies.* Nine (27.3%) faculty members reported a combination of philosophies. Of the nine, seven (77.8% of combination of philosophies; 21.2% of total participants) reported learner-centred approach to teaching, of whom one (11.1% of combination of philosophies; 3% of total participants) with the combination of Liberal, Progressive, Humanistic, and Radical (LPHR) philosophies indicated an *extreme* learner-centred approach. The remaining two (22.2% of combination of philosophies demographic; 6.1% of total participants) faculty reported a teacher-centred approach.

*Factor 1: Educational philosophy, practiced teaching styles and learner-centred activities.* As shown in Tables T-2 (Appendix T), in this section I report the findings related to practiced teaching styles and Factor 1: learner-centred activities by the educational philosophy of participating faculty.
*Liberal philosophy.* Six (18.2%) faculty members reported a Liberal philosophy, of whom five (83.3% of Liberal philosophy demographic; 15.2% of total participants) indicated a teacher-centred approach, the remaining (16.7% of Liberal philosophy demographic; 3% of total participants) faculty member indicated a learner-centred approach.

*Behavioural philosophy.* All four (100% of Behavioural philosophy; 12.1% of total participants) of the faculty members who reported a Behavioural philosophy indicated a teacher-centred approach.

*Progressive philosophy.* Of the nine (27.3%) faculty members who reported a Progressive philosophy; four (44.4% of Progressive philosophy demographic; 12.1% of total participants) reported a teacher-centred teaching style and five (55.6% of Progressive philosophy demographic; 15.2% of total participants) faculty reported a learner-centred teaching style.

*Humanistic philosophy.* Of the four (12.1%) faculty who reported a Humanistic philosophy, two (50% of Humanistic philosophy demographic; 6.1% of total participants) indicated a teacher-centred approach; and two (50% of Humanistic philosophy demographic; 6.1% of total participants) indicated a learner-centred approach.

*Radical Philosophy.* Only one (100% of Radical philosophy demographic; 3% of total participants) of the faculty members reported a Radical philosophy, and this individual indicated a learner-centred teaching style.

*Combination of philosophies.* Of the nine (27.3%), three (33.3% of combination of philosophies demographic; 9.1% of total population) indicated a teacher-centred approach of whom one (11.1% of combination of philosophies demographic; 3% of total population) identified a Behavioural and Progressive (BP) combination of philosophies indicated an extreme teaching-centred teaching style. The majority, six (66.7% of combination of philosophies demographic; 18.2% of total population) faculty indicated a learner-centred approach.
demographic; 18% of total population) faculty members indicated a learner-centred teaching style.

**Factor 2: Educational philosophy, practiced teaching styles and personalizing instruction.** In this section and presented in Tables T-3 (Appendix T), I report the findings related to practiced teaching styles and Factor 2: personalizing instruction by the educational philosophy of participating faculty.

*Liberal philosophy.* Of the six (18.2%) faculty members who reported a Liberal philosophy, four (66.7% of Liberal philosophy demographic; 12.1% of total participants) reported a teacher-centred teaching style and two (33.3% of Liberal philosophy demographic; 6.1% of total participants) faculty reported a learner-centred approach.

*Behavioural philosophy.* All four (100% of Behavioural philosophy; 12.2% of total participants) faculty who reported a Behavioural philosophy indicated a teacher-centred approach to teaching.

*Progressive philosophy.* There were nine (27.3%) faculty members who reported a Progressive philosophy; three (33.3% of Progressive philosophy demographic; 9.1% of total participants) indicated a teacher-centred approach to teaching, and six (66.7% of Progressive philosophy demographic; 18.2% of total participants) were learner-centred.

*Humanistic philosophy.* Of the four (12.1%) faculty who reported a Humanistic philosophy, three (75% of Humanistic philosophy demographic; 9.1% of total participants) reported a teacher-centred approach and one (25% of Humanistic philosophy demographic; 3% of total participants) faculty member reported a learner-centred approach.
Radical philosophy. Only one (100% of Radical philosophy demographic; 3% of total participants) faculty member reported a Radical philosophy and this individual indicated a teacher-centred learning style.

Combination of philosophies. All nine participating faculty who reported a combination of philosophies reported learner-centred teaching styles.

Factor 3: Educational philosophy, practiced teaching styles and relating to experience. In this section, indicated in Tables T-4 (Appendix T), I report the findings related to practiced teaching styles and Factor 3; relating to experience, by the educational philosophy of participating faculty.

Liberal philosophy. Of the six (18.2%) faculty members who reported a Liberal philosophy, only one (16.7% of Liberal philosophy demographic; 3% of total participants) indicated a teacher-centred teaching style compared to five (83.3% of Liberal philosophy demographic; 15.2% of total participants) faculty who indicated a learner-centred approach.

Behavioural philosophy. All four (100% of Behavioural philosophy demographic; 12.2% of total participants) faculty who reported a Behavioural philosophy indicated a teacher-centred approach to teaching.

Progressive philosophy. Of the nine (27.3%) faculty members who reported a Progressive philosophy; five (55.6% of Progressive philosophy demographic; 15.2% of total participants) were teacher-centred, and four were learner-centred.

Humanistic philosophy. Of the four (12.1%) faculty who reported a Humanistic philosophy, three (75% of Humanistic philosophy demographic; 9.1% of total participants) indicated a teacher-centred approach, one of whom identified an extreme teacher-centred
teaching style. Only one (25% of Humanistic philosophy demographic; 3% of total participants) faculty reported a learner-centred approach to teaching under Humanistic philosophy.

_**Radical philosophy.**_ Only one (100% of Radical philosophy demographic; 3% of total participants) faculty reported a Radical philosophy and this individual indicated a teacher-centred approach to teaching.

_**Combination of philosophies.**_ Of the nine (27.3%) faculty who identified a combination of philosophies, only one (11.1% of combination of philosophies demographic; 3% of total participants) identified as teacher-centred and they indicated a Liberal and Behavioural combination. The other eight faculty (88.9% of combination of philosophies demographic; 24.2% of total participants) identified a learner-centred teaching style, one of whom reported with the combination of Liberal, Progressive, Humanistic and Radical and practiced an _extreme_ learner-centred teaching style.

_**Factor 6: Educational philosophy, practiced teaching styles and participation in the learning process.**_ As seen in Tables T-5 (Appendix T), in this section I report the findings related to practiced teaching styles and Factor 6: participation in the learning process by the educational philosophy of participating faculty.

_**Liberal philosophy.**_ Six (18.2%) faculty members reported a Liberal philosophy, of which four (66.7% of Liberal philosophy demographic; 12.1% of total participants) were teacher-centred in their approach to teaching, and two (33.3% of Liberal philosophy demographic; 6.1% of total participants) faculty members of this demographic indicated a learner-centred style.

_**Behavioural philosophy.**_ All four (100% of Behavioural philosophy; 12.2% of total participants) faculty who reported a Behavioural philosophy were teacher-centred.
Progressive philosophy. Nine (27.3%) faculty members reported a Progressive philosophy: two (22.2% of Progressive philosophy demographic; 6.1% of total participants) indicated a teacher-centred approach to teaching and one of them indicated an extreme teacher-centred approach and, seven (77.8% of Progressive philosophy demographic; 21.2% of total participants) practiced a learner-centred approach.

Humanistic philosophy. Of the four (12.1%) faculty who reported a Humanistic philosophy, three (75% of Humanistic philosophy demographic; 9.1% of total participants) indicated a teacher-centred approach to teaching, and one (25% of Humanistic philosophy demographic; 3% of total participants) indicated a learner-centred approach.

Radical philosophy. Only one (100% of Radical philosophy demographic; 3% of total participants) faculty reported a Radical philosophy and this individual practiced a teacher-centred teaching style.

Combination of philosophies. Three faculty members indicated a teacher-centred approach and six indicated a learner-centred teaching style, of which one reported Behavioural and Progressive combination indicating an extreme learner-centred teaching style.

Factor 7: Educational philosophy, practiced teaching styles and flexibility for personal development. In this section and seen in Tables T-6 (Appendix T), I report the findings related to practiced teaching styles and Factor 7: flexibility for personal development by the educational philosophy of participating faculty.

Liberal philosophy. Five (83.3% of Liberal philosophy demographic; 15.2% of total participants) of the six (18.2%) faculty members who reported a Liberal philosophy, were teacher-centred, of which one (16.7% of Liberal philosophy demographic; 3% of total participants) indicated an extreme teacher-centred practice. The other (16.7% of Liberal
philosophy demographic; 3% of total participants) faculty member of this demographic practiced an eclectic teaching style indicating a combination of both teacher and learner-centred practice.

**Behavioural philosophy.** Of the four (12.2%) faculty who reported a Behavioural philosophy, two (50% of Behavioural philosophy demographic; 6.1% of total participants) scored a teacher-centred practice; one (25% of Behavioural philosophy demographic; 3% of total participants) scored a learner-centred practice; and one (25% of Behavioural philosophy demographic; 3% of total participants) scored an eclectic teaching style indicating both teacher and learner-centred teaching style.

**Progressive philosophy.** There were nine (27.3%) faculty members who reported a Progressive philosophy of education; four (44.4% of Progressive philosophy demographic; 12.1% of total participants) were teacher centred, of which one (11.1% of Progressive philosophy demographic; 3% of participants) indicated an extreme teacher-centred practice. Four (44.4% of Progressive philosophy demographic; 12.1% of total participants) of the remaining five (55.6% of Progressive philosophy demographic; 15.2% of total participants) faculty were learner-centred, and lastly, one (11.1% of Progressive philosophy; 3% of total participants) faculty member was eclectic in their teaching style (both teacher and learner centred).

**Humanistic philosophy.** Of the four (12.1%) faculty who reported a Humanistic philosophy, half (50% of Humanistic philosophy demographic; 6.1% of total participants) indicated a teacher-centred approach and the other half were learner-centred.

**Radical philosophy.** The one (100% of Radical philosophy demographic; 3% of total participants) faculty member who reported a Radical philosophy scored an eclectic teaching style, indicating a combination of teacher and learner-centred practice.
Combination of philosophies. Only one faculty scored a teacher-centred practice, and they reported a Behavioural Progressive combination of philosophies. Seven faculty were learner-centred. One faculty member was eclectic (both teacher and learner centred) in their teaching style, and they reported a combination of Liberal and Behavioural combination of philosophies.

Professional development and practiced teaching styles. The demographic findings showed gender, age, employment status, faculty level of education, years of teaching experience, and educational philosophy, were not significant factors in relation to professional development, as all (n=33) but one (3%) faculty member indicated that they had participated in professional development activities in the previous five years. As discussed earlier, professional development activities ranged from formal conferences to informal in-house team meetings.

Nineteen (57.6%) faculty members reported a teacher-centred teaching style and collectively, they reported partaking in professional development activities including all of the following:

- Attending conferences/workshops at Loyalist College and elsewhere, including: the Aligning and Building Curriculum conference, the Celebrating Great Teaching Conference, conferences related to specific programs/industries, coordinator conferences, integrating technology workshops, the Culturally Inclusive Educator workshop, the Leadership Excellence in Academic Programming conference, and the Workplace Violence workshop.
- Participating in specific new part-time training for faculty at Loyalist College.
- Undergoing a variety of training programs including: teacher/coaches/mentors training, Mental Health First Aid Training, Prior Learning Assessment and
Recognition Training, Program Quality Assurance Training, Eastern Region Teacher-Training (Focus on Learning – Part 1 & 2), and simulation training.

- Taking part in various other activities including: discussion groups (formal and informal) offered at Loyalist College, credential courses towards a master’s degree, classroom management and engagement sessions, accessing resources through textbooks and other reading material, conducting educational research, mentoring, participating in webinars, and credential studies for bachelor’s degree.

Thirteen (39.4%) faculty members reported a learner-centred teaching style, and one (3%) faculty member reported an eclectic teaching style, and collectively, they reported partaking in the all of the same professional development activities as teacher-centred respondents with the exception of Leadership Excellence in Academic Programming Conference; accessing resources through textbooks and other reading material; conducting educational research, mentoring and participating in webinars. However, they did report participating in Universal Design in Learning workshops, authentic assessment workshops, experiential learning workshops and discussion groups, student engagement workshops, Managing Diversity in Education workshops, using Blackboard (interactive tools, grading, plagiarism, marking assignments).

One of the 33 faculty members reported an extreme learner-centred teaching style, and they reported having participated in Prior Learning and Assessment Recognition and professional development workshops at Loyalist College. Finally, one other faculty reported an eclectic teaching style, and they reported having participated in professional development workshops at Loyalist College, and experiential learning while working with culturally diverse populations.
The difference between learner-centred and teacher-centred professional development was learner-centred faculty indicated additional professional development activities that were learner focused such as, universal design, experiential workshops, managing diversity.

Regarding practiced teaching styles and factors, the professional development activities of the faculty that scored a teacher-centred practice compared to the faculty that scored a learner-centred practice were similar with the exception that the faculty who scored a learner-centred practice participated in more professional development including conferences/workshops such as Universal Design for Learning workshop, writing learning outcomes workshops, authentic assessment workshops, student engagement workshops, experiential learning workshop and informal discussions among colleagues.

**Summary of Findings Related to Research Question #3**

*Gender.* The majority of participating faculty were female (n=23), and 14 (61%) of them scored practiced teacher-centred teaching style; eight (34.8%) scored practiced learner-centred teaching style, and one (4.3%) scored practiced eclectic teaching style. Ten males completed the survey of which five (50%) scored practiced teacher-centred teaching style, and the other five scored practiced learner-centred teaching style. The only participating faculty to score within three standard deviations was learner-centred and male, and 50% of the male respondents scored learner-centred in their practice whereas only 34.8% of the female respondents scored learner-centred in their practice.

*Age.* Findings for age showed that two (6.1%) participating faculty members were between 20 and 30, one scored practiced teacher-centred in their practice, and the other scored practiced eclectic in their practice. Six (18.2%) participating faculty were between the ages of 31 and 40, the majority (four) scored practiced teacher-centred practice to teaching, and the other
two were practiced learner-centred. Seven (21.2%) faculty members were between the ages of 41 and 50, and the majority (n=5; 71.4%) scored practiced learner-centred teaching style, only two (28.6%) scored practiced teacher-centred teaching style. The self-reported practiced teaching styles of participating faculty compared to age showed that most of the participating faculty were over the age of 50, and regardless of age, the majority of participating faculty scored practiced teacher-centred teaching style. A point of interest, although chronological age is not a defining variable, it is interesting to note that the only faculty to score an extreme learner-centred practice at Loyalist College was over the age of 50.

**Employment status.** Findings for employment showed that 25 (75.8%) faculty members were employed full-time, and of those, by a small majority (n=13; 52%) scored practiced teacher-centred teaching style, while 12 (48%) scored practiced learner-centred style. All five (15.2%) faculty that indicated partial-load scored as teacher-centred; and of the three (9.1%) sessional faculty members, one (33.3%) scored practiced teacher-centred practice, one scored practiced learner-centred approach, and one scored eclectic in their approach to teaching. One full-time faculty scored within three standard deviations for learner-centred practice. Future research may be to study why no part-time faculty completed the survey, and why all five partial-load faculty scored teacher-centred in their practice. This is also a consideration for policy development regarding hiring criteria and professional development activities.

**Faculty education.** Regarding the educational level of faculty members compared to their scored practiced teaching style, demographic findings showed that all three (9.1%) faculty members who held a PhD as their highest level of education scored practiced teacher-centred in their approach to teaching. Of the 19 (57.6%) faculty who held master’s degrees, nine (47.4%) scored practiced teacher-centred, and nine practiced learner-centred. The other faculty member
with a master’s degree scored practiced eclectic teaching style. As for the eight (24.2%) faculty members who held bachelor’s degrees as their highest level of education, five (62.5%) scored practiced teacher-centred approach, and three scored practiced learner-centred approach. Of the three (9.1%) faculty members with college diplomas, two (66.7%) scored as practiced teacher-centred in their practice, and one (33.3%) scored as practiced learner-centred. The only faculty to score within three standard deviations, indicating an extreme practice, held a master’s degree and practiced learner-centred teaching style. All three of the faculty members who held a PhD as their highest level of education scored practiced teacher-centred teaching style. This is a consideration for policy development regarding professional development activities. In addition, this may be a consideration for hiring practices when screening for best practices for working with adult learners.

_Years of teaching experience._ Demographic findings for years of teaching experience and scored practiced teaching style showed that of the eight (24.2%) faculty who had taught between one and five years, five (62.5%) scored practiced teacher-centred approach; two (25%) scored practiced learner-centred approach; and one (12.5%) scored practiced eclectic approach to teaching. Regarding the nine (27.3%) faculty members who had taught between six and 10 years, six (66.7%) scored as practiced teacher-centred; and three (33.3%) as practiced learner-centred in their teaching style. Of the eight (24.2%) faculty members who taught between 11 and 15 years, five (62.5%) scored practiced teacher-centred teaching style, and three (37.5%) scored practiced learner-centred approach. Both (n=2; 6.1%) faculty who had taught between 16 and 20 years scored practiced learner-centred teaching style. For those six faculty members who had taught for over 20 years, three (50%) scored practiced teacher-centred, and three scored practiced learner-centred approach to teaching. The two faculty who taught between 16 and 20 years
scored practiced learner-centred teaching style, and the only faculty who scored within three
standard deviations (extreme) indicated practiced learner-centred teaching style and had taught
for over 20 years. An observation is that faculty seemed to shift towards a more learner-centred
teaching style with increased experience, however it may also be a factor of the type of support
those faculty received when they started.

In chapter 6 under the discussion on implications for policy/practice, I identify the need
to include support for faculty mentoring in policy with the important caveat that only faculty
with learner-centred teaching style be considered as mentors.

*Educational philosophy.* Demographic findings regarding educational philosophy showed
that six faculty members identified a Liberal philosophy, four of them scored teacher-centred
practice, and the other two faculty scored learner-centred practice. According to Elias and
Merriam (1995), the four faculty that scored teacher-centred are aligned with liberal philosophy
because the teacher role is the “expert” transmitter of knowledge. Four faculty members
identified Behavioural, and all of them scored teacher-centred. Elias and Merriam would say that
the Behavioural philosophy is aligned with teacher-centred in that the role of the teacher is
manager, controller, predicts and directs learning-outcomes. Nine faculty members indicated the
most popular philosophy, Progressive, four practiced teacher-centred teaching style, one
practiced eclectic and the other four practiced learner-centred teaching style. Elias and Merriam
would say that the role of faculty with a Progressive philosophy is more of a combination
between organizer, evaluator (teacher-centred) and guider, stimulator (learner-centred),
therefore, to be the most popular and divided between teacher and learner-centred practices
makes sense. Four faculty indicated Humanistic, and all of them were teacher-centred. This
identification does not even closely align with the role of teachers in the Humanistic Philosophy
where teachers facilitate the learning process but do not direct it, which is very learner-centred (Elias & Merriam, 1995). Finally, one faculty indicated a Radical philosophy and they scored a teacher-centred practice. Of all the philosophies, Radical is just that, the most learner-centred in that it “suggests but does not determine direction for learning; equality between teacher and learner” (cited in Galbraith, 2004, p.73). Five (15.2%) of the faculty, four who identified Humanistic philosophy and one who identified Radical philosophy, are prime examples of incongruency between what one says (espoused) and what one does (practiced) as articulated by Argyris & Schön (1974).

Regarding combination of philosophies, two faculty identified Progressive and Humanistic philosophies and both practiced learner-centred teaching style; two faculty identified Progressive, Humanistic and Radical philosophies and both scored learner-centred. Both faculty that identified all five philosophies (Liberal, Behaviours, Progressive, Humanistic and Radical) scored learner-centred practice. The one faculty that indicated a Liberal, Progressive, Humanistic and Radical scored an extreme learner-centred teaching style. The one faculty that indicated a Liberal and Behaviour combination of philosophies scored teacher-centred. Finally, the faculty that indicated a Behaviour and Progressive combination scored a teacher-centred practice.

Analysis of each of Conti’s Factors compared to demographics were outside of the scope of this research however it is noted that regarding educational philosophy, teaching style and flexibility for personal development (Factor 7), this factor compared to educational philosophy demonstrated the most variances of all factors. One faculty, with a Liberal philosophy reported within three standard deviations for teacher-centred approach, and another faculty with a Liberal philosophy reported as eclectic in their teaching approach. One faculty indicated a Behavioural philosophy and an eclectic teaching style. One faculty reported a Progressive philosophy and
indicated an eclectic teaching style and one indicated extreme teacher centred. The one faculty who had reported a Radical philosophy practiced an eclectic teaching style. Finally, the one faculty who reported Liberal and Behavioural philosophies was also eclectic in their teaching style. Future research on educational philosophy and teaching styles, including factor analysis, is a suggestion.

_Professional development._ Lastly, the demographic findings for professional development activities in the last five years showed that 32 of the 33 reported attending or participating in professional development activities, most of which were held in-house at Loyalist College. Some participants took part in Eastern Region Conferences including Celebrating Great Teaching, Leadership Excellence in Academic Programming, Focus on Learning – Part 1 and 2, and Aligning and Building Curriculum. In addition, faculty did indicate credential studies as professional development. Thirteen faculty members reported a learner-centred teaching style and one faculty member reported an eclectic teaching style, and collectively, they reported partaking in most of the same professional development activities with the exception of Leadership Excellence in Academic Programming Conference and, conducting educational research, as the nineteen teacher-centred respondents. The learner-centred faculty members did participate in some additional professional development including Universal Design in Learning workshops, authentic assessment workshops, experiential learning workshops, student engagement workshops, Managing Diversity in Education workshops, using Blackboard (interactive tools, grading, plagiarism, marking assignments). The identification of professional development activities for faculty who practiced learner-centred compared to teacher-centred differed in that learner-centred faculty indicated additional professional development activities that were learner focused (i.e., universal design, experiential workshops,
managing diversity). This is a consideration for policy development. Strout (2016) states “Perceptions and assumptions of the function of learner-centered teaching practices such as content knowledge, the responsibility for learning, shifts in the role of teachers and learners, and addressing new teaching strategies have the potential to be uncovered through discussions, the intentional development and delivery of workshops on the topics, as well as readings and various professional development opportunities” (p. 17).

As seen in Figure 8, there were more female faculty compared to male faculty who completed the survey and most of them were teacher-centred; the majority of faculty were 50 years and older, and most of them were teacher-centred; most faculty taught full-time and the only difference between teacher and learner-centred was one more faculty was teacher-centred. The majority of faculty had master's degrees and were evenly distributed between learner and teacher-centred in their teaching style; nine faculty taught between six and 10 years, and six of them were teacher-centred; progressive educational philosophy was the most popular with tied results for teacher and learner-centred teaching style; all but one faculty identified attending professional development activities, and the majority of them were teacher-centred; finally, the one faculty that identified an eclectic teaching style was female, between 20 and 30 years old, was employed on contract (sessional), had a master's degree with 1 to 5 years of teaching experience and identified as progressive in her educational philosophy.

Summary of the Findings Related to Research Question #3 and the Literature

Stes, Gijbels and Petegem (2008) report that a study done at the University of Antwerp regarding the relationship between faculty approaches to teaching and their demographics (gender, academic status, teaching experience, prior teacher training, age) showed no relationship between the two factors. Similarly, Fries’ (2012) dissertation concludes that “no
statistical significant differences were discovered for the following demographic variables: gender, years teaching at the university, academic rank, assigned college, professional Pk-12 experience as a teacher, or professional Pk-12 experience as an administrator” (p. 97). Fries notes that age range for Factor 1 (learner-centred activities) did result in statistical significance; however, the “merit of the statistical significance could be confounded by the small sample size” (p. 97). According to Cranton (2006b) research has not proven that teachers with certain characteristics are more effective than teachers with other characteristics. O’Brien (2001) believes that “there may be some teachers who continue to teach with the same style and methods no matter what the needs of their pupils might be, but our experience tells us that many teachers are keen to develop their professional skills and understanding” (p. 7).

Norton, Morton & Shannon (2013) find that years of teaching experience does not necessarily contribute to a change in practiced teaching style. Richardson (2005) confirms this finding stating that he found very little evidence to support that teachers change their approach based on years of experience or even formal training. Owens (2012) did not agree and finds that teachers who had more than six years’ experience were more inclined to take a learner-centred approach. The marginal majority ($n=17$) of the 33 survey respondents at Loyalist College had taught between one and ten years and of those, nine had taught between six and ten years. Of those nine, six reported a teacher-centred approach, compared to three who reported as learner-centred. The remaining sixteen faculty members were split in their teaching style with eight practicing teacher-centred and eight practicing learner-centred. A limitation of my study is that faculty were not asked if they had changed their teaching practice over the years.

I found much literature on teaching style and adult educational philosophy (e.g., Strout, 2015; Fries, 2012; Byrd, 2010; Fritz, 2008; Willson, 2006). It is noteworthy that Samuelowicz
and Bain (2001) report they found a gap between stated educational beliefs and actual teaching practices. Stes and Van Petegem (2011) concur stating that teachers who changed their belief to be more learner-centred did not automatically change their teaching practice.

**Figure 8: Summary of Findings Related to Research Question #3**

Prosser and Trigwell (1999) expressed concern about the gap between belief and practice, stating that student learning is directly impacted by teachers’ beliefs and approaches to teaching. My research from faculty who reported only one of the five educational philosophy (not a
combination thereof) does not support a gap in philosophy and teaching style between Liberal,
Behavioural, and Progressive beliefs. Four out of the five faculty members who reported a
Liberal philosophy scored a teacher-centred approach, and all four faculty who reported a
Behavioural philosophy were teacher-centred. Elias and Merriam (1995) use words like “expert;
transmitter of knowledge; authoritative; clearly directs learning process” when describing a
teacher with a Liberal philosophy, and “manager; controller; predicts and directs learning
outcomes” when describing a teacher with a Behavioural philosophy (cited in Galbraith, 2004).
Although by a smaller margin, five of the nine faculty members who reported a Progressive
philosophy were learner-centred. Eight of the nine faculty members who reported a Progressive
philosophy were evenly distributed between teacher and learner-centred teaching style. The ninth
faculty reported an eclectic teaching style. Roles of faculty, as described by Elias and Merriam,
include organizers; guides in the learning; stimulators; instigators; and evaluators of the learning
process (cited in Galbraith, 2005). Faculty with a Progressive philosophy do practice both learner
and teacher-centred teaching style; as my research supports, teachers in my study were evenly
divided in their teaching practice and, one faculty was truly eclectic in their teaching approach.
On the other hand, the four faculty members who reported a Humanistic philosophy correspond
with Samuelowicz and Bain’s (2001) gap assertion. Descriptors for teachers from a Humanistic
philosophy include facilitator; helper; and partner, and these teachers tend to promote but not
direct learning (as cited in Galbraith, 2004, p. 72). All of this is characteristic of a learner-
centred teaching style, yet all the faculty were teacher-centred that reported a Humanistic
philosophy. The last philosophy, Radical, would be considered the most learner-centred with
attributes that include: coordinator; suggests but does not determine direction for learning; and
equality between teacher and learner (as cited in Galbraith, 2004). Although only one faculty in
my research reported a Radical philosophy, there was a significant gap between their teacher-centred teaching style and stated educational belief.

Argyris and Schön’s (1974) argue that people have mental maps that involve the way they plan, implement and review their actions and these maps guide people’s actions. However, these maps are not necessarily the theories they espouse. In addition, as Jürgen (2009) describes, the Johari Window (1955) is a technique used to help self-exploration, it speaks about the “blind self” which is information you do not know about yourself, but others know about you. Faculty may not know that what they are saying does not coincide with what they are doing, this awareness may not surface until others expose it or faculty become more self-aware through reflection. Faculty who reported a combination of philosophies would have less of an apparent gap due to the fact they reported more than one philosophy. The faculty who reported a combination of Liberal and Behavioural was teacher-centred, thus no gap. The faculty who reported a Behavioural and Progressive belief was teacher-centred, thus there was a gap regarding Progressive beliefs. The faculty who reported Liberal, Progressive, Humanistic and Radical was learner-centred and only had a gap in relation to Liberal beliefs. The two faculty members who reported Progressive, Humanistic and Radical philosophies were learner-centred, thus there was no gap. The two faculty who reported Progressive and Humanistic philosophies were learner-centred, thus no gap. Lastly, the two faculty members who reported all five philosophies were learner-centred, though the learner-centred teaching style and the Liberal and Behavioural educational philosophy do not align.

**Research Question #4 asked, How do the participating faculty’s self-reported practiced teaching styles compare with the espoused approach to teaching adult learners at Loyalist College?**
The espoused approaches to teaching adult learners as described in the findings to Research Question #1 were compared to the self-reported practiced teaching styles of participating faculty at Loyalist College, as assessed against a modified version of Conti’s Principles of Adult Learning Scale. I now discuss the findings related to the document review.

**Document review.** Based on my findings in the document review in Phase one and as described in findings related to Research Question #1, data from the 2017-2018 Annual Report, 2016-2020 Academic Plan and the 2017-2020 Strategic Mandate Agreement, were from the institutional perspective and represented the aspirations of moving in the direction of a learning-centred college. Attributes of a learning-centred institution align with adult learning principles which are more aligned with learner-centred practice than teacher-centred practice. Loyalist College espouses an alignment with learner-centred practices. Data assessed against a modified version of Conti’s Principles of Adult Learning Scale suggest that participating faculty scored highest for practiced teacher-centred approach to teaching adult learners at Loyalist College.

I now discuss the findings related to interview responses from participating academic deans and online questionnaire responses from participating faculty at Loyalist College.

**Participating academic deans.** The central theme among all participating academic deans was their confidence that faculty practiced learner-centred approaches with adult learners. Participating academic deans espoused a learner-centred approach to teaching adult learners; however, the assessed practiced teaching style of participating faculty were mostly teacher-centred.

**Participating faculty.** Finally, participating faculty also espoused a learner-centred approach to teaching adult learners, yet when assessed against a modified version
of Conti’s PALS, the majority (57.6%) of responders practiced teacher-centred teaching style. Upon deeper analysis, results showed that in general, teaching styles were more teacher-centred but when factor scores are included, the results were mixed between teacher and learner-centred approaches. Analysis of the online responses from participating faculty compared to the assessed practiced general teaching styles of participating faculty were moderately incongruent. Argyris (1991) state that “[p]eople consistently act inconsistently; unaware of the contradiction between their espoused theory and their theory in use, between the way they think they are acting and the way they really act” (cited in Alexander, 2014, p.47). This was consistent, at least to some degree, with the self-described approaches to teaching adult learners from participating faculty. Alexander also describes that Schön (1987) believes that the spontaneous act of doing and performing (doing without having to think about it) may explain the inconsistency of what is said and what is done.

Regarding the overall teaching style of participating faculty at Loyalist College, the examples they provided (related to their teaching practice) were more learner-centred than teacher-centred. In contrast, based on participating faculty scores on the Conti’s PALS, the majority of faculty practiced more teacher than learner-centred teaching style. An explanation may be that the quantitative questions (to assess practiced teaching styles) included questions about learner-centred activities, but the qualitative questions (to assess espoused approach) on the questionnaire did not ask for examples of learner-centred activities. The scores for learner-centred activities on the modified PALS were higher for teacher-centred practice (n=18; 54.5%) compared to learner-centred practice (n=15; 45.5%). Comparatively, factor scores on teaching styles, showed that personalizing
instruction and relating to student experience, faculty's espoused and practiced theories were congruent; student participating in the learning process, faculty's espoused learner-centred teaching style was incongruent with their practiced teacher-centred teaching style; finally, all faculty were able to identify strategies for flexibility for personal development and half of their espoused and practiced theory aligned while the other half did not, including five of them being eclectic.

**Summary of Findings Related to Research Question #4**

The espoused approach to teaching adult learners at Loyalist College is incongruent with the self-reported practiced teaching styles. Data collected from the 2017-2018 Annual Report, 2016-2020 Academic Plan, 2018-2020 Strategic Mandate Agreement, interview responses from participating Academic Deans and online questionnaire responses from participating faculty at Loyalist College espoused a learner-centred approach to teaching adult learners at Loyalist College. Data scored against a modified version of Conti's Principles of Adult Learning Scale showed that participating faculty scored practiced teacher-centred teaching style. Although most faculty scored a teacher-centred approach to teaching adult learners, the overall scores indicate a commitment to a practice that is closer to both teacher and learner-centred. As to why the self-reported strategies are not congruent with the espoused strategies, the theories of the JOHARI window (Jürgen, 2009) many provide some insights.
In Chapter five I have presented the qualitative and comparative findings, and analysis of the research questions three and four, which were a comparison of demographic profile, including educational philosophy and professional development of participating faculty and their practiced teaching style and how the espoused approach to teaching adult learners compared to the participating faculty’s self-reported practiced teaching styles.

The discussion in Chapter 6 focuses on conclusions based on the findings of my research, policy implications, considerations for the theoretical framework that this study was grounded in are also presented and finally, a summary concludes that chapter.
Chapter Six: Conclusions and Implications of Findings

This chapter presents the overall conclusions based on the findings of my research. The overall question that informed this study was: How do the practiced teaching styles of participating faculty at Loyalist College compare to their demographic profile including, educational philosophy and professional development, and the espoused approach to teaching adult learners at Loyalist College? Policy implications, considerations for the theoretical framework that this study was grounded in and suggestions for further research are presented. Finally, a summary concludes this chapter.

Consistent with the literature, my study findings suggest that the espoused approach to teaching adult learners at Loyalist College is learner-centred compared to the majority of participating faculty’s self-reported practiced teaching style being teacher-centred. This finding is consistent with studies that have found that there is a weak correlation between teacher beliefs and practices (Brown, Molfese, & Molfese, 2008; Jambunathan & Caulfield, 2008; Lynch, 2009; McMullen et al., 2006; Scull, Nolan & Raban, 2012; Wen, Elicker & McMullen, 2011). Regardless of the evidence that a learner-centred environment better meets the needs of adult learners (Conti, 2004; Brookfield, 2013; Boyle and Rothstein, 2006; Caffarella, 2002; Galbraith, 2004; Knowles, Holton & Swanson, 2011; Merriam, Caffarella & Baumgartner, 2007), studies continue to indicate that faculty more often practice a teacher-centred approach in college and university settings (Barrett, 2004; Stover, 2006; Willson, 2006; Clow, 1986; Wang, 2002). Liu, Qiao and Liu (2006) report that the espoused theory in the literature may be preference for learner-centred in higher education but the theory in action, based on their research, is still the traditional teacher-centred approach.
I now discuss the implications of these findings for policy, practice and further research. Finally, considerations for the theoretical framework that this study was grounded in are presented.

**Implications for Policy**

Based on the findings from my study, the following three policies are proposed for consideration.

**Learner-centred principles be embedded in criteria for hiring of new faculty.** My study findings showed that participating faculty know how to apply learner-centred principles in their teaching, but they do not necessarily practice those principles in their teaching style. During hiring interviews, potential faculty candidates must demonstrate that they know (espoused) and can apply (practiced) learner-centred principles to teaching adult learners. Learner-centred principles would be embedded throughout the interview and not just a response to a question and/or demonstration in a micro-teach. The standard rating of responses used during interviews would include learner-centred principles in all the sections.

Human Resource (not publicly posted) does have a policy regarding recruitment and selection of full-time academic positions. As expected, it does reference fair and equitable considerations for the best-qualified applicant. Also, as expected, it cannot describe those qualifications for the best-qualified applicant because there is no consistent qualification for a college teacher. However, postings for academic faculty often state that “experience facilitating learning at the post-secondary/adult level demonstrating a commitment to excellence in teaching and learning is a strong asset” (Loyalist College, Work at Loyalist, 2018). A strong asset is not enough, candidates who can demonstrate they know and that they can apply learner-centred
principles should be given first consideration. Wording that communicates this position may screen out applicants that are not learner-centred.

As discussed in Chapter 2, the college system was not designed to attract teachers it was designed to attract industry experts however between the changed student profile and best practice literature, industry experts who want to teach must enter the college system with a commitment to adult learning principles. As a mature system, the colleges are no longer limited to hiring just industry people with little teaching experience, they can select candidates from applicant pools who have some engagement with the college (i.e., part-time teaching experience) and increasingly graduate prepared faculty are applying (Tesa, 2013).

Findings from my study showed that out of the 19 (57.6%) faculty that practiced an increased approach to either learner-centred or teacher-centred teaching style, 15 (79%) of them were teacher-centred. Mandated professional development, regardless of hiring status (full-time, contract), would provide new faculty, who may lean towards teacher-centred (increased approach), opportunity to analyse their teaching style and potentially shift to a learner-centred approach. Literature has shown that adult learners prefer a learner-centred teaching style; however, new faculty may not know their teaching style. As adult learners themselves, mandated professional development may influence faculty to assess whether their espoused beliefs align with their approach to teaching other adult learners and whether they are following best practices.

**Full-time faculty.** Currently, the letter of offer to new full-time faculty advises them of orientation activities, but it does not specify activities related to teaching. Loyalist College’s Academic Operational Policy (AOP) 203 is under review but currently states, “all probationary faculty members will be subject to a completed faculty development and evaluation process as
per the requirements of Article 27.02 D in the Collective Agreement” (Loyalist College, Policies, 2018). Article 27.02 D in the Collective Agreement states “During the probationary period an employee will be informed in writing of the employee's progress at intervals of four months of continuous employment or four full months of accumulated non-continuous employment and a copy given to the employee” (Academic Employees Collective Agreement, Ontario Colleges of Applied Arts and Technology, p. 60). The importance of professional development is acknowledged, but the particulars are vague. A policy that clearly states that new full-time faculty are mandated to complete and evidence professional development in teaching of adult learners before they will have successfully completed their probation would be a step towards compliance with the espoused approach of learner-centred at Loyalist College. Other mechanisms could be put in place to ensure alignment between beliefs and behaviours, such as peer review of teaching practice, student feedback, faculty coaches, to name a few. Additional incentives to participate could include financial compensation, a reduction of course load, time allocated on Standard Workload Formula (SWF), expenses (tuition/registration fees, books, backfill of teaching time) and resources (computer for online, supplies, access to internal expertise, access to external expertise) provided by Loyalist College.

**Contract Faculty.** Conditions to participate in professional development for contract faculty would be included in their contracts. Incentives could include coverage of expenses, including compensation for time taken from other employment. Contract employees often have other jobs so they would require incentives and compensation to weigh the professional development requirement against their current employers’ expectations. An incentive might include flexible and alternative delivery modalities of professional development tailored around the contract faculty’s schedule. Although a
small sample (n=5) and not generalizable, all partial-load faculty that submitted responses in my study scored teacher-centred teaching style. Contract faculty are not offered the same opportunities for professional development. Some investment in professional development is available to full-time faculty, but the same calibre is not available to contract faculty.

**Academic deans’ support of professional development plans.** Findings from my study showed that participating academic deans believe that faculty are learner-centred in their teaching style. However, findings from my study also showed that the majority of participating faculty (n=19; 57.6%) practiced teacher-centred teaching style. Based on these findings, during yearly performance reviews faculty would identify a professional development activity *specific* to teaching adult learners. Academic deans would assist faculty to access necessary resources. Professional development plans particular to teaching adult learners would be revisited every semester and strategies would be implemented to assist faculty if follow through was an issue. The professional development activity does not have to be limited to formal conferences and/or workshops and could include self-directed learning, mentoring by other faculty, webinars, online courses, etc.

Currently, existing full-time faculty do participate in an exchange with their academic deans on faculty development plans. Loyalist College does have a policy (AOP201) that references “Academic employees will engage in activities that support them in maintaining, developing and expanding competence in their field by exploring materials related to their field, reviewing research, technical advances, and discussions about issues in their field and practice, and maintaining a working knowledge of the core
practice standards in their field” (Loyalist College, Policies, 2018). Not to negate the importance of keeping current in faculty’s respective field and practice, this policy does not address the critical role of teaching content to adult learners. Another policy, AOP 203, states “all full-time, non-probationary faculty will be subject to a formative annual faculty development and evaluation process (Loyalist College, Policies, 2018). Although under review, this is another important policy; however, it does not communicate the necessity to engage in professional development specific to teaching adult learners.

Finally, a consideration in policy development would be the consequence of noncompliance. Currently, professional development, unless part of performance concerns, is optional regardless of how strongly it may be recommended by academic deans.

Implications for Practice

Based on my findings of responses from document analysis, participating academic deans and participating faculty, this study has implications for the teaching of adult learners at Loyalist College. The publicly available statistics, 2013-2014 Report Back, from Loyalist College to the Ministry of Training, Colleges and Universities (Loyalist College, 2018), reported that most learners are between 18 and 24 years of age. Based on personal observations, currently, the average age is closer to 24 years. The literature is clear that adults seek a learner-centred learning environment. The espoused approach at Loyalist College is stated to be learner-centred however the majority of participating faculty in my study practiced a teacher-centred approach. My study demonstrated that industry experts do not necessarily know how to teach their discipline
to adult learners. The following implications for practice are deliberations for the teaching of adult learners at Loyalist College.

**Create a professional development (PD) program, model.** Based on my findings that the espoused approach to adult learning at Loyalist College is learner-centred but faculty lean more towards teacher than learner-centred practice, the first implication for practice would be to build capacity for professional development. With enhanced resources, including operative and financial, a professional development department could be positioned as a service that is responsive and proactive to all faculty. If physically positioned centrally, given administrative independence (no policing expectations; creative license) this department could address the incongruences between espoused and practiced teaching of adult learners at Loyalist College.

**Positive branding of professional development activities.** Based on my findings that academic deans espouse a learner-centred approach at Loyalist college, the second implication for practice would be that professional development be branded as standard behaviour. Academic deans can present professional development as “normal” and not based on a deficit. If it is construed as being punitive, mandatory or the consequence of poor performance then faculty are going to reject the opportunity or worse, attend and taint the learning with negativity. Professional development needs to be communicated and endorsed from a strength-based model. Faculty need to feel that they are contributing to the learning experience and that they are not passive recipients of knowledge from experts. Professional development must be learner centred and follow adult learning principles. The message would be that this department is a service designed to support lifelong learning and that faculty (that work in the department) journey beside faculty
(that work in the classroom) in the pursuit of a common goal, to enrich the student experience at Loyalist College.

**Screen for responsiveness of teaching adult learners during faculty hiring practices.** The third implication for practice would be to hire industry experts who recognize best practices in adult learning. My findings showed that the espoused approach to teaching adult learners at Loyalist College is not congruent with faculty teaching styles. To address this, new faculty hires must be cognizant that teaching adult learners is a skill set that they may not have. College-level faculty shift from industry experts to teachers of adult learners. It is reasonable to assume that it may be harder to hire industry experts that also have teaching experience. If candidates do not have that skill, an investment in acquiring it would be required. A screening process during the interview could identify faculty that are motivated to learn how to teach adult learners. Candidates that espouse to know how to teach adult learners could be given benchmarks that demonstrate their teaching style. Learner-centred principles could be used as part of the criteria that candidates are expected to know (espoused) and demonstrate (practiced).

**Mentor program for faculty.** Based on the findings that college documents, academic deans and faculty espouse a learner-centred approach to teaching adult learners, the last practice implication for deliberation would be a mentor/faculty coaching program that recruits faculty with practiced learner-centred teaching style to work with identified (and interested) faculty to adopt learner-centred principles in their teaching style. Faculty would be compensated for the time and effort to participate in such a program. Currently informal, voluntary mentoring/coaching of new faculty does happen, and some faculty are given hours on their SWF to mentor; however, this is not a consistent formal practice at
Loyalist College. In addition, it is unknown if the mentors/coaches practice teacher-centred or learner-centred teaching style. Based on my study, some participating faculty espoused learner-centred approach, but their practice was teacher-centred. Faculty interested in mentoring/coaching would be screened for teaching style. If they practice a learner-centred teaching style, they would be recruited (with compensation) to work with faculty who have been identified as teacher-centred. A process to identify mentors/coaches and mentees would need to be developed. In addition, branding of the program would be critical to not discourage mentees from participating and/or see their involvement as unfavourable.

**Implications for further research**

There are several implications for further research suggested by the findings in this study.

**Relationship between educational philosophies and teaching styles.** Further research could examine the relationship between educational philosophies and teaching styles. My study found a disconnect for some faculty between their educational philosophy and their teaching style. Questions related to espoused educational philosophy compared to in-action teaching style would explore if there is alignment between the educational philosophy and teaching styles of faculty. Also, questions related to the role of residential schools in Canada as a means of social control and manipulation could be incorporated into research on educational philosophies. Finally, further research would provide opportunity for faculty to self-reflect on their educational philosophy and assess if it supports their teaching practice, giving occasion to explore professional development to address incongruences.
Comparison of student perceptions of teaching styles to faculty perception of teaching styles. Further research could compare student perception with faculty perception of teaching styles. This exploration would determine if there is dissonance or concurrence between how faculty think they are teaching and how students experience their teaching. Questions that address espoused and practiced teaching styles would give opportunity for faculty to reflect on how they think they are teaching compared to how their students experience their teaching.

Incongruences between espoused beliefs and practice. Further research could explore the reasons that faculty may be incongruent with their espoused beliefs about teaching practice and their actual teaching practice. My research identified that there were incongruences, but it did not identify factors that may impact this disconnect.

Professional development and higher education. Further research to explore how professional development and higher education impacts teaching styles. Healey (2000) supports the implication that “for this to happen, it is suggested that teachers in higher education institutions need to learn how to adopt a scholarly approach to teaching and how to collect and present rigorous evidence of their effectiveness as teachers. This involves reflection, inquiry, evaluating, documenting and communicating about teaching” (p. 170). This research could examine whether professional development led to a change in teaching style or do faculty attend professional development because there is a predisposition to learner-centred approach, in other words, is there correlation between professional development and teaching style or causation? Finally, questions related to faculty education, to assess if faculty have credentials in their discipline or in education, which could impact their teaching style.
**Barriers to adopting learner-centred teaching style.** Further research could examine the barriers that prevent faculty from adopting a learner-centred teaching style. This question was not included in my research however factors related to employer-employee relations, few full-time faculty being hired, and concerns by faculty of poor evaluations if they change how they are teaching or try something new, to name a few, may contribute to faculty not adopting learner-centred approaches. I have also heard faculty complain about the limitations of space, time constraints and amount of content, as barriers to being learner-centred. Finally, questions related to how the diversity of students including domestic and non-domestic adult learners, impact faculty teaching practice should be addressed.

**Relationship between demographics and teaching style.** Further research that goes beyond exploring the identification of the teaching styles within demographics, to assess whether there is correlation between demographics and teaching styles. Questions such as what demographics align with what teaching style? What are the variables that impact that alignment, including discipline faculty teach in? How can faculty become cognizant of the impact their demographic may have on their teaching style? What impact does faculty diversity such as race, religion, culture, educational attainment, have on teaching style?

**How do all college employees approach adult learning?** The focus of this study were faculty and academic deans. However, there are many other employees within the college, including staff who are responsible for security, scheduling, library services, cafeteria services, registration, student wellbeing, to name a few. Further research could address questions related to how non-faculty employees work with adult learners in their
college? Are they familiar with adult learning principles? Do they observe adult learning principles when interacting with learners?

**Theoretical Framework Considerations**

This study was grounded in adult learning theory and theory-in-action. Malcolm Knowles (1975, 1977, 1980, 1984, 1990; 1996) and Patricia Cross (1974, 1981, 1990a, 1990b, 1991, 1996, 2001, 2005) identify six factors that separates the young and older learners: (1) adult learners need to know the “why” of learning (2) adult learners need to be self-directed (3) adult learners need to be recognized and incorporate their life experiences in the learning process (4) adult learners expect that learning will help with real-life issues (5) adult learners need to be task focused problem-solvers instead of empty vessels to be filled with knowledge and (6) adult learners are intrinsically motivated for learning yet value extrinsic benefits.

Through growth and maturity adults “develop an increasingly deep psychological need to be independent, first of parental control, and then, later, of control by teachers and other adults” (Knowles, 1975, pp. 14-15). Adults are not as interested in the transmission of information from teacher to student because they view themselves as independent people who are not reliant on teachers to tell them what they need to know. Technology has increased students’ access to content, resulting in learners wanting to gain deeper insights about the content from their faculty. However, Knowles (1996) and Conti (2004) both acknowledge that the adult educator plays a critical role in the classroom. Brookfield (2013) agrees that teachers help others learn and Entwistle (2010) believed to do that, teachers must know the want and needs of their learners. O’Brien & Guiney (2001) believe that “there may be some teachers who continue to teach with the same style and methods no matter what the needs of their pupils might be” (p. 7).
Examination of teaching styles allows adult educators to consider their teaching behaviours in the classroom (Conti & Welborn, 1986).

My study provided participating faculty an opportunity to assess their own teaching practices. Separate from the statistical analysis of the scores and comparison of espoused and practiced teaching style, participating faculty had to be reflective when answering the PALS questionnaire on their teaching style practice. One faculty commented that they appreciated the opportunity to examine their teaching style. Scholars in adult learning, (Merriam & Bierema, 2014; Knowles, Holton & Swanson, 2011) believe that many college professors are not aware of what teaching style they practice or how it impacts adult learners. In addition, the results of my study provided an opportunity for faculty, academic deans and administration to compare the practiced teaching styles of faculty to the espoused approach to teaching adult learners at Loyalist College.

Literature identifies that adults want to learn in an environment that recognizes the differences between teaching them and teaching children (Brookfield 2012, Caffarella, 2002; Conti, 2004; Galbraith, 2004; Knowles, Holton & Swanson, 2011; Weimer, 2002). Literature also identifies that adult educators that are not trained in teaching adult learning, may rely on teaching the same way they were taught (Marshall, 1991; Brown, 2003; Chicoine, 2004; McQuiggan, 2012; Tesa, 2013) which is not always consistent with evidence-based best practices. Schön (1983) asks, “How is professional knowing like and unlike the kinds of knowledge present in academic textbooks, scientific papers and learned journals?” (p. viii). He identifies the gap between espoused and in-action theories. Brookfield (1995) concurs, stating “our practice is informed by our implicit and informal theories about the processes and relationships of teaching.” Scott (1969) adds
that if espoused theory and theory-in-use are incongruent, and faculty are not cognizant of that, their practice may be less than effective. Argyris and Schön (1974) identify that practitioners can find it difficult to implement new philosophies and theories; they state:

Espoused theory is a theory of action a practitioner gives allegiance to, and which, upon request, he communicates to others. However, the theory that actually governs his actions is his theory-in-use, which may or may not be compatible with his espoused theory; furthermore, the individual may or may not be aware of the incompatibility of the two theories. (p. 7)

The diverse study demographics, faculty hiring practices and research supporting best teaching practices in adult learning inspired this research to examine whether faculty were actually following evidence-based teaching and learning strategies when facilitating adult learning. Results demonstrated that although the majority of faculty scored with an increased teacher-centred practice, the majority (n=20; 60.6%) of participating faculty scored within the middle range (above and below the mean), including exactly on the mean, and according to Conti (cited in Galbraith, 2004), “scores in the middle range disclose an eclectic approach that draws on behaviors from each extreme” (p. 79). Examples faculty gave of their behaviours in the classroom would support that they are aware of learner-centred practice. Stes and VanPetegem (2011) indicate that faculty who have changed their belief to more learner-centred do not automatically change their teaching practice. Possibly the majority of participating faculty in my study have changed their belief to be more learner-centred but at times, practice more teacher-centred approaches?
Overall Conclusions of the Study

The goal of this study was to explore how the practiced teaching styles of participating faculty at Loyalist College compare to their demographic profile including, educational philosophy and professional development, and the espoused approach to teaching adult learners at Loyalist College. Adult learning was used as the theoretical lens that grounded this study. Findings from participating faculty responses to a modified version of Conti’s (1982) Principles of Adult Learning Scale, and evidence from the narratives of college documents, participating academic deans and participating faculty were compared to provide insight into the espoused and practiced approach to teaching adult learners at Loyalist College. These findings cannot be generalized however they provide opportunity for faculty to better understand the relationship between their teaching styles and the success of their adult learners in achieving desired learning outcomes, gain personal insight into their implicit educational philosophy and encourage them to explore effective teaching strategies when working with adults to potentially enhance learner-centred education and student success. In addition, these findings demonstrated some differences between espoused and practiced teaching styles, which may spur academic deans to critically reflect on hiring practices and professional development.
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Appendix A: E-mail request for Administrative Consent

From: Paula Buskard [mailto:paula.buskard@mail.utoronto.ca]
Sent: Friday, March 24, 2017 2:43 PM
To: Ann Marie Vaughan <AVaughan@Loyalistc.on.ca>
Subject: Doctorate Research

OISE
ONTARIO INSTITUTE FOR STUDIES IN EDUCATION
UNIVERSITY OF TORONTO

Date: March 24, 2017

Title of Research Study: Exploratory Descriptive Study of Teaching Styles in One Ontario College

Principal Investigator: Paula Buskard

Thesis Supervisor: Dr. Katharine Janzen

Dear President Vaughan,

I am conducting this research study in partial fulfillment of the requirements for the Ph.D. degree at the Ontario Institute of Studies in Education (OISE) at the University of Toronto, under the supervision of Dr. Katharine Janzen in the Leadership, Higher and Adult Education Department. I have also been a faculty member at Loyalist College, in the Social Service Worker Program for 13 years.

This study asks consenting full and contract faculty at Loyalist College to complete a self-report on their teaching practices on a modified version of the Principles of Adult Learning Scale (PALS), which is a 36-question item. This is a predominantly quantitative on-line questionnaire survey hosted on a secure University of Toronto sever. The survey also asks for non-identifiable demographic information and includes nine qualitative questions related to principles of adult learning. It is anticipated to take about 30 minutes to complete. Participation in this research study is completely anonymous and voluntary. No individual participant will be identifiable in any reporting of the findings.

In addition, I would like to interview three or four Academic Managers about their perceptions of espoused teaching style at Loyalist College. The interviews will consist of semi-structured, open-ended questions and will take about 45 minutes. The interviews will be audio-recorded but only with the participants’ consent.
All information collected will be kept confidential and secure at all times, accessible only to my Thesis Supervisor and me. Digital data will be encrypted and audio-recordings will be erased as soon as the interviews are transcribed.

If you have any questions, please contact me at paula.buskard@mail.utoronto.ca or 613-969-1913 ext. 2145 or pbuskard@loyalist.on.ca. You may also contact my supervisor, Dr. Katharine Janzen at katharine.janzen@utoronto.ca or by phone 416 978-1232.

Finally, I have applied for the approval of this study by the Research Ethics Board of the University of Toronto and will be requesting approval of the Loyalist College Research Ethics Board. I will make no contacts with potential participants until after I have received full Ethics approvals from both of these Boards.

I would greatly appreciate your approval to name Loyalist College in the reporting of the findings, but if you prefer, I will use a non-identifiable pseudonym instead.

Please respond to my request with an e-mail to me at paula.buskard@mail.utoronto.ca or pbuskard@loyalist.on.ca

Sincerely,

Paula Buskard

From: Paula Buskard [mailto:paula.buskard@mail.utoronto.ca]
Sent: Monday, March 27, 2017 4:43 PM
To: Ann Marie Vaughan
Subject: RE: Doctorate Research

Hello Ann Marie,

Thank you. Once I have this part of the process approved, I can submit my ethics review and with any luck, do my research in the May/June timeframe. If I miss this timeline, I will have to wait until October (Reading week) because I will not try to do research during start up in September (that would be more challenging than what I could possibly balance).

I look forward to hearing from you,

Paula
Hello Paula

Congratulations on getting to this point in your PhD research. I know how challenging it is to balance research with work and life and really applaud your work. I am not sure if there is a protocol related to any approval you need from me. I certainly check into that and get back to you.

Best wishes,
Ann Marie

Ann Marie Vaughan, Ed.D.
President and CEO
Appendix B: Administrative Consent

From: Ann Marie Vaughan  
Sent: Tuesday, May 02, 2017 4:07 PM  
To: Paula Buskard <PBuskard@Loyalistc.on.ca>  
Cc: Katharine Janzen <katharine.janzen@utoronto.ca>  
Subject: Re: Doctorate Research

Hi Paula

Very sorry for the delay. We are fine with you naming Loyalist.

Best wishes as you undertake your research.

Ann Marie

Ann Marie Vaughan  
President  
Loyalist College  
Sent from my iPhone

On Apr 24, 2017, at 11:34 AM, Paula Buskard <PBuskard@Loyalistc.on.ca> wrote:

Hi Ann Marie,

I have submitted my research to REB here at Loyalist. I am following up with you regarding a reminder of my request for approval and to name Loyalist in my research.

Thank you,  
Paula
Appendix C: Follow-up e-mails requesting Administrative Consent

From: Ann Marie Vaughan  
Sent: Wednesday, April 12, 2017 8:12 AM  
To: Paula Buskard <PBuskard@Loyalistc.on.ca>  
Subject: RE: Doctorate Research

Hi Paula

My sincere apologies for the delay. I was out of the province last week on leave, I will speak to Ann Drennan today.

Ann Marie

From: Paula Buskard  
Sent: Monday, April 10, 2017 10:47 AM  
To: Ann Marie Vaughan <AVaughan@Loyalistc.on.ca>  
Cc: Katharine Janzen <katharine.janzen@utoronto.ca>  
Subject: RE: Doctorate Research

Hello Ann Marie,

I am e-mailing to follow up on my request. Due to timelines I had to submit to UofT REB last Wednesday (April 5) - otherwise I would have missed my window to do my research. I used a pseudonym (Rural College) for my application. I am currently getting my application ready for Loyalist REB and I was hoping to be able to say that I have President approval. I will be submitting my application tomorrow (April 11). I will use the pseudonym again, if I do not hear from you.

Thank you,

Paula

Paula Buskard  
Professor SSW Program  
Loyalist College

From: Paula Buskard  
Sent: Friday, March 31, 2017 12:19 PM  
To: Ann Marie Vaughan  
Subject: RE: Doctorate Research

Hello Ann Marie,

I am e-mailing to follow up on my request. I am hoping to submit to UofT and Loyalist REB next week.
Please advise,

Thank you,
Paula

Paula Buskard
Professor SSW Program
Loyalist College
Appendix D: Request to Human Resources to Invite Faculty Participation

From: Paula Buskard [mailto:paula.buskard@mail.utoronto.ca]
Sent: Tuesday, May 30, 2017 9:57 AM
To: Karen Cullen <KCullen@Loyalistc.on.ca>
Cc: Paula Buskard <PBuskard@Loyalistc.on.ca>; Katharine Janzen <katharine.janzen@utoronto.ca>
Subject: Thesis Research

Hello Karen,

I am requesting that you send the attached e-mails to all part/partial/sessional and full-time faculty, currently employed at Loyalist College.

I am inviting faculty to participate in my Ph.D. research study titled Exploratory Descriptive Study of Teaching Styles at One Ontario College. Dr. Katharine Janzen of the Department of Leadership, Higher and Adult Education at the Ontario Institute for Studies in Education (OISE), University of Toronto (UofT) is my faculty supervisor for this thesis research.

This study has been approved by the Ethics Review Board at UofT/OISE and Loyalist College’s Ethics Review Board.

If you have any questions, please do not hesitate to contact me at: paula.buskard@mail.utoronto.ca or 613-969-1913 ext. 2145

Thank you,

Paula Buskard

Ontario Institute for Studies in Education
Appendix E: Human Resources: Faculty Invite

From: Cheryl McGuinness
Sent: Wednesday, May 31, 2017 9:39 AM
Cc: Paula Buskard <PBuskard@Loyalistc.on.ca>
Subject: Thesis Research

This email is being sent on behalf of Paula Buskard

Enclosed are documents regarding participating in a PhD research study being conducted by Paula Buskard.

Cheryl McGuinness
Assistant to Executive Director, Human Resources
Loyalist College
376 Wallbridge-Loyalist Road
Belleville, Ontario K8N 5B9
(613) 969-1913 ext. 2890
cmcguinness@loyalistc.on.ca
loyalistcollege.com

CONFIDENTIALITY NOTICE: This message (including attachments, if any) is confidential, may be privileged and is intended for the above-named recipient(s) only. If you are not the intended recipient of this message please notify me by return email and delete this message from your system. Any unauthorized use or disclosure of this message is strictly prohibited.

Please consider the environment before printing this email
Appendix F: Recruitment E-mail to Faculty

May 30, 2017

Hello,

I am inviting you to participate in my Ph.D. research study titled *Exploratory Descriptive Study of Teaching Styles in One Ontario College*. Dr. Katharine Janzen of the Department of Leadership, Higher and Adult Education at the Ontario Institute for Studies in Education (OISE), University of Toronto is my Thesis Supervisor for this thesis research.

The purpose of this study is to explore, describe and compare the teaching styles of faculty at Loyalist College with those articulated in College documents and espoused by Academic Managers.

Please review the information in the attached Information Letter. If you have any questions about the study, please contact me paula.buskard@mail.utoronto.ca; 613-969-1913 ext. 2145 or my Thesis Supervisor Dr. Katharine Janzen katharine.janzen@utoronto.ca; 416-978-1232.

If you have any questions about your rights as a participant or about the way the study is conducted, please contact the Office of Research Ethics University of Toronto (416) 946-3273 or ethics.review@utoronto.ca or the Research Ethics Office at Loyalist College (613) 969-1913 or ckelly@loyalstc.on.ca.

Thank you,

Paula Buskard  
Ontario Institute for Studies in Education  
University of Toronto  
paula.buskard@mail.utoronto.ca  
613-969-1913 ext. 2145
Appendix G: Faculty Information Letter and Consent

OISE

ONTARIO INSTITUTE FOR STUDIES IN EDUCATION

UNIVERSITY OF TORONTO

Date: May 30, 2017

Title of Research Study: Exploratory Descriptive Study of Teaching Styles in One Ontario College

Principal Investigator: Paula Buskard

Thesis Supervisor: Dr. Katharine Janzen

I am inviting your participation in this research study, which I am conducting in partial fulfillment of the requirements for the Ph.D. degree at the Ontario Institute of Studies in Education (OISE) at the University of Toronto under the supervision of Dr. Katharine Janzen, in the Department of Leadership, Higher and Adult Education.

This study aims to assess the teaching styles as reported by participating faculty at Loyalist College, through the exploration of teaching styles relative to adult learning principles. This study will also explore the perceptions of participating Academic Managers at Loyalist College regarding the College’s espoused approach to adult learning compared with the in-practice teaching approaches as reported by faculty participants.

It is my hope that the findings from this study will provide information for the development of professional development curriculum. I am also inviting Academic Managers to participate in interviews for the study.

If you agree to participate you will be asked to complete an anonymous online questionnaire anticipated to take about 20-30 minutes. The questionnaire consists of 36 closed-ended questions modified from Conti’s Principles of Adult Learning Scale (Conti, 1982). Non-identifiable demographic data and eight open-ended questions related to adult learning principles are also included. The questionnaire is hosted on a secure University of Toronto server. Since the questionnaire is online, there is a very slight chance that the Web Master could identify you but you will not be identifiable to me.

Your participation in this research study is completely voluntary. No individual participant will be identifiable in any reporting of the findings or in relevant conferences or publications. Only aggregated scores will be reported in any publications or presentations of the findings in appropriate professional venues. There is no risk anticipated to you by being involved in this study.
You are free to decline to answer any question(s) you do not wish to answer. You may withdraw from the study without explanation at any time simply by not submitting your responses. All data previously entered will be deleted if you close the questionnaire before submitting it. Since the online survey is anonymous if you decide to withdraw after you submit the completed survey, I will not be able to delete any information you have provided.

All information collected will be secured in a locked cabinet in my office, accessible only to me and my Thesis Supervisor. Digital information will be stored on a password protected computer, encrypted consistent with University of Toronto policies, and accessible only by me and my Thesis Supervisor. All information will be destroyed by shredding of hard copies and deleting digital data five years after the completion of the study.

If you would like any other information regarding the study, please contact me at paula.buskard@mail.utoronto.ca or 613-969-1913 ext. 2145 or my Thesis Supervisor: Dr. Katharine Janzen at; katharine.janzen@utoronto.ca or 416-978-1232.

If you have any concerns or questions about your rights as a research participant please contact the Office of Research Ethics University of Toronto (416) 946-3273 or ethics.review@utoronto.ca or the Research Ethics Board at Loyalist College at (613) 969-1913 or ckelley@loyalistic.on.ca.

Please note that the research study you are participating in may be reviewed for quality assurance to make sure that the required laws and guidelines are followed. If chosen, (a) representative(s) of the Human Research Ethics Program (HREP) may access study-related data and/or consent materials as part of the review. All information accessed by the HREP will be upheld to the same level of confidentiality that has been stated by the research team.

If you are willing to participate in this research study, please click on the following link or copy and paste the URL link:

https://surveys.oise.utoronto.ca/surveyviewer2/index.php?surveyID=8NK0L

Thank you,
Appendix H: Reminder Request from Human Resources: Faculty Invite

From: Cheryl McGuinness
Sent: Tuesday, June 20, 2017 12:14 PM
Cc: Paula Buskard <PBuskard@Loyalistc.on.ca>
Subject: Second Reminder - Thesis Research

This email is being sent on behalf of Paula Buskard

Enclosed is memo as reminder regarding research being performed by Paula Buskard.

Regards,

Cheryl McGuinness
Assistant to Executive Director, Human Resources
Loyalist College
376 Wallbridge-Loyalist Road
Belleville, Ontario K8N 5B9
(613) 969-1913 ext. 2890
cmcguinness@loyalistc.on.ca
loyalistcollege.com

CONFIDENTIALITY NOTICE: This message (including attachments, if any) is confidential, may be privileged and is intended for the above-named recipient(s) only. If you are not the intended recipient of this message please notify me by return email and delete this message from your system. Any unauthorized use or disclosure of this message is strictly prohibited.

Please consider the environment before printing this email
Appendix I: Second Reminder Memo to Participate

Title of Study: Exploratory Descriptive Study of Teaching Styles at One Ontario College

Researcher: Paula Buskard
Thesis Supervisor: Dr. Katharine Janzen

A sincere thank you to the many who have completed the Modified Principles of Adult Learning Scale, online questionnaire. For those who may wish to participate in this study but have not yet completed the questionnaire, it will remain active until June 23, 2017 after which time I will have to inactivate the link.

If you would like any other information regarding the study, please contact me at paula.buskard@mail.utoronto.ca or 613-969-1913 ext. 2145 or my Thesis Supervisor: Dr. Katharine Janzen at; katharine.janzen@utoronto.ca or 416-978-1232.

If you are willing to participate in this research study, please click on the following link or copy and paste the URL link:

https://surveys.oise.utoronto.ca/surveyviewer2/index.php?surveyID=8NK0L

Thank you,
Paula Buskard (PhD candidate)
Ontario Institute for Studies in Education University of Toronto
Appendix J: E-mail Invite to Academic Deans

Paula Buskard
Thu 6/1/2017 8:37 AM

Hello [redacted]

I am inviting you to participate in my Ph.D. research study titled *Exploratory Descriptive Study of Teaching Styles in One Ontario College*. Dr. Katharine Janzen of the Department of Leadership, Higher and Adult Education at the Ontario Institute for Studies in Education (OISE), University of Toronto is my Thesis Supervisor for this thesis research.

The purpose of this study is to explore, describe and compare the teaching styles of faculty at Loyalist College with those articulated in College documents and espoused by Academic Deans.

Please review the information in the attached Information Letter. If you have any questions about the study please contact me paula.buskard@mail.utoronto.ca; 613-969-1913 ext. 2145 or my Thesis Supervisor Dr. Katharine Janzen katharine.janzen@utoronto.ca; 416-978-1232.

If you are willing to participate in my study, please reply to this e-mail or phone me at 613-969-1913 ext. 2145 so that we can arrange a convenient time and location for the interview. One week prior to the interview I will send you the information and consent form and interview questions for you to review. Before we begin our discussion, I will review the essence of the Consent and ask you to sign the form and keep a copy for yourself.

If you have any questions about your rights as a participant or about the way the study is conducted, please contact the Office of Research Ethics University of Toronto (416) 946-3273 or ethics.review@utoronto.ca or the REB at Loyalist College at (613) 969-1913 or ckelly@loyalistc.on.ca.

Thank you,
Paula Buskard
Ontario Institute for Studies in Education
University of Toronto
paula.buskard@mail.utoronto.ca
613-969-1913 ext. 2145
Appendix K: Information Letter to Academic Deans

OISE
ONTARIO INSTITUTE FOR STUDIES IN EDUCATION
UNIVERSITY OF TORONTO

Date: June 1, 2017

Title of Research Study: Exploratory Descriptive Study of Teaching Styles in One Ontario College

Principal Investigator: Paula Buskard
Thesis Supervisor: Dr. Katharine Janzen

I am conducting this research study in partial fulfillment of the requirements for the Ph.D. degree at the Ontario Institute of Studies in Education (OISE) at the University of Toronto under the supervision of Dr. Katharine Janzen, in the Department of Leadership, Higher and Adult Education.

I am inviting you to participate in a research study that seeks to assess and compare teaching styles in order to increase awareness and facilitate change in teaching approaches with adult learners. Specifically, this study aims to assess the teaching styles of participating faculty at Loyalist College as assessed in an anonymous online survey of participating faculty and interviews with consenting Academic Deans. The findings from this study will provide information for the development and facilitation of professional development curriculum and may inform hiring policies in the future.

No participants will be identifiable in any reporting of the findings and faculty will have no knowledge of any Academic Deans who participate or not. Only non-identifiable pseudonyms will be used.

Your participation in this research study is completely voluntary. You are asked to participate in an interview anticipated to take about 45 minutes, which will be audio-recorded with your specific consent. If you do not wish to have the interview audio-recorded I will take notes during the interview. Questions posed will be semi-structured, open ended and ask for non-identifiable demographic information followed by questions related to your perception of teaching styles espoused at Loyalist College. The audio-recorded interview will be transcribed by a transcriptionist but no identifying information will be recorded and the transcriptionist will have signed a confidentiality statement before accessing any data. You will have an opportunity to review the transcript of your interview and make any changes that you wish. The audio-
recordings will be erased immediately after transcription. You may choose a convenient time and location for the interview.

There is no risk anticipated to you by being involved in this study. At no time will your responses be evaluated or judged. If you agree to participate, you are free decline to answer any question(s) you do not wish to answer and withdraw from the study at any time without explanation by simply asking me to terminate the interview. Any information you have provided to the time you withdraw from the study will be destroyed and not included in any reporting of the findings. If you withdraw before data aggregation is begun, all previously submitted data will be deleted. After data aggregation is begun it will no longer be possible to delete your information.

All information collected will be secured in a locked cabinet in my office. All digital information will be stored on a pass-word protected computer, encrypted consistent with University of Toronto policies, and accessible only to me and my Thesis Supervisor. All information will be destroyed by shredding hard copies or deleting digital data 5 years after completion of the study.

If you would like any other information regarding the study please contact me at paula.buskard@mail.utoronto.ca or 613-969-1913 ext. 2145 or my Thesis Supervisor, Dr. Katharine Janzen at; katharine.janzen@utoronto.ca or 416-978-1232

If you have any concerns or questions about your rights as a research participant contact the Office of Research Ethics University of Toronto (416) 946-3273 or ethics.review@utoronto.ca or the Research Ethics Board of Loyalist College at (613) 969-1913 or ckelly@loyalistc.on.ca.

Please note that the research study you are participating in may be reviewed for quality assurance to make sure that the required laws and guidelines are followed. If chosen, (a) representative(s) of the Human Research Ethics Program (HREP) may access study-related data and/or consent materials as part of the review. All information accessed by the HREP will be upheld to the same level of confidentiality that has been stated by the research team.”

Thank you,

Paula Buskard, PhD Candidate
Ontario Institute for Studies in Education
University of Toronto
paula.buskard@mail.utoronto.ca
613-969-9802

Dr. Katharine Janzen
Dept. of Leadership, Adult & Higher Education, OISE/ Univ. of Toronto
katharine.janzen@utoronto.ca
416 978-1232
Appendix L: Follow-Up E-mail to Academic Deans

From: Paula Buskard [mailto:paula.buskard@mail.utoronto.ca]
Sent: Thursday, June 15, 2017 1:42 PM
To: Academic Dean Named
Subject: Academic Dean Interview

Hello Academic Dean Named,

Thank you for agreeing to meet with me on June 21st at 11:00am. Please find attached the Guided Questionnaire and Consent.

Regards,

Paula
Appendix M: Questionnaire for Faculty

CONSENT TO PARTICIPATE:

Thank you for your willingness to participate in this questionnaire.

I have read and understand the terms of participating in this study as provided in the e-mail invitation by Paula Buskard. I have had the opportunity to ask questions about my involvement in this study and have received any additional details I requested. I understand that participation is voluntary and that if I agree to participate in this study, I may decline to answer any questions and withdraw from the study at any time without explanation or consequences of any kind. In addition, none of my responses to that point will be included in the study findings, however because this survey is anonymous, data cannot be retrieved once I press “submit.”

I understand that by accessing the survey on the below link that I consent to participate in the modified Principles of Adult Learning Scale (PALS) online questionnaire which is part of this study.

Please indicate your response to this invitation:

□ I agree to complete the modified Principles of Adult Learning Scale
[ ] I do not agree to complete the modified Principles of Adult Learning Scale (access to the questionnaire will be blocked)

Principles of Adult Learning Scale (PALS)
Developed by Gary J. Conti

Section 1   DIRECTIONS

The following survey contains several things that a teacher of adults might do in a classroom. You may personally find some of them desirable and find others undesirable. For each item please respond to the way you most frequently practice the action described in the item. Your choices are Always, Almost Always, Often, Seldom, Almost Never, and Never. If the item does not apply to you, circle number 5 for never.

Please consider the following when answering questions:

Instructional objectives relate to “HOW” you intend to deliver/teach content
Educational objectives relate to “WHAT” you want student/s to learn
Topics are separate from Learning Outcomes i.e.: if the Learning Outcome is on discrimination do your students participate in deciding which topic(s) under that Learning Outcome is to be covered –e.g., racism, ageism, sexism, Charter of Rights, etc.
Learning episodes are lesson sessions or plans
Learning objectives are part of lesson plans (micro) – Learning outcomes are met for course/program completion (macro). Learning Objectives (in class) scaffold to meet Learning Outcomes (course/program).
Learning episodes are teaching/learning sessions or lesson plans.
Professional Exams examples: Nursing; Red Seal, Accounting, Paramedic, Welders, etc.
<table>
<thead>
<tr>
<th>Question/Item</th>
<th>Response Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>I allow students to participate in developing the criteria for evaluating their performance in class.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use disciplinary action when it is needed.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I allow older learners more time to complete assignments when they need it.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I encourage learners to adopt middle class values.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I provide knowledge rather than serve as a resource person.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I stick to the instructional objectives that I write at the beginning of a program.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use lecturing as the best method for presenting my subject material to adult learners.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I arrange the classroom so that it is easy for students to interact.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I determine the educational objectives for each of my learners.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I plan units which differ widely as possible from my learners' socio-economic backgrounds.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I get learners to motivate himself/herself by confronting him/her in the presence of classmates during group discussions.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I plan learning episodes to take into account my learners' prior experiences.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I allow students to participate in making decisions about the <strong>topics</strong> that will be covered in class.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use one basic teaching method because I have found that most adults have a similar style of learning.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use different techniques depending on the learners being taught.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use written tests to assess the degree of academic growth rather than to indicate new directions for learning.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use what history has proven that adults need to learn as my chief criteria for planning learning episodes.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I let each learner work at his/her own rate regardless of the amount of time it takes him/her to learn a new concept.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>Question/Item</td>
<td>Response Category</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>I maintain a well-disciplined classroom to reduce interference to learning.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I avoid discussion of controversial subjects that involve value judgments.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use methods that foster quiet, productive desk work.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use tests as my chief method of evaluating learners.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I plan activities that will encourage each learner's growth from</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>dependence on others to greater independence.</td>
<td></td>
</tr>
<tr>
<td>I gear my instructional objectives to match the individual abilities and</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>needs of the learners.</td>
<td></td>
</tr>
<tr>
<td>I avoid issues that relate to the learner's concept of himself/herself.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I encourage my students to ask questions about the nature of their society.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I allow a learner's motives for participating in continuing education to</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>be a major determinant in the planning of learning objectives.</td>
<td></td>
</tr>
<tr>
<td>i.e., I plan my teaching strategies based on the learners’ motives for</td>
<td></td>
</tr>
<tr>
<td>learning.</td>
<td></td>
</tr>
<tr>
<td>I have my students identify their own problems that need to be solved.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I give all my learners in my class the same assignment on a given topic.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use materials that were originally designed for learners in elementary</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>and secondary schools.</td>
<td></td>
</tr>
<tr>
<td>I organize adult learning episodes according to the problems that my</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>learners encounter in everyday life.</td>
<td></td>
</tr>
<tr>
<td>I measure a learner's long-term educational growth by comparing his/her</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>total achievement in class to his/her expected performance as measured by</td>
<td></td>
</tr>
<tr>
<td>national norms from standardized tests.</td>
<td></td>
</tr>
<tr>
<td>I encourage competition among my learners.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I use different materials with different learners.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I help learners relate new learning to their prior experiences.</td>
<td>A AA O S AN N</td>
</tr>
<tr>
<td>I teach units about problems of everyday living.</td>
<td>A AA O S AN N</td>
</tr>
</tbody>
</table>
Section 2 * Demographic Information

Are you male ( ) or female ( )

Age: 20-30 ( ); 31 – 40 ( ); 41 – 50 ( ); over 50 ( )

Are you full-time ( ); part-time ( ); partial load ( ); sessional load ( )

Educational Attainment:

Years of teaching experience:

Please pick the educational philosophy or combination that best describes your philosophy of adult education (Zinn, 2004; Elias and Merriam, 1995):

To develop intellectual powers of the mind; to make a person literate in the broadest sense – intellectually, morally, spiritually, aesthetically ( )

To promote skill development and behavioural change; ensure compliance with standards and societal expectations ( )

To promote societal wellbeing; enhance individual effectiveness in society; to give learners practical knowledge and problem-solving skills ( )

To enhance personal growth and development; to facilitate self-actualization ( )

To bring about through education fundamental social, political, and economic changes in society ( )

Please list the professional activities related to teaching and learning that you have participated in over the last 5 years.

Section 3 * Qualitative Data

What are 3 key terms that define Learner-Centred for you?

What are 3 key terms that define Teacher-Centred for you?

How do you personalize instruction for learners? Please provide 2 examples:

How do you encourage learners to relate learning to their experiences? If so, personal experience ( ); professional experience ( ); both ( ). Please provide 2 examples of personal, professional or both:

How do you assess the learning needs of your learners? If so, formative ( ); summative ( ); both ( ). Please provide 2 examples of formative, summative or both:
How do you build the teaching/learning climate for learners? Please provide 2 examples:

How do your learners participate in the learning process? Please provide 2 examples?

How do you assist learners in personal development? Please provide 2 examples?

* Denotes data collection added to the PALS tool.
Appendix N: Academic Deans Guided Interview Questions

Before we begin our discussion, I will review the main issues in the Consent Form that you received previously and answer any questions you may have, and then, if you still agree I will ask you to sign the Consent Form.

Thank-you for your willingness to participate in this study. Your participation in this research study is completely voluntary. No individual participant will be identifiable in any reporting of the findings. There is no risk anticipated to you by being involved in this study.

I want to remind you that you are free to decline to answer any question(s) you do not wish to answer and may withdraw from the study at any time simply terminating this interview without explanation and all of the discussion previously provided will be deleted and not included in the study findings. If you decide to withdraw from the study after the interview, you may do so by letting me know by any means. If you withdraw before data aggregation is begun, all information shared will be deleted and not included in the study findings. However, if you withdraw after data aggregation is begun it will not be possible to delete and previous input. With your specific consent the interview will be audio-recorded and transcribed by a transcriptionist who will have signed a confidential agreement before accessing any data. The audio-recording will be erased immediately after interview transcription and you will have an opportunity to review and revise the transcript as you wish.

If you still agree to participate in this study, please sign the consent form now and keep a copy for your records.

Questions

How many months/years have you been at Loyalist College?

How many faculty do you supervise?

How do you believe Rural College is learner-centred?

What learner-centred activities do you believe faculty use?

Prompt questions: How do you think educational objectives for each student are determined? What do you believe written tests are used for re: to assess the degree of academic growth or to indicate new directions for learning?

How do you believe faculty personalize instruction?

Prompt questions: What is your position on the use of lecturing as a method for presenting subject material to adult students? How do you think faculty determine their instructional objectives?

How do you believe faculty relate learners experiences to instructions?
Prompt questions: Do you think faculty help students to relate new learning to their prior experiences? Do you think faculty teach about problems of everyday living?

How do you believe faculty assess learner needs?

Prompt questions: How do you think faculty participate in informal academic counseling of students? What do you think faculty do to help students identify their educational needs?

How do you think faculty build climate in their classroom?

Prompt questions: What do you think faculty position is on errors being a natural part of the learning process? How do you think faculty view giving students periodic breaks during class?

How do you think faculty include learners in the learning process?

Prompt questions: How do you think faculty develop criteria for evaluating performance? What are your thoughts about faculty allowing students to participate in developing the criteria for evaluating their performance in class?

How flexible do you think faculty are in supporting learners in personal development?

Prompt questions: How do you think faculty manage issues that relate to students concept of him or herself?
Appendix O: Academic Deans: Consent to Participate

CONSENT TO PARTICIPATE

Before we begin our interview, we will review the following Consent Form and if you are still willing to participate in this study, I will then ask you to sign the consent form and keep a copy for your records.

I have read and understand the information presented in the above about the study being conducted by Paula Buskard, Ph.D. Candidate. I have had the opportunity to ask questions about my involvement in this study and to receive additional details I requested. I understand that if I agree to participate in this study, I may decline to answer any questions and withdraw from the study at any time without explanation and only need to contact the researcher to let her know by any means as described above. I have received a signed copy of this form and I agree to participate in the study.

☐ I agree to be interviewed
☐ I agree to have the interview audio-recorded

Date: __________

Name of Participant (Print) ____________________

Signature: ____________________

Please keep a copy of the informed consent letter for yourself
Appendix P: Confidentiality Agreement with Transcriptionist

Confidentiality Agreement between

Paula Buskard, Principal Investigator

And

Lina Beard

Re: Exploratory Descriptive Study of Teaching Styles in One Ontario College

1. Confidential information means, without limitation, any information including the data on the audio tape (conversations), the contents of the audio conversations, transcriptions of those data and any information to which the recipient Lina Beard gains access from Paula Buskard, or participants in this project during this project.

2. Lina Beard will use the confidential information provided only for the purposes of transcribing the audio-taped conversations. She will treat the information as confidential and will not discuss or disclose the confidential information to any third-party. Lina Beard will not copy the confidential information except, as necessary, to complete the transcription and will keep all data secure at all times and accessible only to Lina Beard and Paula Buskard.

3. Throughout the project and upon completion of the transcriptions all the information will be submitted to Paula Buskard at paula.buskard@mail.utoronto.ca. Lina Beard agrees to destroy completely all her copies of confidential information made and all data pertaining to the confidential information including, but not limited to, all her electronic versions of the data. She will destroy completely all data copied from the original sources within 48 hours of completion of the transcription.
4. This Agreement is governed by the laws of the Province of Ontario and any applicable Federal laws and may be amended only by mutual agreement in writing.

Signed:

__________________________________________

Print Name:

__________________________________________

Witness:

____________________________________________

Print Name of Witness:

____________________________________________

Date:

__________________________________________

I have received for transcription audiotapes of conversations with the following participants:

Deanone
Deantwo
Deanthree

Signed: ______________________________________
Appendix Q: E-mail to Academic Deans with Transcribed Interview

From: Paula Buskard [mailto:paula.buskard@mail.utoronto.ca]
Sent: Tuesday, August 8, 2017 11:40 AM
To: Name of Academic Dean
Cc: paula.buskard@mail.utoronto.ca
Subject: Academic Interview Transcribed

Hello Name of Academic Dean,

Please find attached our Academic Deans interview. If you have any edits, questions, concerns, please advise before August 22, 2017. If I do not hear back from you then I will proceed with my analysis of the data.

Thank you for agreeing to participate in my research.

Paula
Appendix R: Request to Pilot Test

From: Paula Buskard [mailto:paula.buskard@mail.utoronto.ca]
Sent: Saturday, May 27, 2017 8:53:26 PM
To: lyndacarrmulholland@gmail.com; bonnieoddie@yahoo.ca; debtaylor00@gmail.com; ladybird1@sympatico.ca
Cc: Katharine Janzen; pbuskard@loyalistc.on.ca
Subject: Pilot Test

Thank you for agreeing to pilot test the attached “Modified Principles of Adult Learning Scale” and guided interview questions.

Please consider the following:

Face validity:
1 - identify any questions that are confusing or unclear and how the questions might be revised to be clearer;
2- if any of the questions seem leading (i.e., suggesting a response) either in the wording or sequence.

Content validity: Form attached.

Time it took to complete the survey.

My study is an “Exploratory Descriptive Study of Teaching Styles at One Ontario College” -

My research questions that are related to the Modified Principles of Adult Learning Scale are:
What are the teaching styles practiced by participating faculty and What is the relationship between the demographic profile and predominant teaching style.

Once you have completed the survey and content validity form, please e-mail back to me. If you have any questions/concerns, please do not hesitate to connect with me.

Thank you,
Paula
Appendix S: Content Validity Index

Please review the survey and guided interview questions then complete the following Content Validity Index (CVI). The CVI was developed by C. H. Lawshe for the purpose of validating the reliability of a research instrument among subject matter expert raters (SMEs) to determine whether each survey question is relevant to the research study.

Numbers in brackets correspond with questions.

**Research Study:** To assess the teaching styles as reported by participating faculty at Loyalist College, through the exploration of teaching styles relative to adult learning principles.

**Section 1**

(1) Is the knowledge measured by this item _______________ to the research study?

☐ essential    ☐ useful but not essential    ☐ not necessary

(2) Is the knowledge measured by this item _______________ to the research study?

☐ essential    ☐ useful but not essential    ☐ not necessary

(3) Is the knowledge measured by this item _______________ to the research study?

☐ essential    ☐ useful but not essential    ☐ not necessary

(4) Is the knowledge measured by this item _______________ to the research study?

☐ essential    ☐ useful but not essential    ☐ not necessary

(6) Is the knowledge measured by this item _______________ to the research study?

☐ essential    ☐ useful but not essential    ☐ not necessary

(7) Is the knowledge measured by this item _______________ to the research study?

☐ essential    ☐ useful but not essential    ☐ not necessary

(9) Is the knowledge measured by this item _______________ to the research study?

☐ essential    ☐ useful but not essential    ☐ not necessary

(10) Is the knowledge measured by this item _______________ to the research study?

☐ essential    ☐ useful but not essential    ☐ not necessary

(11) Is the knowledge measured by this item _______________ to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(12) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(13) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(14) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(15) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(16) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(17) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(19) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(21) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(24) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(26) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(27) Is the knowledge measured by this item ______________to the research study?
☐ essential ☐ useful but not essential ☐ not necessary
(29) Is the knowledge measured by this item ______________to the research study?
(30) Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

(31) Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

(32) Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

(33) Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

(34) Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

(35) Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

(36) Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

Section 2

Demographics

Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary

Is the knowledge measured by this item ________________to the research study?

☐ essential  ☐ useful but not essential  ☐ not necessary
Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

**Educational Philosophy**

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

**Professional Development Activities**

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

**Section 3**

**Qualitative Data**

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

Is the knowledge measured by this item __________________ to the research study?
   □ essential    □ useful but not essential    □ not necessary

Is the knowledge measured by this item __________________ to the research study?
Is the knowledge measured by this item __________________to the research study?

Additional Comments:

______________________________________________________________

______________________________________________________________

Academic Deans Guided Interview Questions

Is the knowledge measured by this item __________________to the research study?
□ essential □ useful but not essential □ not necessary

Is the knowledge measured by this item ____________________ to the research study?

□ essential □ useful but not essential □ not necessary

**Subject Matter Expert Rater Information**

Name: _________________________________ Signature: ______________________

Department: ____________________________ Job Title: _______________________

Place of Employment: _____________________________________________________

Date: _________________________________

Created by Paula Buskard based on Andrea Lalonde and C.H. Lawshe
### Appendix T: Educational Philosophy and Teaching Styles

Table 1a: *Educational philosophy and teaching styles* (n=24)

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>L  (n=6)</th>
<th>%</th>
<th>B  (n=4)</th>
<th>%</th>
<th>P  (n=9)</th>
<th>%</th>
<th>H  (n=4)</th>
<th>%</th>
<th>R  (n=1)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
<td>3</td>
<td>50</td>
<td>1</td>
<td>25</td>
<td>4</td>
<td>44.4</td>
<td>4</td>
<td>100</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>1</td>
<td>16.7</td>
<td>3</td>
<td>75</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred Style</strong></td>
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<td>66.7</td>
<td>4</td>
<td>100</td>
<td>4</td>
<td>44.4</td>
<td>4</td>
<td>100</td>
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</tr>
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<td>Eclectic (Mean)</td>
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<td>11.1</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>11.1</td>
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</tr>
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<td>33.3</td>
<td>0</td>
<td>0</td>
<td>3</td>
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<td>Extreme Learner-Centred</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Learner-Centred Style</strong></td>
<td>2</td>
<td>33.3</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>44.1</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td><strong>Total</strong></td>
<td>6</td>
<td>100</td>
<td>4</td>
<td>100</td>
<td>9</td>
<td>100</td>
<td>4</td>
<td>100</td>
<td>1</td>
<td>100</td>
</tr>
</tbody>
</table>

L=Liberal; B=Behavioural; P=Progressive; H=Humanistic; R=Radical
Table 1b: *Combination Educational philosophy and teaching styles (n=9)*

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>PH (n=2)</th>
<th>%</th>
<th>PHR (n=2)</th>
<th>%</th>
<th>LBP HR (n=2)</th>
<th>%</th>
<th>LP HR (n=1)</th>
<th>%</th>
<th>LB (n=1)</th>
<th>%</th>
<th>BP (n=1)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Teacher-Centred</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>100%</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Very Strong Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Teacher-Centred</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Teacher-Centred</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
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PH=Progressive, Humanistic; PHR=Progressive, Humanistic, Radical; LBP HR=Liberal, Behavioural, Progressive, Humanistic, Radical; LPHR=Liberal, Progressive, Humanistic, Radical; LB=Liberal, Behavioural; BP=Behavioural, Progressive
Table 2a: Educational philosophy, teaching styles and Factor 1: learner-centred activities (n=24)

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L=Liberal; B=Behavioural; P=Progressive; H=Humanistic; R=Radical
Table 2b: *Combination Educational philosophy and teaching styles* (n=9)

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PH=Progressive, Humanistic; PHR=Progressive, Humanistic, Radical; LBPHR=Liberal, Behavioural, Progressive, Humanistic, Radical; LPHR=Liberal, Progressive, Humanistic, Radical; LB=Liberal, Behavioural; BP=Behavioural, Progressive
Table 3a: *Educational philosophy, teaching styles and Factor 2: personalizing instruction* (n=24)

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<th>H (n=4)</th>
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L=Liberal; B=Behavioural; P=Progressive; H=Humanistic; R=Radical
Table 3b: *Combination Educational philosophy and teaching styles* (n=9)

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<th>Teaching Style</th>
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PH=Progressive, Humanistic; PHR=Progressive, Humanistic, Radical; LBPHR=Liberal, Behavioural, Progressive, Humanistic, Radical; LPHR=Liberal, Progressive, Humanistic, Radical; LB=Liberal, Behavioural; BP=Behavioural, Progressive
Table 4a: Educational philosophy, teaching styles and Factor 3: relating to experience (n=24)

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L=Liberal; B=Behavioural; P=Progressive; H=Humanistic; R=Radical
Table 4b: *Combination Educational philosophy and teaching styles* (n=9)

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<tr>
<th>Teaching Style</th>
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PH=Progressive, Humanistic; PHR=Progressive, Humanistic, Radical; LBPHR=Liberal, Behavioural, Progressive, Humanistic, Radical; LPHR=Liberal, Progressive, Humanistic, Radical; LB=Liberal, Behavioural; BP=Behavioural, Progressive
Table 5a: *Educational philosophy, teaching styles and Factor 6: participation in the learning process (n=24)*

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<th>Teaching Style</th>
<th>L (n=6)</th>
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<th>B (n=4)</th>
<th>%</th>
<th>P (n=9)</th>
<th>%</th>
<th>H (n=4)</th>
<th>%</th>
<th>R (n=1)</th>
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L=Liberal; B=Behavioural; P=Progressive; H=Humanistic; R=Radical
Table 5b: *Combination Educational philosophy and teaching styles* (n=9)

<table>
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<tr>
<th>Teaching Style</th>
<th>PH (n=2)</th>
<th>PHR (n=2)</th>
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<th>LP HR (n=1)</th>
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PH=Progressive, Humanistic; PHR=Progressive, Humanistic, Radical; LBPHR=Liberal, Behavioural, Progressive, Humanistic, Radical; LPHR=Liberal, Progressive, Humanistic, Radical; LB=Liberal, Behavioural; BP=Behavioural, Progressive
Table 6a: Educational philosophy, teaching styles and Factor 7: flexibility for personal development (n=24)

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<th>B (n=4)</th>
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<th>P (n=9)</th>
<th>%</th>
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L=Liberal; B=Behavioural; P=Progressive; H=Humanistic; R=Radical
Table 6b: Combination Educational philosophy and teaching styles (n=9)

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<th>Teaching Style</th>
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<th>PHR (n=2)</th>
<th>%</th>
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PH=Progressive, Humanistic; PHR=Progressive, Humanistic, Radical; LBPHR=Liberal, Behavioural, Progressive, Humanistic, Radical; LPHR=Liberal, Progressive, Humanistic, Radical; LB=Liberal, Behavioural; BP=Behavioural, Progressive