How Do They Know What They Know?
Teacher Experiences of Assessment as Learning in Ontario Intermediate Classrooms

By

Jonelle Mitchell

A research paper submitted in conformity with the requirements
For the degree of Master of Teaching
Department of Curriculum, Teaching and Learning
Ontario Institute for Studies in Education of the University of Toronto

Copyright by Jonelle Mitchell, April 2017
Abstract

Despite the evidence that teaching strategies that include the implementation of assessment as learning (AAL) are best for student learning, as well as the inclusion of AAL in the Ontario Ministry of Education’s Growing Success policy, there appear to be difficulties in the pragmatic application of this strategy in Ontario classrooms. Since AAL aims at developing self-assessment and metacognition, students at the intermediate grade level are at a prime mental level to start to understand what their learning means and looks like. This qualitative study explored how three Ontario intermediate teachers experience AAL in their practice through semi-structured interviews. These teachers believe that ongoing assessment is central to their teaching practice, but each had a different interpretation of what AAL is and what it looks like in the classroom. They believe that assessment that moves away from a summative focus is necessary, but there are challenges to adopting these changes such as lack of time for professional development and common language. To overcome these challenges, these teachers use conventional and innovative resources from other educators to navigate their understanding of AAL. These results imply that teachers may not be fully informed as to what AAL looks like and, as a result, intermediate students may have fewer opportunities to develop self-regulation and management of their own learning.

Key Words: assessment as learning, formative assessment, teacher understandings, Growing Success, intermediate teachers
# Table of Contents

Abstract ii

Chapter 1: Introduction 1

1.0 Research Context and Problem 1

1.1 Purpose of the Study 4

1.2 Research Questions 5

1.3 Background of the Researcher 5

1.5 Overview 6

Chapter 2: Literature Review 8

2.0 Chapter Introduction 8

2.1 Benefits of AAL for Students 8

2.1.1 Benefits of AAL for primary and junior students 8

2.1.2 Benefits of AAL with elementary teacher candidates 10

2.1.3 Benefits of AAL for intermediate students 11

2.2 Teacher Understandings and Utilization of AAL 12

2.2.1 Canadian teacher candidate understandings of AAL 12

2.2.2 Ontario teacher understandings and utilization of AAL 13

2.2.3 Ontario teacher challenges with AAL 14

2.3 Conclusion 15

Chapter 3: Research Methodology 17

3.0 Chapter Introduction 17

3.1 Research Approach and Procedures 17
3.2 Instruments of Data Collection 18
3.3 Participants 19
  3.3.1 Sampling criteria 19
  3.3.2 Sampling procedures 20
  3.3.3 Participant biographies 21
3.4 Data Analysis 22
3.5 Ethical Review Procedures 23
3.6 Methodological Limitations 24
3.7 Conclusion 25

Chapter 4: Research Findings 26
  4.0 Chapter Introduction 26
  4.1 Teachers Believe Ongoing Assessment That Involved an Understanding of Students to be Central to Their Teaching Practice 27
  4.2 Teachers Have Different Interpretations of What AAL is and What it Looks Like in the Classroom 29
  4.3 Teachers Believe That Implementing This New Form of Assessment That Moves Away From a Summative Assessment Focus is Necessary, but Resistant Attitudes to Change, Lack of Time for Professional Development, and Lack of Common Language About Assessment are Barriers 33
  4.4 Teachers Reportedly Collaborated With Other Educators and Used a Variety of Resources (Both Conventional and Innovative) to Help Them Navigate Their Understandings of AAL in Order to Grow as an Educator 36
  4.5 Conclusion 40
Chapter 5: Conclusion 42

5.0 Chapter Introduction 42

5.1 Overview of Key Findings and their Significance 42

5.2 Implications 43

5.2.1 Broad implications: The educational community 43

5.2.2 Narrow implications: My professional identity and practice 44

5.3 Recommendations 46

5.4 Areas for Further Research 47

5.5 Concluding Comments 48

References 49

Appendix A: Letter of Signed Consent 52

Appendix B: Interview Protocol/Questions 54
Chapter 1: Introduction

1.0 Research Context and Problem

Teachers, for the most part, are solely responsible for delivering content to students and assessing their acquisition of this content. Traditionally, teachers would assess students after the completion of the unit of study with a test or exam. This type of assessment can be referred to as summative assessment which represents how well the student has acquired what has been taught. However, if a student did not grasp concepts or content early on, this was often not addressed and caught until the end of a unit. In the same vein, a teacher may not be aware of whether students understood fundamental concepts throughout the unit of study upon which subsequent knowledge is built. So, if a student did not comprehend basic notions presented at the beginning of a unit, it could be very difficult for a student to continue within the unit and stay engaged with their learning.

As a result of these problems, there has been in shift in education from the traditional paradigm where the teacher is the active agent in learning and assessment, to a more collaborative paradigm where both teachers and students are responsible for learning and assessment. In addition, within this new paradigm there is constant reflection and feedback on how content is being understood and applied. This feedback is important for both teachers in their planning, and students in their ownership of success. In September 2010, the Ontario Ministry of Education (2010) published Growing Success: Assessment, Evaluation and Reporting in Ontario's Schools, First Edition Covering Grades 1 to 12, a document seeking to establish best practices for assessment, evaluation and reporting that would benefit students and improve their learning experiences. Growing Success describes assessment as “a set of actions undertaken by the teacher and student to gather information about student learning” (p. 30), with
the ultimate goal of improving student learning. Of note is that this definition includes both the teacher and the student. This definition underscores the teaching paradigm shift from traditional teacher-centered teaching to student-centered teaching and learning. Traditional assessment tends to focus more on summative assessments such as exams or tests at the end of a unit of study, and is summarized as an evaluative mark. Within the new approach to teaching, assessment has expanded to include a stronger focus on feedback provided to the student during the course of learning, rather than only at the end. This type of assessment can be referred to as formative assessment.

Harlen (2012) describes formative assessment as being comparable to a thermostat, where feedback about learning helps teachers ensure that concepts are not too difficult or too easy for students. To achieve this, there are five cornerstone strategies used in formative assessment. These include: clarifying and sharing learning goals and success criteria, designing classroom discussions and activities to elicit student understanding, providing feedback to enhance student learning, encouraging peer assessment, and advocating that students be responsible for their learning (Wiliam & Thompson, 2007).

Assessment terminology has also changed to reflect specific tasks associated with assessment. Earl (2003) re-imagined that assessment should be an integral part of student learning with three approaches. She describes these approaches as assessment of learning, assessment for learning, and assessment as learning (AAL). Assessment of learning is associated with grades and evaluation, and is often understood as summative assessment. Assessment for learning and AAL, on the other hand, make assessment a part of teaching and support student learning. These terms are often associated and used interchangeably with formative assessment (Earl, 2003; Gardiner, 2012).
While assessment for learning is associated with informing teachers about student learning for the purpose of modifying teaching, AAL is a student-centered process where “[s]tudents personally monitor what they are learning and use the feedback from this monitoring to make adjustments, adaptations, and even major changes in what they understand. AAL is the ultimate goal, where students are their own best assessors” (Earl, 2003, p. 25). This assessment would include such activities as self and peer-assessment checklists, learning logs, and reflection journals. This assessment looks at the subset of formative assessment strategies that focus on student metacognition (Volante, 2010), which include providing feedback to enhance student learning, encouraging peer assessment, and advocating that students be responsible for their learning. This focus on both peer feedback and student self-reflection illustrates the collaborative and individual nature of AAL to provide evidence of learning (Clark, 2012). Thus, AAL is designed to place the focus on students to elicit an understanding of their learning and promote learner autonomy.

Although these new strategies are seen as best practices, the Ontario education system still uses data from large-scale standardized summative tests such as those administered by the provincial testing agency Education Quality and Accountability Office (EQAO) to ascertain its success (Volante, 2010). Summative forms of assessment like tests are still widely used and respected. As a result, adherence to these new forms of assessment has not been easy (Volante, 2010). In particular, understanding and effective usage of AAL as spelled out in Growing Success (OME, 2010) is still in its beginning stages in the province.

Some research has been conducted on teacher experiences and the success of implementing AAL in Ontario classrooms (Black, 2014; Volante, 2010; Volante & Beckett, 2011). Despite the evidence that teaching strategies that include the generation of implementing
AAL is best for student learning (Black & Wiliam, 1998), and the inclusion of this new teaching paradigm mandated by the Ontario Ministry of Education’s Growing Success document (OME, 2010), there appear to be difficulties in the pragmatic application of this strategy in Ontario classrooms (Black, 2014; Volante, 2010; Volante & Beckett, 2011). Although many teachers do agree that AAL is a good strategy, there appears to be a lack of clarity with what AAL actually is and there are challenges to pragmatically applying this strategy effectively within the classroom.

Most studies that have been done in Ontario look at the experience of educators from grades 1 to 12, with some comparisons made between elementary and secondary school teachers. However, deeper analysis into the specific challenges faced by teachers within certain grade divisions has not been largely undertaken. Since AAL aims at developing self-assessment and metacognition in students, students in early adolescence have been found to be at a mental level to truly exhibit and start to understand what their learning means and looks like (Bourke, 2016). In Ontario, this age group lines up with intermediate grades representing grades 7 to 10 (Ontario College of Teachers [OCT], 2016). Given this, it would be beneficial to explore how AAL is being implemented in Ontario with students in the intermediate division.

1.1 Purpose of the Study

The purpose of this qualitative study is to explore how Ontario intermediate teachers experience AAL in their practice. For the purposes of this study, their experience of using of AAL will be explored by interviewing teachers about: their understanding of, beliefs about, and attitudes toward AAL; perceived indicators of success with related approaches (e.g., co-creating learning goals); challenges to the implementation of AAL strategies; and the supports available to them to overcome these challenges. This study will add a specific perspective from middle to high school teachers to the existing literature on AAL implementation in Ontario, as well as
elucidate whether there are experiences of implementing this strategy that are unique to these classroom contexts.

1.2 Research Questions

The central question guiding this study is: what are the experiences of Ontario intermediate teachers with implementing AAL strategies in their classrooms? Subquestions that will be used to further explore this topic include:

- How is AAL understood by these teachers? What are their beliefs and attitudes?
- What indicators of success are observed by teachers for gauging student learning with regards to implementing AAL?
- What challenges do they encounter and how do they respond to these challenges?
- What resources are available to support them in this work?

The aim of this research is to add to the existing literature on AAL implementation in Ontario, as well as explore whether there are factors particular to the context of intermediate classroom that influence the experience of AAL.

1.3 Background of the Researcher

As a student of the education system in Ontario in the 1990s, my learning experience was primarily focused on summative assessments such as tests, quizzes, and final assignments. Success was contingent on whether I received a happy face sticker and few X’s on my tests. In general, I performed well and learned how to prepare for tests as a student. I was able to develop my own strategies that enabled me to know whether or not I understood content. Some of these strategies included answering all of the review questions at the end of a chapter, reading through notes, and trying to articulate what I knew to someone who was unfamiliar with the content.
Hence, I feel that this form of assessment worked fairly well for me and my learning. However, I can recognize that this form of learning may not be best for all students.

As a pre-service teacher, AAL is a novel concept for me. My observation and that of my fellow pre-service teachers is that this new strategy is difficult to conceptualize and apply effectively. Co-creating success criteria, learning goals, and completing lessons with self- and peer-assessment can be regarded as time consuming; however, if AAL were used more consistently, it could potentially motivate students to take a more active role in their own learning. As this new form of assessment has been shown to be highly effective (Fletcher, 2016; Fletcher & Shaw, 2012), I would like to understand it more clearly so that I can implement it into my own teaching practice.

With regards to my own personal teaching philosophy, I strongly believe that students must take an active role in their learning. This can help build self-confidence, self-regulation, and self-efficacy, all important skills for the development of lifelong learners. As a child, my mother told me that my job at school was to make sure that I advocated for myself and took charge of my own learning. This can be difficult for students if they have not developed an awareness of their own learning process, and do not have the skills to assess this. My hope is that strategies like AAL can help facilitate this process for students by giving them the tools to exercise self-awareness and reflection in their learning and track their progress over time.

1.5 Overview

In order to gather data and answer my research questions, I will be conducting a qualitative research study in which I will purposively sample and interview three teachers about their experiences with implementing AAL strategies in their classrooms. In Chapter Two I review the literature in the area of assessment (specifically formative assessment and AAL); the
benefits of AAL for students; and the understanding and experiences of teachers implementing AAL into their practice. Next, in Chapter Three I elaborate on the research design. In Chapter Four I report my research findings and discuss their significance in light of the existing research literature. Finally, in Chapter Five I identify the implications of the research findings for my own teaching practice and for the educational research community more broadly. I also articulate a series of questions raised by the research findings, and point to areas for future research.
Chapter 2: Literature Review

2.0 Chapter Introduction

In this chapter I review the literature in the areas of student benefits of assessment as learning (AAL) and teacher understanding and implementation of AAL within the classroom. Specifically, I review research on the benefits of AAL for students and intermediate students in particular, in order to establish how AAL promotes self-regulated learning and metacognition in intermediate students. From there, I examine teacher understandings and experiences of AAL in the classroom. Specifically, I look at both teacher candidates and teachers in Ontario and their understandings of AAL. Finally, I examine the challenges that have been found in the literature with regards to the implementation of AAL by focusing on challenges experienced by Ontario educators in particular.

2.1 Benefits of AAL for Students

The shift towards AAL has occurred because of the benefits it offers students. It has been found to be effective in promoting student learning (Fletcher, 2016; Fletcher & Shaw, 2012). The aspects of assessment that can relate to personal reflection can play an important role in student self-regulation. By giving students the resources to feel in control of their learning, this type of motivation can persist to create an orientation towards learning that extends beyond the classroom.

2.1.1 Benefits of AAL for primary and junior students. In Ontario elementary schools, primary divisions represent kindergarten to grade 3, while junior divisions represent grades 4-6 (OCT, 2016). AAL has been found to be beneficial for students who fall within the age range of these younger grade levels outside of Canada. In a study of elementary school teachers implementing AAL strategies with students aged 7, 9, and 11 in Northern Territory, Australia,
Fletcher (2016) found very positive results with students, including those identified as low achieving. Teachers carefully scaffolded the process for a poetry writing task by creating assessment templates consisting of 3 sections: forethought, performance and self-reflection. By having students make strategic decisions about their task and self-assess, this gave them a perception of control in assessment and confidence in their work. This in turn promoted student self-regulation. In the process, students exceeded the expectations of their teachers, both academically and motivationally. Students exhibited persistence, greater effort and pride in their work. From this study, we can see that when teachers use AAL, they can provide students with a sense of agency and control in their work, positive effects can be produced.

In another study of AAL in the same region with the same age groups, when students were given the opportunity to create their own learning goals to be assessed against, this resulted in deep and meaningful learning experiences. Fletcher and Shaw (2012) gave students direct control of their assessment in a literacy task where they created their own success criteria based on curriculum expectations. Students established a checklist of specific skills and language features that they would assess themselves on to prove that they had achieved curriculum expectations. This process instilled goal-setting and promoted self-regulated learning. Within this study, students in the 11-year-old age group achieved significantly higher results with student directed assessment versus those who received teacher directed assessment. Students who engaged in student-directed assessment also displayed increased levels of behavioral, emotional, and cognitive engagement in their work. Most importantly for the context of this research, these 11-year-old students achieved significantly higher results with student directed assessment compared to the younger age groups, indicated by the increased capability for students to self-assess as they get older. One explanation for this is that as children increase in age, so do their
self-regulatory behaviours and the abilities to reflect on their learning. This age also approaches that of intermediate students.

2.1.2 Benefits of AAL with elementary teacher candidates. Teacher candidates experience the dual roles of student and teacher. As students, teacher candidates can benefit from AAL methods to promote confidence in their acquisition of content, therefore affecting their confidence to teach this content. Research in the UK has also demonstrated how students can learn from their own assessment procedures. For example, when elementary teacher candidates enrolled in a 4-year teacher education program in the UK used confidence-based assessments to assess their ability to teach elementary science, this illuminated to themselves and program organizers areas that these candidates desired more training in (Ryan, 2006). Although on the surface this type of assessment can be seen as AAL, these teacher candidates found that it is also effective as a tool for AAL. For confidence-based assessment, students are not only providing their answer, but also how confident they feel they are correct. These elementary teacher candidates felt that this sort of assessment not only illuminated their knowledge, but also their personal confidence in their knowledge which was more useful than knowing whether they got answers correct. Since this test gave them more information about their understanding of science content, these teacher candidates considered this to be an example of AAL. This approach was especially helpful for many female teacher candidates who had had negative experiences in science. The potential for this type of assessment is that it can help all students and also those who may have had bad experiences with a subject and do not feel confident in their abilities within that subject. The authors propose that this type of assessment is AAL because it not only addresses importance of competency within, but also that confidence in understanding material is equally if not more so important.
2.1.3 Benefits of AAL for intermediate students. As students enter adolescence, their capacity to become more self-aware increases. As they become more self-aware, and reflective of their strengths and weaknesses in other areas of their lives, this is the time period during which students are ready to develop better awareness of themselves as learners (Heritage, 2009). In a study of New Zealand students’ experiences with self-assessment in relation to their learning, Bourke (2016) found that 11- and 12-year-old students had different ways of explaining what it means ‘to learn’ and ‘to self-assess’. This age group was chosen because they still had their secondary school years ahead of them. Their responses ranged from low sophistication where students believed that learning was akin to ‘filling up the brain’ and self-assessment was likened to seeking an opinion from an ‘expert’, to high sophistication where students recognized different ways of learning and were excited to understanding these different ways and self-assessment was seen as a personal evaluation of the worth of a learning goal. Students who held lower sophisticated views of learning tended to hold lower sophisticated views of self-assessment as well. Bourke (2016) recommends that teachers encourage students to embrace learning and self-assessment in more sophisticated ways and finding different ways for students to self-assess to develop their own learning goals.

In this section, we can see that AAL has various benefits for students including motivation, student autonomy, self-regulated learning, and confidence in one’s abilities (Fletcher, 2016; Fletcher & Shaw, 2012; Ryan 2006). We also see that it can take different forms, but most importantly, it gives students greater responsibility for their assessment of their knowledge and achievement. This is especially important for intermediate students who at a stage where they are developing greater capacity for self-regulation, a skill that is important for later grades which involve increasing levels of self-study (Bourke, 2016). Therefore, it is
important for teachers to give students opportunities to understand how to assess themselves. This relinquishing of teacher control within assessment, however, is very different than traditional models of assessment and has proven to be challenging for some educators to wrap their heads around.

2.2 Teacher Understandings and Utilization of AAL

The terms assessment for learning and AAL were born out of formative assessment (Earl, 2003). Because of this, the lines between these two assessment models can sometimes be blurred when looking through the lens of formative assessment, with teachers emphasizing assessment for learning understanding and practices (Volante, 2010). Elementary teachers in Cyprus had narrow views of what constituted to formative assessment (Antoniou & James, 2014). When speaking about what formative assessment means in practice, grade 3 and 4 teachers predominantly focused on their personal role in assessment and overlooked the role of the student. This demonstrated that these teachers emphasized concepts of formative assessment that related more to assessment for learning, rather than AAL. This teacher-centered focus on assessment was also found with observational data where teachers’ actions concentrated more on gaining information from students in order to finish covering curriculum rather than student-centered learning. This predominance of assessment for learning and assessment of learning understandings can lead to an imbalance in teacher understanding of AAL within the classroom which has been seen in teacher candidates and practicing teachers in Canada.

2.2.1 Canadian teacher candidate understandings of AAL. Teacher candidates may be walking out of teacher education programs with misconceptions about assessment, and often AAL is the one assessment area in which teacher candidates are the least clear about. The consequence of this is that once in the classroom, these teachers may focus on traditional
assessment strategies (such as assessment of learning) that they experienced themselves as students. In a study of teacher candidates in a four-year concurrent at Canadian university, Volante and Fazio (2007) found that when asked to list the three main purposes for classroom assessment, 75% of primary/junior teacher candidates had responses that aligned with assessment of learning, and only approximately one-fifth had responses that aligned with assessment for and as learning. Though this sample only included teacher candidates from one Canadian education program, the authors suggest that teacher education programs should provide specific courses on assessment and evaluation and should not assume that graduating teacher candidates are assessment literate. Lin and Lin (2015) also suggested a need for teacher education programs to set assessment literacy as a priority as many did not understand the connections between different assessment strategies. When they surveyed Canadian teacher candidates on their beliefs about inclusive classroom assessment, their data showed that although the majority of teacher candidates had positive beliefs about AAL and other assessment strategies, they saw each of these strategies as isolated from each other and not interconnected.

The call for teacher education programs to place more focus on assessment literacy is echoed throughout the literature (Lin & Lin, 2015; Volante & Fazio, 2010) because these new teachers will help shape whether the new shift in assessment practices will be successful. It is necessary for these teachers to have strong foundational knowledge and understandings about different assessment practices because although the above findings suggest that teacher candidates may have misconceptions about AAL, this was also seen with teacher candidates as well as practicing teachers in Ontario.

2.2.2 Ontario teacher understandings and utilization of AAL. Teachers understand that assessment is an important part of their practice. In a study of elementary school teachers in
urban and rural regions of Ontario and Alberta, Black (2014) found that teachers primarily used assessment on an ongoing basis in order to inform their teaching. Furthermore, these teachers mentioned the need to know the students in a classroom first in order to know what types of assessment will work. However, Ontario educators seem to have a poor understanding of AAL. In a study of teachers in two Southern Ontario school boards, Volante (2010) found that educators were unfamiliar with AAL and were unable to discuss its application within their classrooms even when interviewers explained the term to them (Volante, 2010). The result of this misunderstanding is that AAL strategies – particularly those aligned with self-assessment and peer assessment – are not being fully utilized within Ontario classroom, and a need for professional development with teachers regarding assessment literacy (Volante, 2010; Black 2014). Volante and Beckett (2011) found that both elementary and secondary school teachers from two school boards in southern Ontario noted unease when implementing assessment strategies such as peer assessment and self-assessment. Teachers also noted that the main source of their education on assessment came from their teacher education.

These above findings suggest that Ontario students may be missing out on AAL strategies that encourage student metacognition. This is not to place blame on educators, but indicates that there may be reasons as to why teachers may not be able to fully understand and implement AAL more frequently in their classrooms.

2.2.3 Ontario teacher challenges with AAL. Along with limited utilization of AAL and a need for professional development, Ontario teachers noted challenges such as teaching for success on large-scale assessments (Black, 2014), a lack of in-class time for peer and group discussion, demands of the curriculum, and marks-oriented attitudes toward assessment and evaluation (Volante, 2010). Many parents and students desire a mark or grade to assess learning,
as opposed to valuing the assessment that takes place within the process of teaching. Due to this paradigm shift in assessment practices, Suurtamm and Koch (2014) studied how grade 4-12 mathematic teachers in Ontario navigate challenges as they incorporate new assessment practices (including AAL) within their classrooms. Through their framework, they found a need for clarity in assessment language and opportunities for collaboration with other teachers were necessary.

Taken together, these two studies offer a glimpse into the issues of educators in Ontario with regards to implementing AAL in their schools. It is also important to note that within these studies on teacher understandings, utilization and challenges, AAL was studied alongside assessment for and of learning. With regards to AAL, there is limited research for Ontario teachers that focusses on the gaps in knowledge for AAL in particular. Furthermore, most research tends to focus on a broad range of grade levels as opposed to a narrow focus to explore specific experiences with students of certain ages. As discussed in Chapter One, there are multiple demands and pressures from parents as well as directives from the Ministry of Education; this makes the implementation of AAL very challenging for teachers. Although research has shown the benefits of this strategy for students (Fletcher, 2016; Fletcher & Shaw, 2012), there are still many barriers that hinder teachers from effectively using AAL strategies as a regular part of their teaching practice.

2.3 Conclusion

In this literature review I examined research on the benefits of assessments as learning for students, and the understanding and experiences of teachers implementing AAL into their practice both in Ontario and more broadly. This review demonstrates that there has been research on AAL and its benefits, but also raises questions about whether teachers are effectively implementing this strategy within the classroom. It also points to the need for further research on
how teachers can overcome the pragmatic challenges of implementing AAL in the classroom given that they are accountable to so many stakeholders and demands.

In light of this, the purpose of my research is to explore how intermediate teachers experience AAL in theory and in practice. I aim to explore whether these teachers report similar challenges to those experienced by Volante (2010), Black (2014), and Volante and Beckett (2011) since this strategy was first implemented in Ontario through the Growing Success policy (OME, 2010). In particular, I will be looking at specific challenges encountered by grade 7 and 8 teachers.
Chapter 3: Research Methodology

3.0 Chapter Introduction

As discussed in the previous chapters, this study will explore how Ontario intermediate teachers experience assessment as learning (AAL) in their practice. In this chapter, I will describe the research methodology I will be using. I begin by reviewing the general approach of qualitative research, and then discuss my data collection instrument. After this, I will elaborate more specifically on participant sampling and recruitment. I then explain my data analysis procedures and review the ethical considerations relevant to my study. Relatedly, I identify a range of methodological limitations, but also speak to the strengths of the methodology. Finally, I conclude the chapter with a brief summary of key methodological decisions and my rationale for these decisions given the research purpose and questions.

3.1 Research Approach and Procedures

This research study was conducted using a qualitative research approach involving a literature review and semi-structured interviews with teachers. Qualitative research aims at understanding the meanings that people have constructed, and how they make sense of their world, and their experiences within it (Merriam, 1998). The data in a qualitative study is richly descriptive and analyzed through an inductive method, by finding meaning within the data itself. These findings were then reported using the voices of the participants and via the reflexivity of the researcher (Creswell, 2013). Like other qualitative studies, this study used a social constructivist framework, in that multiple realities are understood to be individually constructed through a person’s lived experiences (Creswell, 2013). Through my personal interpretation, findings were inductively generated based on the interviews.
Within the field of education, much qualitative research looks at understanding a phenomenon, process, or the perspectives of people involved within a particular context (Merriam, 1998). Marshall and Rossman (2010 as cited in Creswell, 2013, p. 10) recommend a phenomenological approach for research in education. This approach focuses on the individual and their lived experience, and typically involves in-depth interviews with individuals who have experienced a common phenomenon (Creswell, 2013). My research was not a formal phenomenology; however, thought through this lens, the phenomenon I examined was AAL, the people I spoke to are teachers, and their common experience was using AAL within their practice in Ontario intermediate classrooms.

This type of qualitative approach using interviews has also been used by other researchers who have studied the experiences of educators with assessment in Ontario (Black, 2014; Volante, 2010; Volante & Beckett, 2011). In their studies, they used interviews to obtain rich and detailed information on educators’ experiences using assessment. Thus, given the nature of my study, a qualitative approach using interviews was appropriate for exploring teacher attitudes and experiences related to their practices of the AAL strategy.

3.2 Instruments of Data Collection

The primary instrument for data collection used in this study were one-on-one semi-structured interviews. On the interview structure continuum, semi-structured interviews fall between highly structured interviews, which are characterized as an oral survey where the wording of questions and order are predetermined, and unstructured interviews, which are characterized as a conversation that is much more flexible and open (Merriam, 1998). Semi-structured interviews employ a structure that has been planned in advance; however, questions
can be adjusted for individual participants in order to make them feel more comfortable for the purposes of building rapport to encourage a deeper discussion (DeMarrais, 2004)

In my interviews, I asked questions to address my main research question to gain an understanding of Ontario intermediate teachers’ experiences with AAL. Patton (1980) describes various types of interview questions typically used in qualitative studies. From his list, I will be asking experience, opinion, knowledge and demographic questions in order to obtain rich information about my participants’ experiences with AAL. My interview guide was divided into four sections starting with background information, followed by these teachers’ understanding of AAL, the strategies they use within the classroom, as well as the challenges and supports they have used to overcome these challenges. Some example questions include:

- How would you describe ‘AAL’?
- If I were to sit in your class, what examples of AAL with students would I see in action?
- What kinds of resources have helped you in your understanding of the AAL strategy?

3.3 Participants

Here I review the sampling criteria I have established for participant recruitment, and I review the range of avenues for teacher recruitment. I have also included a section where I will introduce each of the participants.

3.3.1 Sampling criteria. The following criteria was applied to participants for this study:

1. Teachers had at least 8 years of experience teaching in Ontario.
2. Teachers were currently teaching in Ontario.
3. Teachers reported actively using AAL within their current practice.
4. Teachers were currently teaching grade 7, 8, 9 or 10.
I found three teachers using the above criteria to address my research question. The Ontario Ministry of Education (2010) released the document *Growing Success: Assessment, Evaluation, and Reporting in Ontario's Schools, Kindergarten to Grade 12* in September 2010, and from this point forward, teachers in Ontario were expected to be using a new assessment strategy with students that includes AAL. I chose to select teachers who had at least 8 years of teaching experience so that I can speak to teachers who may have had experience with old assessment practices and will be able to speak about their experiences and feelings about using AAL within their practice. Given that the first year of teaching can be difficult for new teachers (Tait, 2005), I chosen to extend the experience period to account for this, so that teachers will have considerable experience using this strategy without facing the additional challenges often encountered by new teachers. I recruited teachers who self-identified as actively using AAL currently. Given that the Ministry of Education mandates that this type of assessment should be taking place, it is assumed that all teachers should be doing this. Lastly, since I am interested in the experiences of using this assessment strategy with intermediate students because they are at an age metacognitively where they are becoming more self-aware in controlling their own learning, I will be recruiting teachers who currently teach grade 7, 8, 9 or 10.

### 3.3.2 Sampling procedures

Due to the methodological constraints of this research study, I utilized a combination of purposive, convenience and snowball sampling to find participants. Purposive sampling allows us to select information-rich individuals from which one can gain information. From these individuals, one can learn about key issues around our phenomenon, and gain insights and deep understanding (Patton, 2002). Convenience sampling is a sample that is chosen based on time, resources, location, and availability of respondents (Merriam, 1998). Although Patton (2002) states that this type of sampling can result in cases
with less rich information, I mitigated this by choosing a sampling frame with a population that is engaged in the assessment conversation through targeting those at assessment conferences and those who are sharing their ideas on social media. Finally, I also used snowball sampling in the case that my participants did not fit my sampling criteria, but had someone in their networks who did.

To recruit participants, I used social media to seek out educators who are engaged in assessment practices. Using this method, I used Twitter hashtags to locate teachers who are engaged in assessment conversations. I contacted individuals with an overview of my research study, and provided the participant criteria and my contact information. If they or someone in their professional networks is suitable for my study, they can contact me. This will help ensure that teachers are volunteering to participate rather than feeling pressure or obligation to participate. I believe that through finding participants in these ways, I was able to find educators who were knowledgeable and could speak in depth about AAL practices.

3.3.3 Participant biographies.

Margaret. Margaret had been teaching for 19 years in a Greater Toronto Area public school board and had been teaching at her current school for almost ten years. At the time of interview, she was currently teaching grade 7 and had her intermediate qualifications as well as additional qualifications in reading and special education. Given her wealth of experience, she worked as a mentor to new teachers and teacher candidates at her school.

Teagan. Tegan had been teaching for almost ten years in a Greater Toronto Area public school board and had been teaching at her current school for 3 years. When she was interviewed, she was currently teaching grade 7 and had her intermediate qualifications along with additional qualifications in special education and ESL.
Katherine. Katherine had been teaching for almost ten years as well in a Greater Toronto Area public school board and had been teaching grade 9 science and grade 12 math at her new school for 2 months. Her intermediate/senior qualifications were in math and physics, along with a senior social science qualification. She also had an additional qualification in student assessment and evaluation.

3.4 Data Analysis

Qualitative data analysis is not a linear process. Analysis happens simultaneously during the data collection and analysis phases (Merriam, 1998). Patterns in the narrative data are not found from statistical relationships, but rather from conceptual ones. These patterns (themes and categories) are derived from the data itself. Patton (1980) describes two ways in which these patterns emerge: through categories that are articulated by participants during the interview process, and though categories that were not articulated. In the latter case, the researcher could create a term for this category. This type of data analysis is an inductive, ‘bottom up’ approach which takes specific observations and applies them to more general explanations (Suter, 2012).

For my analysis, I transcribed my interviews in order to embark on further analysis. These transcripts were coded based on my research questions as an interpretive tool. Each transcript was coded individually to identify categories and themes within these categories. Then, these categories and themes were compared across all transcripts, and themes were synthesized where appropriate. Finally, I then made meaning from the data and discussed these found themes within the context of existing research from my literature review. At the same time, I also looked at what was not addressed by participants within these interviews compared to what is said in the literature.
3.5 Ethical Review Procedures

Research within professional practices is important for the enhancement of knowledge within a given field. Unethical research can have the potential to negatively impact individual professionals, their institution, the profession as a whole, and the willingness of future research participants within that field to volunteer for research (Campbell & Groundwater-Smith, 2007). Therefore, it is important to have ethical procedures in place to protect the rights of participants. The common ethical principles considered in an ethical review include: autonomy, beneficence, non-maleficence, and justice (Campbell & Groundwater-Smith, 2007). Autonomy looks at whether participants give their consent freely. Beneficence and non-beneficence look at potential harm and risk to the participant and researcher. Justice further looks at potential harm and risk to the broader community.

To address these ethical concerns, a number of ethical procedures were put in place for this study. Participants were asked to sign a consent letter (Appendix A) giving their consent to be interviewed as well as audio-recorded. Informed consent was important to allow participants to freely choose whether or not they want to participate in a study, and is the foundation for further ethical considerations (Cohen, Manion & Morrison, 2013). This consent letter provided an overview of the study, addressed ethical implications, and specified expectations of participation (approximately 60-minute semi-structured interview). Although there were minimal risks to participation in this study, I reassured participants throughout the interview that they had the right to refrain from answering any question that they did not feel comfortable with, as well as re-stated their right to withdraw from participation.

One strength of this study is the respect to power imbalance and exploitation of the participant (Creswell, 2013). Since I am still a student and not in a position of power above my
participants (i.e., veteran teachers), the conflicts and risks for teacher participants were minimal. I had little influence on their employment or status within their institutions. Therefore, I hoped that these teachers felt that they could speak openly and honestly about their experiences and attitudes towards AAL and how it is used.

To minimize risk to participants, identities remain confidential and identifying markers related to their schools or students are excluded. As well, all data (audio recordings) will be stored on my password protected device and will be destroyed after 5 years. In addition, all participants are assigned a pseudonym for reporting purposes to further respect privacy (Creswell, 2013).

In following all of these ethical procedures, I believe that this provides the maximum protection and minimize risk to my participants, while at the same time benefits the educational research community at large.

3.6 Methodological Limitations

One major limitation of this study is its lack of generalizability. Unlike quantitative research, qualitative research does not aim at generalizability due to various methodological limitations. First, my sampling procedure does not allow for generalizability. My sample was purposefully selected for their interest in assessment practices. Their views and experiences may not necessarily be typical of the average teacher. Secondly, the sample size is too small to generalize results to the greater population of teachers. Polkinghorne (1989, as cited in Creswell, 2013, p. 149) recommends 5-25 participants for interviews; however, due to the parameters of this particular study, only three teachers could be interviewed. Thus, even within qualitative research standards, this sample is quite small. Thus, the findings of this study are specific to these participants.
Since I personally was a primary instrument in data collection, my reflexive position as a researcher can result in bias in the reporting (Merriam, 1998). I am a teacher in training who had only completed two practicum placements at the time of interviewing. My interpretation of the data may be very different from, for instance, a teacher who has been using AAL for a few years, versus a teacher who has been teaching using traditional summative approaches. The lens with which I used for asking questions and analysis may have missed concepts that may be addressed by another research with different experiences. Further, since I am used semi-structured interviews, the ways in which I asked questions and delivered follow-up questions may have differ between participants, which may have resulted in a reduced ability to easily compare responses (Cohen et al., 2013).

3.7 Conclusion

In this chapter, I discussed the research methodology for this study. I began by explaining the qualitative research approach I took and the framework through which I conducted this research. Then I elaborated on the nature of semi-structured interviews, which was the instrument for data collection, and offered some sample questions from my interview guide. I then gave my rationale for my participant selection and sampling procedures with regard to my research question, and discussed my plan to find teacher participants. I went on to describe how the narrative data would be analyzed, and the ethical concerns I have taken into account with respect to participant consent, privacy, and protection of data. Finally, I review the limitations of my research design. Next, in Chapter Four, I report the research findings.
Chapter 4: Research Findings

4.0 Chapter Introduction

In Chapter One, I introduced my research question: what are the experiences of Ontario intermediate teachers with implementing assessment as learning (AAL) strategies in their classrooms? I also introduced the subquestions used to further explore this topic. This was followed by a review of literature on AAL in Chapter Two, and a discussion of my research methodology detailing my inductive qualitative data analysis in Chapter Three. In this chapter, I will present and discuss the findings and themes that emerged through analysis of my three semi-structured interviews. The findings are organized into the following four main themes:

1. Teachers believe ongoing assessment that involved an understanding of students was to be central to their teaching practice.

2. Teachers have different interpretations of what AAL is and what it looks like in the classroom.

3. Teachers believe that implementing this new form of assessment that moves away from a summative assessment focus is necessary, but resistant attitudes to change, lack of time for professional development, and lack of common language about assessment are barriers.

4. Teachers reportedly collaborated with other educators and used a variety of resources (both conventional and innovative) to help them navigate their understandings of AAL in order to grow as an educator.

For each theme, I will first describe the context, report my qualitative data, and finally make connections between the participants’ experiences and perceptions as well as relate this to the existing literature.
4.1 Teachers Believe Ongoing Assessment That Involved an Understanding of Students to be Central to Their Teaching Practice

Participants emphasized that assessment plays a very important role within their practice as a teacher and that, in their view, assessment needs to revolve around the student. In their view, the purpose of assessment is to benefit students and their learning, and AAL has a role to play in this by involving the student. In this section, I will first discuss how these teachers felt strongly about the role of assessment in the teaching profession. I will then move on to expand on they felt that a keen understanding of the student is necessary for appropriate assessment.

The teachers interviewed expressed that assessment itself is central to their teaching practice and noted that it is an important part of their everyday role as a teacher. Assessment was seen as a tool to understand student learning and guide their teaching practices. Katherine described the purpose of assessment as “the everyday you’re doing all the time. It’s about figuring out how kids learn, being able to figure out whether or not they’re learning and really it should be the heart of what we’re doing.” When Katherine talked about assessment as something being done all the time, this indicated that assessment should not happen sporadically throughout the teaching process, but rather should occur constantly from lesson to lesson. Using assessment in this continuous way was what she believed to be part of good teaching practice. This sentiment of assessment being “at the heart” of the profession was also felt by Margaret. During our interview, she asked me if I had a specific assessment and evaluation course in my teacher training. She expressed shocked when I told her I did not and exclaimed that “it’s vital because when you get in, that’s what we’re doing!” indicating her view of the importance of understanding assessment within the role of a teacher. She was concerned that not enough time is spent on training teachers on it presently, given the important role it plays in one’s daily teaching
practice. In their study of elementary and secondary school teachers from two school boards in southern Ontario, Volante and Beckett (2010) found that a primary source of education on assessment practices came from teacher’s training from teacher education programs, underscoring the importance of focused study on this concept. This necessity to have better assessment training for teacher candidates has also surfaced in the study by Volante and Fazio (2007), who found that teacher candidates themselves desired specific courses in assessment and evaluation within their training. Taken together, these findings denote the importance of having a strong foundation in assessment knowledge for teachers. The above teachers demonstrated the belief that assessment is very important within their teaching practice and in order to do so, we will see that knowledge of their students plays an important role in this.

These teachers believe that they need a deep understanding of their students in order to implement assessment effectively. It is necessary to understand what students know, their preferred learning styles, and interests. This was seen as necessary in order for assessment to achieve the goal of benefitting students. Teagan noted that it is important to

…[know] your learners really well. I think if you don’t know your students well enough to understand how they will perform in certain tasks or what their likes and dislikes are, if you can’t connect them with the material that you’re trying to teach then…it’s just a waste of time”

Here, she explained how an understanding of students’ capabilities and personal interests was an important factor within the success of assessment. If she was unable to provide an appropriate task to her students to be assessed, students would not be able to perform effectively on it in order to inform her about their understanding.
Here I have shown how the teachers in this study felt that assessment is essential to their teaching practice and through performing assessment on an ongoing basis, they reportedly learn about how their students learn, comprehend, and connect to material. Further to this, they believe it is important to have a comprehensive understanding of their learners which includes their interests and capabilities. When it comes to assessment in general, the teachers in this study agreed on its purpose; however, when it comes to defining AAL specifically, there was some divergence in their understandings.

4.2 Teachers Have Different Interpretations of What AAL is and What it Looks Like in the Classroom

The teachers in this study defined and reportedly implemented AAL in different ways. Not all of the teachers defined AAL in ways similar to each other and to the definition of AAL within the literature and according to Growing Success (OME, 2010). Definitions of AAL also influenced the way these teachers implemented it in the class. In this section, I will first show how each teacher defined AAL and how it relates to their self-reported practice of it. I will then discuss the similarities between their definitions of this concept and then expand on how some of their definitions were different.

Katherine defined AAL as “a student’s ability to understand where they are and where they need to go, so they can reflect on their own work, or ... give their peer feedback on their work”. Not only did she mention an understanding of a baseline of knowledge, but she noted that it is the student who understands this and the direction for their learning. She further included the element of students assessing other students through peer feedback as part of AAL. This emphasis on student ownership in AAL is part of Earl’s (2003) definition, which conceptualizes AAL as “students personally monitoring what they are learning and [using] the feedback from
this” (p. 47). Katherine mentioned AAL as a tool for students to personally understand and monitor their current place in the learning process, and was the only participant to explicitly mention any element of peer feedback. Her emphasis on “understanding where they are and where they need to go” is depicted in her description of implementing learning goals and success criteria in the classroom:

I will tell them what the learning goal is for the day, it gets published for them online so they can go back to it as often as they want, and then as part of our consolidation the following day, I will ask them what the success criteria is. “So OK, this is what you did yesterday, you did some homework, what are you now able to do?”

Here she makes learning goals explicit for her students and invites them to reflect on their learning process to determine the criteria they had to be able to be successful in achieving the goal of the lesson. This aligns with Volante and Beckett’s (2011) study on Ontario elementary and secondary school teachers which found that teachers who implemented self- and peer-assessment strategies included both teacher and student directed activities.

AAL was also viewed as a way for teachers to gain information about students. Teagan said that AAL “gives me a general understanding of students’ understanding of what we’re doing and it also gives opportunities for students to be able to assess where they’re at in a kind of…informal way”. Here, Teagan included the role of the teacher in AAL and also included the word “informal” indicating a lack of formal mark or evaluation. This indicated a distinction from more traditional assessment of learning strategies that may occur after a unit or lesson. This interpretation was demonstrated through the examples she gave of her classroom practice where for her, AAL
in a lesson may typically happen off the cuff after a minds-on activity for me, especially if it’s at the beginning of introducing a new topic. [It] would involve a lot of observations with kids and would hopefully be really thought-provoking, and I would be able to get a general grasp of where we need to go next.

In this example, Teagan used a minds-on as a tool for herself to understand where her students were at in order to direct planning for her future lessons. This strategy is more often lined up with assessment for learning models, as opposed to AAL models.

Similar to Teagan, Margaret described AAL as a way to inform her understanding as a teacher about student learning. She used an analogy of going to a doctor and physically drew a feedback system to illustrate her point. In her practice, she mentioned moving away from older teaching strategies to incorporate more student collaboration and listening to how students describe their learning process:

a lot of things I do in the classroom [are] to give them ownership …stay away from this rote teaching…give the student a lot of opportunities to work in groups and brainstorm things and work together and come up with solutions and come up with a process…they will [then] have to come up as a group and show the class, and explain how they got it, the process and they’ll have to justify. So it really will tell me what they know…And throughout that, I will observe, there will be checklists…and then in the end I will consolidate just to see if they have succeeded in that expectation, I may have a quiz or a journal entry…to see what they know.

Although Margaret mentions giving her students ownership in classroom activities, like Teagan, her use of observation and checklists indicates a teacher-directed use of assessment. Similarly, Black (2014) found that elementary school teachers in urban and rural regions of Ontario and
Alberta primarily used observations often for assessment. This aligns more with assessment for learning practices, rather than AAL.

Although the teachers in this study defined AAL in different ways, most of their definitions involved a mention of students taking charge of their learning. This supports findings by Volante and Beckett (2011) who found that teachers acknowledge that involving students in the assessment process is vital to student learning. In that same study, teachers further understood that assessment that is solely performed by the teacher is incomplete and that student reflection is necessary. Furthermore, inconsistencies in the delivery of AAL have also been documented (Black, 2014; Volante, 2010). In a study of teachers in two Southern Ontario school boards, Volante (2010) found that:

Many educators were unfamiliar with AAL and could not directly discuss its applicability within classrooms and schools …[comments by participants fit] into an overall pattern that suggests a lack of understanding of what AAL entails and, more [importantly], an uneven utilization of different phases of assessment. This parallels the findings of this present study, since there seemed to be inconsistencies among teacher definitions, formal definitions in Ontario education policy, and teachers’ reported implementations into practice.

Here, I have shown how these teachers each had different interpretations which reportedly resulted in different implementations of AAL within their classrooms. Some reported practices aligned with what has been found about AAL in the literature, while others aligned more closely with definitions of assessment for learning. This indicated that there is still some disagreement in understanding and distinguishing AAL from assessment for learning. Although
these differences existed, we will see that these teachers nonetheless still believed in assessment reform.

4.3 Teachers Believe That Implementing This New Form of Assessment That Moves Away From a Summative Assessment Focus Is Necessary, but Resistant Attitudes to Change, Lack of Time for Professional Development, and Lack of Common Language About Assessment are Barriers

Throughout discussions of their beliefs about assessment and AAL, teachers in this study expressed how varied assessment truly was and how a primary adherence to summative assessment was outdated and not as helpful to students. This change in education, though, is not without its challenges. In this section, I will discuss how participants cited resistance by other teachers to incorporating new assessment material as a problem within education. I will then discuss how these teachers personally had difficulties finding time to attend professional development for assessment to further inform themselves about new assessment practices. Finally, I will then illuminate how a lack of common language about assessment reportedly adds to difficulties in learning about new forms of assessment.

Resistance to change was seen by these teachers as a reason why some educators may not want to utilize and adapt to AAL strategies. Katherine explained why many want to hold on to their old ways of assessing students:

Honestly, I think education hasn’t changed in over 100 years…school was still set up to get up, go to school, get lectured at, do some homework, repeat, which I don’t really think fits the mould anymore… [and] because that is what education has been for so long, many people have trouble deviating from what they think education should be. The most common argument is “well that’s the way we’ve always done it”…I think that there is
this disconnect between what [teachers] need and what the future kids need, and what [teachers] think is right because that’s the way that they learned.

Given that AAL is a relatively new concept within the Ontario teaching context (mandated by the Ministry of Education in 2010), not all teachers have been quick to change their practices. Katherine made reference to the need for change in education because the “mould”, or world in which students will be growing up in, has changed. Many teachers who are teaching now were taught as students using summative assessments and are carrying on this tradition within their own practices. Teagan furthered the conversation on this, adding that

some teachers are very used to being in control of assessment and using dated, summative techniques all the time. I think that there needs to be more professional development for teachers in understanding the real wealth of things you can do to assess students and how it’s not just the multiple choice tests you’ve have in your binders for 20 years.

Here, Teagan mentioned the element of control and how, traditionally, summative assessments resided solely in the authority of the teacher. She advocated for diversity in assessment practices that move away from customary summative assessments like multiple choice tests. She then suggested the need for more professional development; however, we will see that the reality of accessing professional development is not without its challenges.

Some participants noted that they found it difficult to find time to get the needed training and professional development about AAL. When asked what can be done to help teachers with assessment, Margaret wanted more time designated for teachers to take advantage of learning opportunities. She advocated for bringing in more support during those times so that teachers can freely take the time for professional development. Volante (2010) also found that educators in
two Southern Ontario school boards said that more professional development was needed in order to understand assessment models. Teagan echoed this sentiment by admitting that “sometimes it’s harder to take advantage of professional development on your own. So, when it’s provided by schools and it’s happening on a PD day, then you’re kind of forced to go and figure it out if it applies to you and how you can use it.” Teagan noted how it can be difficult for teachers to be motivated to access professional development outside of designated school time. Moreover, next we will see that challenges with acquiring knowledge about assessment are also complicated by the language used to describe it.

Terms used to describe assessment have varied over the years, which may have led to confusion in understanding the differences among various models of assessment. Katherine discussed this when asked about what can be done to help teachers with assessment:

I think in the end, the language being common is the most important part…Do they know what assessment as, of, and for learning is?…people like to associate those with formative and summative, which, the further I get into it, the more I realize they don’t go together. To call something formative doesn’t mean it has to be ‘for’ or ‘as’, which is how most people have linked them…So I really think the language is the key to make sure…that the people you’re having that conversation with have the same definition of the words you are using.

This problem of a lack of common language was also encountered by me when finding literature on AAL. Newer terms of assessment for, as, and of have been aligned with older terms of diagnostic, formative, and summative assessment, but there was not a one-to-one match based on the definitions created by Earl (2003). Bennett (2011) more specifically found that the term ‘formative assessment’ was sometimes used by educators and researchers interchangeably with
other assessment terminology. In the above quote, Katherine explained that assessment ‘for’ or ‘as’ learning was not equivalent to formative assessment. Yes, these terms may have emerged from that term, but assessment for and as learning do not individually equate to formative assessment. She continued to emphasize the importance of common and consistent language regarding AAL, so that when educators speak about assessment, are actually talking about the same thing.

In this section, I have shown that although these teachers felt that new models of assessment were necessary for a modern education system, they perceive challenges in terms of having these changes implemented properly. These challenges included not having enough time to attend professional development, and a lack of common knowledge for discussing assessment. As we will see in the next section, these teachers recognized that there are resources to help them overcome these challenges and grow as educators in using assessment, and this growth is important to them for their professional practice.

4.4 Teachers Reportedly Collaborated With Other Educators and Used a Variety of Resources (Both Conventional and Innovative) to Help Them Navigate Their Understandings of AAL in Order to Grow as an Educator

When asked about what supports they used to help them understand more about assessment and AAL in particular, these teachers named a plethora of resources at their disposal. They also believed that continually learning about new strategies that can add to their teaching practice is important in their role as an educator. In this section, I will discuss how teachers highlighted the importance of getting support from other teachers in their schools and the benefits of learning within their school community. I will then move on to discuss conventional resources accessed by these teachers such as professional development workshops and books, as
well as modern online resources like social media and online blogs that were mentioned as supports for learning about assessment. I will then conclude this section with an examination of how these teachers felt that continual learning is an essential part of being an effective teacher.

All of the participants expressed the value of conversations with other educators in their schools as important resources for their assessment practice. All participants talked about the importance of working as a team with other teachers and learning from their experiences. When discussing ways to overcome assessment challenges, Margaret noted that “[o]ne of the most important things is when you are working, you cannot be working alone, you cannot be isolated. You’ve got to work as a team…[because] they can support you…[so] utilize the teachers within your group.” She further expressed the value of team learning, describing the discussions that she has experienced working with other teachers:

As teachers, we’d meet together and were able to [say] “this is what my classroom did”…and we had deep, deep discussions, and other teachers would share and they’ll say, “well maybe this doesn’t work” or “try this”…I think [this] needs to be done more frequently…those things are very vital…just hearing what other teachers did and how… really, really helps you as a teacher.

Margaret looked to other teachers as a resource because this provided an opportunity for conversations to be had about what worked and what did not work in their teaching practice. Katherine continued also underscored the importance of assessment in those conversations:

I think for too long education became this independent, ‘I work in my own classroom. I close my door. Nobody knows what’s going on’. That is changing. There’s definitely a much more open dialogue in education these days. It needs to be more so. And assessment needs to become that conversation.
Katherine noted that understanding what colleagues are doing in their classroom and not working in isolation is necessary. She also pointed out that conversations about assessment need to be a part of this discussion. Building on the former theme, these conversations that include a common language about assessment are seen as important for the future practice of educators so that assessment practices can evolve. Along with learning from their colleagues, participants noted using other conventional resources to help with their understanding of assessment.

Participants cited conventional resources such as professional development and books as valuable tools for growing their understanding of assessment. These resources are considered conventional as they involve traditional ways for professionals to gain knowledge within their field. Teagan mentioned that within her board, there are programs for new staff to be mentored by staff members in one’s schools and have the opportunity to co-attend professional development workshops “where they give you a lot of strategies and help you understand where it’s all coming from and how you can harness those tips and tools, so I think those are really valuable.” In this case, Teagan not only talked about the importance of professional development being a platform to understand the theory and practice of teaching strategies such as different assessment models, but she also brings in the factor of having mentors in her school to attend these workshops with so that she can also benefit from their knowledge as well. This is reminiscent of my former point about the importance of teachers working with other teachers to build knowledge about assessment. In this case, Teagan talks about how new teachers can also benefit from this type of interaction. Additionally, both Teagan and Katherine shared different books and authors who have written about assessment and have helped them in their understanding of the concept of AAL. During our interview, Katherine talked about different books that have helped her in her journey of understanding of the AAL model. She pointed out
Assessment 3.0 and noted how it was written by experienced teacher Mark Barnes, thus indicating again the importance of gaining knowledge from a community of educators.

Even when using conventional resources, however, these teacher participants still suggest the importance of learning through their fellow peers. Besides conventional resources, modern online tools were also viewed as useful places to go to seek out information about teaching practices with regards to assessment. Katherine utilized a variety of online teacher blogs and was a big advocate of online resources because of her familiarity with online platforms. The most useful place for her to find information about AAL was Twitter:

The professional learning you can do on there…the networking is amazing. No matter what you teach or what strategy you think you want to try, you can find people who are likeminded and if you find people who are likeminded, you then feel supported and you have a place to go when something goes horribly wrong…and you’re on there whenever you can be. It’s not a requirement to be on Twitter at a certain time to get some PD. You can go on, find what you need, and get off.

Again, the importance of establishing community in order to develop professionally is indicated here. For Katherine, Twitter not only gives her a place to learn about assessment, but was also able to learn and find support from other like-minded teachers. She also notes the convenience of the platform because she can use it at her leisure. This benefit is not seen with traditional professional development workshops that are often confined to specific times. Recall that this was seen as a challenge for these teachers because attending traditional professional development workshops required time investment outside of school hours. Here, Katherine suggested that with Twitter, the time investment is minimal allowing her to find what she wants, and move on with her day. No matter what resource the teachers interviewed used, the stated goal for them was to
gain up to date knowledge to develop their teaching practices which, as we will see, was important to their growth as educators.

All of the educators in this study made reference to a commitment to ongoing learning as a teaching professional. This was seen as even more necessary because of the changing nature of education and assessment practices. Katherine admitted that she was “at the point now where I realize that if I stop learning and stop changing, then I’m not doing my job anymore.” Here she implies that part of a teacher’s job is to seek out new information and continuously learn.

Margaret expands on this idea by adding that “as a teacher, you’re a lifelong learner. Even myself, it’s continuous because things change so you have to keep relevant.” Teagan reiterated this point by saying that “you have to take the initiative as a teacher who wants to stay current and relevant to really try and branch out sometimes and take advantage of opportunities like [professional development].” All of these teachers see the importance in keeping up to date, and continually growing and learning as a part of what it is to be a good teacher and develop good practices.

In this final theme, I have discussed how teachers looked to other educators for advice on assessment practices and information. Whether they were using conventional resources like professional development and books, or modern online resources like Twitter or online blogs, these teachers valued the knowledge and experience of other educators with assessment. This process of seeking out new and current knowledge through a variety of resources was also believed to be necessary and important to their professional roles as teachers.

4.5 Conclusion

In this chapter, I presented and discussed the findings and main themes from my interviews. Teachers in this study believed that assessment that was ongoing and involved a deep
understanding of their students was essential to their teaching practice. Additionally, these teachers each had different interpretations of what this assessment model was, which affected how they demonstrated it in their classrooms. Despite this, these teachers felt that new forms of assessment that move away from a traditional summative focus are necessary; however, resistant attitudes to change, a lack of time for professional development and common language about assessment were cited as barriers to assessment change. Finally, a variety of both conventional and modern resources, along with support from other educators, reportedly helped these teachers navigate their understanding of assessment in order to grow as educators. I discussed each of these themes by describing their contexts, presenting qualitative data from my interviews, and illustrating how this data aligned with the existing literature. As we have seen, Ontario intermediate teachers do not have unanimous experiences with understanding and implementing AAL; however, they do believe that assessment is key to their practice and the more they can understand about assessment strategies, the better they can help their students learn. In the next and final chapter, I will explain the importance of my findings with their significance to the current body of educational literature, implications for the educational community as well as my professional practice, and provide recommendations for various stakeholders within education as well as areas for further research within the Ontario teaching context.
Chapter 5: Conclusion

5.0 Chapter Introduction

In this final chapter I will reiterate my findings from this study and connect them to recommendations and further research within the field. I will start by providing an overview of the key findings and the significance of their implications within the Ontario educational context. I then elaborate on how this research has shaped me as a teacher-researcher and its connection to my future practice. From there, I will offer recommendations with respect to supporting teachers in implementing assessment as learning (AAL) in their classrooms. Finally, I will suggest areas of further research on AAL and an outlook on the shifting paradigms of educational assessment.

5.1 Overview of Key Findings and their Significance

The intermediate teachers interviewed in this study demonstrated a commitment to assessment within their teaching practices in order to help their students learn. Consistent and ongoing assessment was seen as the heart of what it means to be an educator. Through ongoing assessment, they reported being able to gain greater insight into who their learners were and how to best assist them in their learning goals. When it came to AAL, however, these teachers had varying understandings of the term and reported implementations within the classroom. The term was sometimes described in ways similar to formative assessment or assessment for learning and focused on teacher-centered assessment which helped these teachers understand their students’ learning as opposed to students understanding their own learning. This was also reflected in some examples of how it was represented in their classrooms. All of the teachers believed that assessment reform is necessary and moving away from the exclusive use of summative assessments is best for students. Unfortunately, they felt that there are some stubborn educators who are resistant to change and that this can impede the success of students.
As result of the change in assessment terminology over time, there is a lack of common language among educators which can contribute to a lack of understanding of what AAL actually is. To rectify this, these teachers expressed a need for more time to access professional development opportunities and collaborate with other educators to understand new assessment language and share best practices. This would provide ongoing growth for these teachers so that they can be better able to support their students.

These findings support a body of educational research that illustrates gaps in the understanding of different forms of assessment by Ontario teachers. Literature shows that many teachers want to be able to differentiate their assessments to better help their students learning, however there are misunderstandings with the goals of these assessments and what they may look like within the classroom (Volante, 2010; Volante & Beckett, 2011). It supports the continuous call of educational assessment researchers that teachers need more training and professional development on the differences, benefits, strategies, and what these new forms of assessment look like within their classrooms (Black 2014; Volante, 2010).

5.2 Implications

The findings of this research elucidate various implications for how AAL is being implemented within Ontario intermediate classrooms. In this section, we will see how intermediate students and teachers may be missing out on the breadth of assessment opportunities possible. Given this, I then connect my findings to how I understand AAL and my growth as an educator.

5.2.1 Broad implications: The educational community. The above findings paint a picture that AAL may not be regularly implemented by intermediate teachers with their students. Teachers who are more familiar with assessment terminology of diagnostic, formative, and
summative could be misunderstanding the new terminology of assessment for, as, and of learning. Teachers may be making one to one comparisons between these terminologies where AAL is understood synonymously as formative assessment, when this is not the case.

That being said, although intermediate teachers may not explicitly understand what AAL is as defined by the Ontario Ministry of Education, this does not necessarily mean that they are not implementing this within the classroom. There could be two possibilities. The first is that teachers do implicitly practice self and peer assessment activities with students, but do not consider this assessment since it does not inform them (the teacher) about their students’ progress. Alternatively, teachers may not consider self and peer assessment as beneficial and there may be an imbalance of assessment for and of learning occurring in classrooms at the expense of AAL since the former helps the teacher in terms of understanding student progress for teaching and evaluating purposes. If the latter is the case, then intermediate students could be missing out on self and peer assessment opportunities.

The absence of AAL in the classroom could mean that students are not receiving opportunities to develop metacognitive abilities that can help in self-regulation and management of their own learning. This would go against the push by Growing Success: Assessment, Evaluation and Reporting in Ontario's Schools, First Edition Covering Grades 1 to 12 (OME, 2010) towards student-centered learning. This would also be unfortunate because students during these grades are in an ideal developmental stage to exercise their metacognitive abilities which can benefit them in secondary and post-secondary school. AAL can augment these skills in students to establish their own learning goals and gauge their progress towards these goals.

5.2.2 Narrow implications: My professional identity and practice. When I embarked on this research, I was unsure of what AAL was because I grew up in a predominantly
summative assessment system. I was unsure what the assessment method looked like and was skeptical of whether or not it could actually help students. Through this journey, I have reflected on what the role of the teacher is, what student-centered learning should be, and where to find support as a new educator. Although I did not have an opportunity to see specific AAL strategies, I believe that it plays a crucial role in student-centered learning. However, if students can become master assessors of their own learning, then what is the role of the teacher? The participants in this study said that assessment was at the heart of their role as teachers. If students can assume a large part of this role, then what are we as educators to do?

AAL represents a fundamental shift in teaching. Assessment for and assessment of learning aim to determine whether students are understanding content as determined by the curriculum. On the other hand, AAL is less concerned with the acquisition of content, but rather reflects on the process of learning. In other words, it focuses on how content was learning as opposed to what content was learned. In the 21st century classroom where technology has made it such that content can be easily searched for, it is the teacher’s role to guide students into understanding the process of learning with the goal of creating independent learners. With regards to my teaching practice, this means actively making an effort to mindfully implement self-reflective practices within my lessons in the classroom. As a teacher, not only will I be prompting students with questions in order to understand whether they are comprehending material, but I will include questions for them to constantly reflect on during their learning process. This will also require me to involve students in the creation of their own learning goals and success criteria. Ultimately, I will need to relinquish some control of assessment and allow more space for students to mindfully work on their individual goals.
In my interviews, all the teachers expressed the importance of collaboration with other teachers in their schools, especially as a new teacher. Assessment can be an overwhelming topic and it is important to have conversations with other educators about what assessments are working for them and also for sharing strategies. It is also crucial to reach out to colleagues when things are not working. Furthermore, one needs to not be afraid to take risks when trying new types of assessment and accepting the prospect of things not working out perfectly. Given that AAL is a relatively new concept in assessment methodology, mistakes will be made, but the important thing is the effort of trying to create environments where students can understand their progress and grow metacognitively. Technology has also provided a vehicle for collaboration through Twitter, Instagram and internet blogs. Teachers are sharing what they are doing, therefore my resources network need not only stay within the walls of my school. There are many people all over the world doing AAL work and the internet is a great tool for leveraging these resources.

5.3 Recommendations

Based on the findings of this study, I offer several recommendations aimed at various stakeholders within the educational context of Ontario. Teachers have very demanding schedules with numerous responsibilities to balance. Assessment is a significant responsibility that is central to their roles. Therefore, administrators should allocate more time for teachers to collaborate on assessment practices and access professional development. This change can be done immediately during staff meetings or professional development days.

Related to this, the gap in assessment literacy with regards to AAL can be closed by providing opportunities for continuous teacher development provided by school boards. The participants in this study welcomed having ongoing professional development on assessment and
it is important that this training also provides specific AAL strategies that can be successfully implemented in the classroom. Within this training, it is also key to establish common assessment language that differentiates between diagnostic, formative, and summative assessment, and assessment for, as, and of learning. This language should be created and agreed upon by elementary and secondary teachers, as well as administration. Having a clear understanding of the subtle difference between these concepts is necessary if conversations about assessment are to be successful. Once this is established, more conversations about assessment practices can take place within departments and also between schools.

In the long term, teacher education should make assessment literacy more of a priority for pre-service teachers. Teacher education has an opportunity to strongly equip new teachers with a strong foundation of not only what AAL is, how it benefits students, and how it is different from assessment for learning, but also specific strategies for what this looks like. Through having specialized courses on assessment literacy or encouraging students to take additional qualifications in assessment, this can build confidence in new teachers entering the profession and will also provide a learning resource for experienced teachers in schools. Teacher education can also provide an opportunity to explore AAL with different student populations such as Indigenous students, English language learners, and students with identified learning needs in order to investigate ways to overcome barriers that may arise.

5.4 Areas for Further Research

Given that there still appear to be gaps in knowledge with regards to AAL with teachers in Ontario, there still needs to be continued research into educators’ understanding of this area. Much of the research in Ontario looks at assessment for, as, and of learning collectively, so there needs to be continued investigation into teacher attitudes, understandings of, and comfort with
AAL specifically. This exploration should also continue to look at experienced, new and teacher candidates. Additionally, further investigation into actual AAL strategies implemented in the classroom and their effects on student achievement is also needed as has been done in Australia (Fletcher, 2016; Fletcher & Shaw, 2012) and the UK (Ryan, 2006). Not only will this add to the body of educational assessment research in Canada, but it will also provide actionable evidence and strategies that teachers can not only learn from, but also use in their classrooms.

5.5 Concluding Comments

AAL is not just another assessment for teachers to implement; it provides cognitive benefits for students by focusing on how to learn with content, rather than on the acquisition of content itself. This idea drives the notion of student-centered learning. The paradigm shift in education towards student-centered learning is being strongly advocated, however this is not yet a reality and we still have a long way to go on this journey. Getting teachers relinquish some control of assessment maybe an uphill climb, but change is happening. By empowering students to take charge and responsibility of their own assessment, teachers can be sources of support for their students in becoming lifelong learners.
References


Appendix A: Letter of Signed Consent

Date: ______________________________

Dear ______________________________,

My name is Jonelle Mitchell and I am a student in the Master of Teaching (MT) program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). A component of this degree program involves conducting a small-scale qualitative research study. My research will focus on the experiences of Ontario intermediate teachers implementing the assessment as learning strategy. I am interested in interviewing teachers who have been teaching in Ontario for at least 10 years and actively use assessment as learning within their classrooms. I think that your knowledge and experience will provide insights into this topic.

Your participation in this research will involve one roughly 60 minute interview, which will be transcribed and audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. The contents of this interview will be used for my research project, which will include a final paper and presentations to my classmates. I may also present my research findings via conference presentations and/or through publication. You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications. This information will remain confidential. Any information that identifies your school or students will also be excluded.

The interview data will be stored on my password-protected computer and the only person who will have access to the research data will be my course instructor. You are free to change your mind about your participation at any time, and to withdraw even after you have consented to participate. You may also choose to decline to answer any specific question during the interview. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected. There are no known risks to participation.

Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.

Sincerely,

Jonelle Mitchell

MT Program Contact:
Dr. Angela Macdonald-Vemic, Assistant Professor – Teaching Stream
Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw from this research study at any time without penalty.

I have read the letter provided to me by Jonelle Mitchell and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: ____________________________________________

Name (printed): ________________________________________

Date: ______________________
Appendix B: Interview Protocol/Questions

Introductory Script: Thank you for agreeing to participate in this research study. I appreciate you taking time today to discuss your thoughts and experiences with me. My research study is about the experiences of Ontario intermediate teachers with implementing assessment as learning in their classrooms. I am interested in learning about what teachers understand about assessment as learning, how they plan and use it, and the challenges and/or supports they have had with regards to assessment as learning. My questions today will cover these areas. This interview will last approximately 60-75 minutes, and I will ask you a series of questions focused on the assessment as learning strategy and your experiences with it. I want to remind you that you may refrain from answering any question, and you have the right to withdraw your participation from the study at any time. As I explained in the consent letter, this interview will be audio-recorded. Do you have any questions before we begin?

Section A – Background Information
- Where did you receive your teacher training?
- How long have you been teaching?
- Do you have any additional qualifications? If so, what are they?
- What grades and subjects do you currently teach? Which have you previously taught?
- How long have you taught in this school?
- In addition to your role as a teacher, do you fulfill any other roles in the school (e.g. coach, advisor, resource teacher etc.)?

Section B – Understanding, Experiences and Beliefs About Assessment as Learning
- In your view, what would you say is the purpose of assessment, in general?
  - Do you feel that the current assessment strategies (for, as, of) as recommended by Growing Success are fulfilling this purpose?
  - Do you feel like these recommendations are realistic?
- How would you define ‘assessment as learning’?
- Research has shown that some teachers have some trouble understanding exactly what assessment as learning is. Why do you think teachers may have a hard time with understanding this and incorporating this into their classroom practice?

Section C – Assessment as Learning Strategies (Planning, Implementing, and Evaluating)
- Can you walk me through how you typically plan for assessment as learning in a lesson or a unit?
  - PROMPTS: in advance, single or multiple checkpoints, learning goals, success criteria, descriptive feedback
- Are there some subjects in which using this strategy is more effective/easier to implement than others? (Which subjects? Why?)
Can you tell me about a time (unit, lesson, assignment) when using assessment as learning with your students lead to positive outcomes?
  o What made you come to this conclusion?
Can you tell me about a time (unit, lesson, assignment) when using assessment as learning with your students was not as successful as you had hoped?
  o What made you come to this conclusion?

**Section D – Supports, Challenges, and Next Steps**

- What challenges (if any) have you encountered when using assessment as learning with students? (Challenges with certain students? ELLs? Those on IEPs?)
  o What do you do to manage these challenges?
  o Which of these resources have you found to be the most useful? Which of these resources have you found to be the least useful?
- What do you think can be done to help teachers with assessment?
- As a beginning teacher who is starting out, what advice do you have for me entering the profession with regards to assessment in general?
- We are now coming to the end of our interview. Do you have any final thoughts or anything else you would like to share with me with regards to assessment as learning specifically, formative assessment, or evaluation in general?

Thank you, sincerely, for your time and considered responses.