Teaching Strategies for Students with Developmental Speech Delays in Mainstream Classrooms

By

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Abstract

This research study explores effective teaching strategies for students with developmental speech delays who are integrated into mainstream classrooms. The purpose of this research is to help teachers find ways in which they can help to improve students’ speech abilities while in their mainstream classes. This research also looks at the different impacts, challenges, and benefits with having students with developmental speech delays in mainstream classes. In addition, this study explores teachers’ collaboration with speech language pathologists (SLPs), as well as parent involvement. Data for this research study was collected by conducting face-to-face interviews with two elementary school teachers. Findings of this study show many effective teaching strategies for teachers to use in order to support the improvement of their students’ speech impairments. As well, teachers reported the different challenges in having these students in their mainstream classes, and the effects that these challenges have on their students’ self-esteem and confidence.

Key Words: teaching strategies, developmental speech delays, mainstream classrooms, inclusion, challenges, impacts, self-esteem, confidence, elementary school teachers
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Teaching Strategies for Students with Developmental Speech Delays in Mainstream Classrooms

CHAPTER 1: INTRODUCTION

Introduction to the Research Study

The integration of students with special needs in mainstream classrooms is a trend occurring in classrooms around the world (Avramidis, Bayliss, & Burden, 2000). Many of these students are at a disadvantage because some teachers are not able to support these students’ individual needs since they are focusing on teaching the entire class (Avramidis et al., 2000). This results in these students with special needs not receiving the necessary support that they may need and thus may make them vulnerable to falling behind in their learning and development (Avramidis et al., 2000). I think that it is critical that teachers are able to support the needs of these students using specialized teaching strategies so that these students become successful in their academic careers and in their personal development.

However, I also think that educators need to remember that even though teaching strategies are being developed for students with special needs, it is important to integrate them in ways that do not negatively impact the rest of the class but rather benefit all learners. These strategies must be able to provide a balance between maintaining the academic and developmental levels of the classroom as well as being responsive to the individual needs of the children with special needs in the class.

In my study, I am specifically focusing on students with developmental speech delays who are being integrated into mainstream classrooms. Developmental speech delays are classified as abnormalities in the development of speech skills in children stemming from birth (Hoff, 2009). Children with normal speech and language development follow key milestones that occur at specific ages (Hoff, 2009). Some of these milestones include cooing, babbling,
holophrastic speech (one-word utterances), telegraphic speech (2-3 word utterances), and full-sentence production, just to name a few (Hoff, 2009). Children that do not meet these milestones in their speech development or have abnormalities in these skills are usually seen as having developmental speech delays or impairments (Hoff, 2009). Some speech impairments include stuttering, lisps, apraxia, and dysarthria (Hoff, 2009).

**Purpose of the Study**

The purpose of this study is to learn about a range of teaching strategies that are specifically responsive to the learning needs of children with developmental speech delays who are integrated into mainstream classrooms. This study is important to the education community, including teachers, students, and parents, because I think that if students with developmental speech delays are being integrated into mainstream classrooms, educators should be aware and knowledgeable on teaching strategies that are responsive to these types of students. These strategies should also benefit the rest of the students in the class.

According to the Ontario Ministry of Education (1988), all public schools in Ontario are required to provide speech and language services to students who struggle in these areas. SLPs may be assigned to pupils who are in need so that they receive the support that they require. These speech and language services support students in need when the SLPs are working directly with these students, however this support is not being provided during the majority of class time.

In addition, incorporating these teaching strategies may offer challenges to some teachers, and some teachers may even feel that direct speech therapy is not in their realm. Throughout my investigation, I want to learn about effective teaching strategies that all teachers can use with students with developmental speech delays.
Research Questions

The main question guiding my research is:

What instructional strategies are being employed by a sample of mainstream elementary teachers as responsive pedagogy for their students with developmental speech delays?

Sub-questions:

• Do teachers feel adequately trained to be using these teaching strategies?
• After using these strategies, which strategies showed improvements in these students socially, academically, behaviourally, and emotionally?
• What are teachers’ reactions towards having these types of students their classrooms?
• What challenges do teachers, the students with speech impairments, and the other students in the class face by having students with speech impairments in the classroom?
• What are the benefits and concerns with consulting with SLPs?
• What parent involvement or support do students with speech impairments receive?

Background of the Researcher

This research topic is of interest and concern to me for different reasons. The first reason is because I have experience working with many children with various special needs. In particular, after studying Linguistics while completing my undergraduate degree at the University of Western Ontario, I took an interest in children who have developmental delays in their speech. Having worked with SLPs and seeing the time and effort that they spend with children who have speech impairments, I was able to see how much special support these children need. Children with severe development speech delays are likely to be integrated into mainstream classrooms along with children with minor speech delays, but they might not be
receiving the necessary support that they need. This can also lower their self-esteem, which concerns me. It is very challenging for teachers to be able to give support to these children while at the same time teaching the rest of the class, so I want to find out what teachers do in order to accommodate these children and how they think their accommodations benefit these students.

As well, throughout my volunteer work and practicum experiences, I have seen some children with speech impairments who have not received the necessary support that they need. I have seen cases where teachers did not address their students’ problems because they did not have the time or training to address their specific issues. This is very unfortunate and I want to see if there are ways in which this can be changed.

Lastly, as a child I was a very slow reading learner. Not enough special help and remedial support was given to me, which ultimately affected my reading skills even today. Having not been given the extra help that I needed and continuing on as a struggling reader had a negative impact on my self-esteem whenever it came to reading, and gave me a lasting negative attitude towards reading in general. I know that if more remedial support was given to me while I was learning to read, and if certain teaching strategies were used in order to help me become a better reader, I would have become a much stronger reader and would enjoy reading a lot more.

Because I lacked extra remedial support in an area in which I struggled, I understand what other students are going through when they are not receiving the necessary support in the areas in which they are struggling. Whether it is difficulties in reading, math, fine motor skills, or speech, to name a few, I believe that all students should be given the extra support, both developmental and academic, in the areas in which they are struggling. I believe that it is the teachers’ role to try their best to help their students develop in all aspects of life, whether they
are able to give this support to students personally, or whether they find the adequate support from a specialist or use special resources.

   All in all, based on my personal experiences, I want to ensure that the necessary support is given to students that need the extra help in whatever area they are struggling so that they improve and are successful. I think that it is not only important for academic success, but also very important for students’ self-esteem that they receive the support and help in areas that are needed. With effective teaching strategies, I think that all students can strive in all learning areas and can be successful in their academic careers as well as in their everyday lives.

   

Overview

   In Chapter 2, I review the literature and research relating to my topic. In Chapter 3, I describe the research methodology and procedures used in this study, including information about the sample participants and data collection instruments. In Chapter 4, I describe the participants in the study and report the data findings as they address the research questions. In Chapter 5, I review the limitations of the study, articulate conclusions, make recommendations for practice, and identify areas for further reading and study. References and a list of appendixes follow at the end.
CHAPTER 2: LITERATURE REVIEW

While reviewing the literature, I noted four reoccurring themes. These themes include 1) teaching strategies that are responsive to students with developmental speech delays in mainstream classrooms 2) impacts and challenges with having students with developmental speech delays in mainstream classrooms, 3) the extent that teachers have (and not) adequate training in order to be responsive to students with developmental speech delays in their classrooms, and 4) teacher’s relationships with SLPs in order to learn about different teaching strategies that they can use with these students and how to effectively utilize them.

Teaching Strategies and Outcomes

In my research, I looked for articles that described teaching strategies that teachers use in their classrooms that are responsive to students with special needs who are integrated into mainstream classes, in particular for students with developmental speech delays. Nilholm and Alm (2010) discovered different teaching strategies in their field work that teachers used in their classrooms in order to accommodate their students with special needs. First and foremost, they made general classroom rules that were geared towards creating an inclusive environment. For example, one rule stated that all students had the right to speak and to voice their own opinions. Another rule stated that all students must be respectful of one another and that everyone must try to accept the other students’ differences as something positive. As well, the students in the classroom were given differentiated instruction, and extra help and support depending on their individual needs (Nilholm & Alm, 2010).

Gelston (2004) also mentions that it is very important that teachers teach their students the importance of inclusion right from kindergarten so that students with developmental speech
delays are made to feel comfortable and accepted in their classes. He says that it is very important for teachers to be accepting of these students and to promote positive attitudes towards these students (Gelston, 2004). He also says that teaching inclusion early in life can help stop negative attitudes from forming towards people with speech impairments later in life (Gelston, 2004).

Creating an inclusive environment is very important in helping to make students with differences feel safe and respected in the classroom. As well, giving all students a voice in the class and giving them opportunities to speak, especially students with developmental speech delays, will encourage the students to participate in the class and will help to raise their self-esteem. This will also give students with developmental speech delays an opportunity to practice their speech and to improve on certain sounds, which is very important for their speech development. As well, providing the necessary support for these students while including them in a mainstream classroom can help these students develop in their speech skills while feeling included in their mainstream classes.

Gelston’s (2004) article also focuses on the importance of interacting with students with speech impairments. He states that it is very important for teachers to be in close proximity to these students and to listen closely to these students’ speech so that the teachers can assess the students’ speech as well as clearly hear what they are saying (Gelston, 2004). He recommends repeating or paraphrasing the students’ speech once they are finished speaking so that the other students can understand what these students are saying. He explains that this will also show the students the correct way of saying certain words (Gelston, 2004). He also encourages teachers to promote conversations among the entire class and including the students with speech impairments in the conversations so that they get practice using their speech (Gelston, 2004). He
also suggests allowing students to collaborate with one another in order to promote speaking with one another and learning from each other (Gelston, 2004). He also mentions that teachers praised the students as they read and helped them sound out certain words (Gelston, 2004).

Gelston (2004) also mentioned that it is very important to have students with developmental speech delays practice their reading out loud. He said that when students mispronounce words or a sentence while reading, it is important to encourage the students to keep reading (Gelston, 2004). He also mentioned that instead of correcting a student who mispronounces a word while reading, it is more effective to give the students hints of how to say the word correctly (Gelston, 2004). He also suggests providing synonymous words or guiding students towards pronouncing the words that they are struggling to articulate (Gelston, 2004). In addition, Gelston (2004) suggests that in order to diminish frustration of students that are struggling to articulate their words, it is important for instructors to repeat or clarify what these students are trying to say so that their peers could still understand their messages.

A case study by Low and Lee (2011) also suggests strategies in helping students with speech and communication deficits to improve their speech skills. They recommend using strategies such as “turn-taking”, “object-picture matching”, and “imitating vocalization”, just to name a few, in order to promote the speech of these students (Low & Lee, 2011). These strategies help students hear the correct way of saying certain sounds, which is an effective strategy for helping to improve students’ speech skills (Low & Lee, 2011).

In an article by Mroz and Letts (2008), they used a narrative approach to describe interviews that were conducted on fifty early years practitioners, including school, nursery, and playgroup staff. The practitioners discuss their experiences of working with children with speech, language and communication deficits. They describe the characteristics of the children’s
behaviours and how they were identified, as well as strategies that they used in order to help these children improve their speech, language and communication skills. Most of the practitioners reported using teaching strategies with these children including “one-on-one activities”, “modeling”, and “games” (Mroz & Letts, 2008). A few of the practitioners who had been working with a Speech Language Therapist also used “correcting” as a strategy (Mroz & Letts, 2008). This strategy consists of correcting the students after they speak and pointing out what the student had said incorrectly (Mroz & Letts, 2008).

These teaching strategies can also be applied in different types of classrooms. In the work done by Hourigan (2008) on music classes, he reminds us that it is important that we include students with different abilities in performances, like students with developmental speech delays. He mentioned that even if these students’ contribution is small, we want to make sure that they still feel that they are part of the team (Hourigan, 2008). He also states that peer teaching and collaboration can be very beneficial to students with different abilities (Hourigan, 2008). As well, he states that extra help, like spending extra time with these students to practice their music, as well as providing additional resources like videotapes, can really make a big difference in their learning and success (Hourigan, 2008).

Even though this article was written for music teachers, the teaching strategies that the Hourigan (2008) describes can mostly be applied to all subject areas, not just for music teachers and conductors. He describes the importance of the inclusion of students with different abilities, and stresses that it is very important that these students still feel of value and part of the team, even if their contribution is small (Hourigan, 2008). This can have a positive impact on self-esteem, and can encourage these students to participate and try their best. Regardless of the subject, it is very important to include students with developmental speech delays in
performances, presentations, and in sharing their ideas or work with the rest of the class. It is important that these students have the same opportunities as the other students in the class to practice their speech.

**Impacts of Inclusion**

There are both benefits and challenges with including students with developmental speech delays in mainstream classrooms. A range of perspectives on the issues related to the impacts of including students with speech impairments in mainstream classes can be seen from a variety of stakeholders, including teachers, students with special needs, and other students within the mainstream classrooms.

**Impacts on Teachers**

After reviewing some articles, it appears as though teachers have found both challenges and benefits with including students with developmental speech delays in the classroom. In a study aiming to offer insight and suggestions to educators in both regular schools and in special education programs on how to teach speech, language, and communication skills to students with severe Autism Spectrum Disorder (ASD), Low and Lee (2011) found that teachers think that it is very important to promote sustainable inclusive education for children who struggle with speech impediments and other developmental impairments.

Sadler (2005) found that teachers had both positive and negative points of view with having students with speech impairments in the classroom. Teachers in this study were asked about their knowledge, beliefs, and attitudes towards including students with speech impairments in mainstream classrooms and the impacts that these speech impairments had on the students’
social, emotional, language, and educational development. Results showed that the majority of these teachers thought that integrating these children into mainstream classrooms had positive impacts on the students, and that the advantages of having them in the class outweighed the disadvantages (Sadler, 2005). For example, one advantage that most teachers agreed upon was that these children had good peer influences when they were integrated into mainstream classes (Sadler, 2005). Most of the disadvantages had to do with management issues, like class size and not enough individual support to improve the students’ speech skills (Sadler, 2005).

Lindsay, Dockrell, Mackie and Letchford (2005) also discussed the challenges with including children with specific speech and language difficulties in mainstream schools. In their study, they interviewed heads of language units/integrated resources as well as head teachers of special schools. These subjects were asked about their views on criteria for students’ entry into specialist provisions, the development of collaborative practice between teachers, teaching assistants and speech and language therapists, and the implications for inclusive education. They found that the majority of the subjects interviewed were in favour of inclusive educational systems for students with speech and language deficits, although they felt that collaboration between SLPs and the teachers were necessary (Lindsay et al., 2005). They also felt that providing these students with special language units and integrated resources were still necessary for these students in order to support their needs (Lindsay et al., 2005).

Lastly, Gelston (2004) found that the main challenge that teachers may face with having students with speech impairments in the classroom is that teachers may not be able to provide the necessary support to these students because of the large class size. He mentions that smaller classes are more conducive for students with developmental speech delays because the teachers are able to give more one-on-one support to these students and to help them work on their speech
skills (Gelston, 2004). He also noted that this individualized support from the teacher might also result in an increase of participation of students with speech impediments (Gelston, 2004).

I think that it is very important that despite the challenges that teachers may face in including students with developmental speech delays in their classrooms, that they try to support these students to the best of their abilities, or find remedial support or extra resources for these students if they do not feel adequately trained to support these students. I also think that it is important for all teachers to create inclusive and safe classroom environments so that students with different ability levels and skills feel comfortable to participate in the class, and are accepted by their peers.

**Impact on Students with Developmental Speech Delays**

In looking at articles discussing the impacts of inclusion on students with developmental speech delays in mainstream classrooms, I found that Gelston (2004) had much insight to offer. Not only did he conduct research on this topic, but he also talked about his own personal experiences as a young student in the classroom with a speech impediment. Gelston (2004) mentions that students with developmental speech delays tend to opt out of participating in class discussions or speaking wherever possible, even though they are likely to have the same cognitive abilities as the other students in the class. They may do this to avoid embarrassment from making speech errors or to avoid disrupting the fast-pace flow of the class (Gelston, 2004). Not knowing how other students in the class will react to their speech impairments also discourages students with speech impairments to participate in class (Gelston, 2004). Gelston (2004) also mentions that students with speech impairments may also choose to stay silent during class discussions in order to save the teacher and fellow peers the task of figuring out what they
are trying to say. He mentions that it is common for students with developmental speech delays to talk privately with the teacher at the end of a lesson or to wait until the end of the class to avoid other classmates from hearing their speech errors (Gelston, 2004).

As well, Gelston (2004) mentions that students with speech impairments may even avoid asking questions during class for clarification to avoid the embarrassment of sounding incoherent, or because it may take the student too long to formulate their thoughts into words and to articulate their words. Gelston (2004) mentions that some students fear that their teachers or peers may get frustrated or impatient waiting for them to articulate their speech so they avoid making comments in class or asking questions. This is unfortunate because students with developmental speech delays would greatly benefit from participating in class discussions so that they could practice their speech and communication skills. Gelston (2004) also mentions that the communicative process between teachers and students or between peers is “a necessary element in the act of learning” (pp. 21) and that when students opt out of speaking because of their speech impairments, these students are not receiving the full benefits of education.

Gelston (2004) also mentions that class size can have an impact on student participation. He mentions that students with speech impairments may be discouraged to participate in classes with more peers for fear of bringing more attention to the way that they sound (Gelston, 2004). Smaller, more intimate classes are less intimidating for students with developmental speech delays, and these students may feel more comfortable contributing to class discussions (Gelston, 2004). He also states that when students with speech impairments receive one-on-one support from the teacher, this tends to raise their self-confidence and makes them more confident to communicate with their peers (Gelston, 2004).
In addition, Gelston (2004) also mentions that a challenge that students with speech impairments may face is having to interrupt their teachers or peers because of miscommunications. He explains that sometimes when students with speech impairments ask questions during class, the teacher or their peers may mishear them and provide a response to what they thought they heard (Gelston, 2004). Gelston (2004) says that students with speech impairments sometimes have to interrupt their teachers or peers in order to correct any miscommunications and to get the answer to what they were looking for in the first place. This can cause the students embarrassment or frustration (Gelston, 2004).

I think that it is very important that students with developmental speech delays feel confident in participating in class discussions. This relates back to the teacher creating an inclusive and safe classroom environment for all of the students in the class. Once students with speech impairments feel comfortable participating in class discussions, they will get more out of their learning and may also improve on their speech skills.

**Peer Impacts**

Other students in the classroom may be impacted by their peers with developmental speech delays, or may have an impact on their peers with developmental speech delays. Gelston (2004) reported that females were more attentive and passionate when it came to trying to understand students who had speech impairments than males. He mentioned that the female students were more willing to understand those with speech impediments by repeating back what was said or paraphrasing what was said in order to make sure that the students with speech impairments were understood (Gelston, 2004). However, he pointed out that both male and female students would collaborate with one another if in a situation where they were trying to
figure out what a student with a speech impediment was trying to say (Gelston, 2004). As well, he also mentioned that once teachers and peers understood the speech patterns that the speech impaired students tended to make, the teachers and peers would be able to understand these students much better and they would not need clarification for what was said (Gelston, 2004). This in turn relaxed the speech-impaired students, allowing them to speak more comprehensibly (Gelston, 2004).

Gelston (2004) also mentions that other students in the classroom may think that students with developmental speech delays are not as competent as their fellow classmates because of their speech impairments. He states that often, once the students with speech impairments have the opportunity and time to demonstrate that they are knowledgeable in the subject area being studied, the rest of the peers become more accepting and inclusive towards these students, and think higher of them (Gelston, 2004).

Lastly, Gelston (2004) mentions that it is important for all students to participate in free-play activities with one another because this encourages positive interactions among peers. He says that activities where students are sharing toys with one another and conversing with one another will encourage positive attitudes towards students with speech impairments (Gelston, 2004). He also mentions that it is important for students to participate in teamwork activities and cooperative play in order for the students to become more accepting of one another (Gelston, 2004).

I think that it is important that students are open-minded and accepting of each other’s differences. I understand that peers can have a big impact on each other’s self-esteem and development, so it is important for students to get to know each other and to be accepting of each other’s differences. As well, once students get to know one another, they may see that they have
more in common with each other than they originally thought. This can be accomplished from a very young age through play. Once students are older, I think that it is important for students to collaborate with each other by working together in class.

**Collaboration/Consultation with SLPs**

Many articles stressed the importance of teachers consulting with SLPs in order to learn the correct strategies to effectively support the needs of the students with developmental speech delays in the classroom. Mroz and Letts (2008) found that the practitioners that they interviewed saw the importance of working with SLPs in order to receive proper training to work with the students with developmental speech delays. They mentioned that the practitioners who had been working with SLPs learned many different strategies that were responsive to these students, including a very effective strategy called “correcting” (Mroz & Letts, 2008).

Similarly, Murphy (2013) found that it was beneficial for teachers to consult with SLPs. In this study, Murphy (2013) looked at the collaboration between SLPs and special education teachers (SETs) in helping students with speech impairments. This study was completed using questionnaires and was given to the SLPs and the SETs. It focused on teaching strategies/treatment, collaboration between professionals, knowledge of others’ professional duties, as well as demographic information. Results showed that little collaboration among the SLPs and the SETs occurred (Murphy, 2013). The SLPs reported that their main focus when working with children with speech impairments was to improve their communication skills (Murphy, 2013). The SETs’ main focus was on the educational curriculum as a whole (Murphy, 2013). SETs reported that most collaboration was only done for specific cases rather than routine collaborations (Murphy, 2013). They also indicated that the professionals they most often
collaborated with were general education teachers as opposed to professionals like SLPs (Murphy, 2013). In addition, the SLPs reported that they had knowledge of the others’ professional duties, but the SETs mainly reported that they did not have adequate knowledge of the others’ professional duties (Murphy, 2013).

In addition, Murphy (2013) also discovered that the majority of the SLPs reported delivering treatment through both individual and group therapy, whereas the SETs mainly used small group instruction most frequently. The SLPs also reported conducting treatment in a special therapy room versus the SETs who conducted lessons in a classroom with five to ten students (Murphy, 2013). As well, the SLPs reported that for the most part they did not use a specific reinforcement schedule, compared to the SETs who reported using a continuous reinforcement schedule followed by an intermittent schedule (Murphy, 2013). Murphy (2013) found that both SLPs and SETs used verbal praise as the most frequent type of reinforcement. As a whole, results showed that both the SLPs and SETs believed that collaboration among the professionals would be of great benefit to the students’ outcomes and success (Murphy, 2013). They believed that this would help to improve the services and instruction provided to the students with speech impairments, and that this would increase both their treatment and educational outcomes (Murphy, 2013).

Another interesting finding by Lindsay et al. (2005) showed that attitudes towards inclusion changed depending on whether teachers had consulted with SLPs. They found that the majority of the people that they interviewed were in favour of inclusive educational systems for students with speech and language deficits if there was collaboration between SLPs and the teachers (Lindsay et al., 2005).
Overall, it is very important for teachers to consult with SLPs in order to learn the effective teaching strategies to support the needs of students with developmental speech delays. I think that it is important that there is constant open communication between the two professionals in order to improve the students’ development. I think that it is also important that teachers feel confident in supporting students with speech impairments in their classrooms, and that collaboration between teachers and SLPs can help to improve this confidence.

Adequate Training for Teachers

It is important that teachers are able to provide the necessary support for the students in their classrooms. In order to provide the necessary support for the needs of the students in their classrooms, teachers need the adequate training. Gelston (2004) mentions that teachers who lack adequate training in working with students with developmental speech delays may not be able to provide the support for these students or understand what these students are struggling with. He says that teachers lacking this training may become impatient or frustrated while waiting for students with speech impairments to formulate and articulate their words, or may rush these students while they are trying to speak (Gelston, 2004). He also mentions that teachers with inadequate training may interrupt or cut these students off while they are speaking, and then proceed to answering a question incorrectly because they did not wait for these students to finish asking their questions, or misunderstood what these students said (Gelston, 2004).

In Sadler’s (2005) study, most of the teachers reported that they had not had any prior training specific to speech impairments, and the majority of those who were already working for five years had never previously taught students with speech or language deficits. Almost all teachers reported that they felt “limited” or “very limited” in their knowledge of speech impairments, and more than half of the teachers indicated that they felt “not at all” or “not very”
confident in teaching students with these speech impairments (Sadler, 2005). None of the teachers reported feeling “very confident” (Sadler, 2005).

Another important thing to consider when including students with developmental speech delays in mainstream classrooms is being able to provide them with the appropriate resources and learning tools in order to support their learning and development. Lindsay et al. (2005) felt that providing students with speech and language impairments in mainstream classrooms with special language units and integrated resources were necessary for these students in order to support their needs and for their overall success.

Summary

Overall, it seems as though there are both challenges and benefits with including students with developmental speech delays in mainstream classes. Including students with speech impairments impacts the teachers, the students with speech impairments, as well as the other students in the class. However, there are many effective strategies that teachers could implement in order to support the needs of students with speech impairments. As well, by creating an inclusive classroom, students with developmental speech delays as well as the rest of the students in the classroom can learn from each other and benefit from this inclusion. This can also improve the self-esteem of the students with speech impairments in the classroom. In addition, it is important that teachers consult with SLPs and that they have the adequate training in order to provide the necessary support to students with speech impairments.
CHAPTER 3: METHODOLOGY

Procedure

For this research study, I took a qualitative research approach to study teaching strategies that are responsive to students with developmental speech delays who are integrated into mainstream classrooms. I conducted a literature review of past research on this topic in order to get a sense of what research has already been done on this topic and to learn about findings from past research. I then conducted face-to-face semi-structured interviews with two teachers. These teachers had to meet the criteria of being Ontario elementary school teachers who have used teaching strategies that are responsive to children with developmental speech delays in their mainstream classrooms. They also had to have worked together with SLPs in order to ensure that the teaching strategies that they were using were effective.

Once I had collected my data, I transcribed my interviews and coded them. I coded these interviews by looking for common themes that arose from both interviews. I found five main themes from the data and organized my findings based on the five themes and their sub-themes. Finally, I compared my findings to the findings from my literature review in order to find similarities and differences among the research.

Instruments of Data Collection

I used a semi-structured interview protocol (see Appendix A) as my instrument of data collection. I formulated interview questions to align with the headings of my literature review. I wanted to compare my results with past literature and to see what additional findings I could come up with. I recorded these interviews using a recording application on my smartphone, which I will delete after the completion of my research project.
As well, after reviewing literature, I was able to see many strengths of conducting an interview as the instrument of data collection. Some of these strengths include hearing about first-hand experience from the interviewee (Collins, 1970). This data appeared to be valid as during my interviews I was able to hear about my participants’ first-hand experiences, and I was also able to probe for more in-depth answers. Also, Collins (1970) mentioned how the interview can open many different doors that may not have been opened because the nature of an interview is so open-ended. This happened to be true because during my interviews the conversations led to topics that I did not think to inquire about, but that the participants happened to bring up on their own. This gave me great insight on additional topics and helped me dig deeper into the topics under investigation. As well, Collins (1970) mentioned how interviews also give voice to the interviewee, allowing different stories and opinions to come out. This occurred during my interviews and was very insightful for my research.

Participants

I conducted informal interviews with two elementary school teachers. I selected teachers who have used teaching strategies that are responsive to children with developmental speech delays in their mainstream classrooms, and who have collaborated with SLPs.

I recruited the teachers for my research by asking teachers from my practicum schools if they knew of any teachers who worked with students with developmental speech delays in their classrooms. I also contacted SLPs who work with teachers to ask them to refer me to teachers who use teaching strategies for students with developmental speech delays in their classrooms.
I chose teachers who have been teaching for at least five years so that they would be able to talk about their experiences working in different classrooms with different types of students, and so that they could reflect on their years of experience.

**Data Collection and Analysis**

I digitally recorded my interviews using a recording application on my smartphone. I then transferred these recordings onto my computer. Once on my computer, I was able to play these recordings while transcribing them at the same time. Once I transcribed both interviews, I looked for similarities and common themes that emerged from both interviews. I then used different coloured highlighters to colour-code each transcript based on the five themes that emerged from both interviews. I then discovered different sub-themes from the overall themes in my interviews. Once the transcripts were colour coded, I typed up a chart with the themes and sub-themes for each interview. In these charts, I included the quotes that supported each sub-theme. I then used these charts to record my findings in Chapter 4, making connections between the two interviews. I then compared my findings to the findings from my literature review and compared these in Chapters 4 and 5.

**Ethical Review Procedures**

For my research study, I followed the ethical review approval procedures for the Master of Teaching program. All participants remain anonymous, and I used pseudonyms in my work in order to keep all names mentioned confidential. All participants were given a consent letter (see Appendix B) explaining the purpose of the study and were given the option to withdraw from the study at any point. As well, all recordings of the interviews will be deleted upon the completion of my research.
CHAPTER 4: FINDINGS

This chapter describes my participants and summarizes the findings to my research questions. I found the results to be quite consistent between the two interviews that I conducted. I organized this chapter by diving it into themes and sub-themes that arose from my interviews. These themes and sub-themes are organized as follows:

**Theme 1: Teaching Strategies for Students with Developmental Speech Delays**
- Teacher-Instructional Strategies
- Self-Selected Strategies Used by Students
- Whole Class Inclusionary Strategies

**Theme 2: Impacts of Inclusion**
- Impact on Teachers
- Peer Impacts

**Theme 3: Teacher Training**
- Teaching Experience
- Special Education and Speech Therapy Training
- Consultation with SLPs
- Personal Experiences

**Theme 4: Parent Involvement**
- At-Home Help
- Private Speech Therapy
- Parent Communication with Teachers and In-School SLPs

**Theme 5: Self-Esteem**
- Students with Developmental Speech Delays
- Peer Impact on Self-Esteem and Confidence

**Background Information of Participants**

For this research study, I interviewed two junior kindergarten teachers, Rachel and Leah (these are pseudonyms). I decided to use kindergarten teachers because it is common for students at this age to have speech impediments, and these teachers both had lots of experience working
with students with speech impairments. As well, they have both consulted and worked together with SLPs in learning strategies for supporting students with developmental speech delays.

Rachel has been teaching for twenty-three years and has taught kindergarten all the way through to grade 6. Most recently, she has been teaching in the kindergarten department of her school, and is currently teaching junior kindergarten. She has always taught in typical classrooms, but has her special education certification from South Africa. As well, she did additional speech and drama certifications in South Africa before moving to Canada.

Leah has been teaching for twenty years and has always taught in the kindergarten department. She has taught both junior and senior kindergarten, but is currently teaching junior kindergarten. She has always taught in typical classrooms but has completed all three levels of the special education additional qualification certifications.

Key Findings

Theme 1: Teaching Strategies for Students with Developmental Speech Delays

• Teacher-Instructional Strategies

This sub-theme focuses on instructional strategies that the teacher can implement for students with developmental speech delays. Rachel started off by mentioning that, “you never want to rush a student while they are speaking”, “you want to wait for the students to produce words on their own”, “you should repeat words back for students correctly so that they can hear it correctly, but don’t insist that they repeat it back”, “show the students how to make the sound and where the tongue touches the teeth at the back”, “give the students as many opportunities as possible to speak and to say words with tricky sounds in them, like ‘words with S’s and R’s’”, as well as, “make silly sounds, like a ‘Rrrrr!’ while playing with a car so that they can copy the
sounds.” She also mentioned, “If you play games with them and you’re silly with them, they hear you saying funny things too, and they’ll be more inclined to say it.”

Many of the strategies that Rachel mentioned were consistent with the strategies that I found in my literature review. For example, Gelston (2004) also mentioned the importance of repeating words back to students so that they could hear the correct way of saying certain words and sounds. As well, he also mentioned that it is very important to promote the speech of students with speech impairments so that they get practice speaking, which can lead to improvements in their speech abilities (Gelston, 2004). Gelston (2004) also said that it is important that students with speech impairments are not rushed while speaking, but rather that teachers give them adequate time in articulating their words.

Rachel also mentioned that when giving these students one-on-one support, she “plays little games with them like the Silly Sack Game” in order to work on the tricky sounds. She also recommended to “play rote games with the students alone so that they can repeat after you while playing a game.” She mentioned that when she taught older grades, “It was less play and more private conferencing because you don’t want to embarrass them…Repeating back, and giving them an opportunity to speak because they will opt not to speak at all because maybe they are aware of their problems and they’re embarrassed by it.”

These findings are also consistent with the studies from my literature review. Mroz and Letts (2008) emphasized the importance of one-on-one activities, modeling, and playing games with students with speech impairments. As well, Low and Lee (2011) also mentioned that turn-taking and imitating vocalizations were important strategies to use with students with speech impairments, which are similar to the rote game strategies that Rachel described.
Both of my participants mentioned that it is important to repeat words or sentences back to students rather than correcting them. Rachel suggested to “ask the students questions like, ‘Did you mean this?’ and repeat it back to them, or ‘Try it again if you want!’” Similarly, Leah said, “instead of asking them ‘What did you say?’ I kind of give a sentence and then ask them if that’s what they meant”. They both said that repeating words or sentences back to them is important so that the students could hear the proper way of saying the words and then they can try again if they would like or just move on. This is consistent with what Gelston (2004) mentioned in his findings. Rachel also said that sometimes the students understand each other better than the teachers may understand them, so she suggested that sometimes you can ask one student what the other one said for clarification. This is consistent with findings from Gelston (2004) as he mentioned that students tend to understand each other’s speech patterns more than some teachers understand their students’ speech patterns.

Rachel also mentioned that when having a conversation with a student with a speech impairment, you should, “just keep repeating things back to them and keep conversing with them and smiling at them” rather than stopping and correcting them. She said, “never correct them because this will discourage them from speaking.” However, she mentioned that when you repeat words back to them and keep conversing with them, it encourages them to keep speaking. Gelston (2004) also mentioned that rather than correcting students’ speech, it is more encouraging to repeat words back to them and to ask them if that was what they meant. As well, Rachel mentioned, “Never pressure a student to speak or to get their words out quickly”, rather it is important to “wait” and “smile at them” so that they know you are allowing them time to formulate and articulate what they are trying to say without feeling rushed. She pointed out, “as
soon as you force them to do something, they won’t do it.” This is also consistent with Gelston’s (2004) findings.

Something very interesting that my first participant pointed out to me was that, “you have to reprogram yourself to say things in order to promote their speech.” She explained, “Don’t ask questions that just require one word answers, like a ‘yes’ or a ‘no’ because it’s not going to promote their language.” She suggested that rather than asking yes/no questions, ask them to explain certain things in order to get a fuller response from them and to get them talking more.

Something that surprised me was that both of my participants said to “never prompt a student”. This came as a surprise because I thought that if a student was stuttering over a word, you would want to help them find the word, but I learned that it is best to just let them take their time and get their words out on their own. They explained to me that students with a stutter will often have the word in their mind, but it is the production of the actual word that is the problem. They said that giving them time to get the word out on their own is very important for both their development and self-esteem. Gelston (2004) also mentioned that it is very important to encourage students to take their time in order to formulate their own words. However, he also suggested that teachers could provide the students with hints or synonymous words, or to guide them in order to help them articulate their words (Gelston, 2004).

• **Self-Selected Strategies Used by Students**

This sub-theme focuses on strategies that teachers can help students implement and self-select on their own. Rachel mentioned that, “having the students slow down when they speak” is very important. She mentioned how students tend to rush when they are speaking, and having them get into the habit of slowing down when speaking is especially useful for students with
speech impairments. She also mentioned that it is important that students practice “producing the sounds,” so encouraging them to speak to others and starting their own conversations can help them develop speech skills. Gelston (2004) also emphasizes how important it is for students to have conversations with the teacher and with their peers in order to practice their speech sounds.

• Whole Class Inclusionary Strategies

This sub-theme focuses on strategies that are implemented by the teacher and practiced with the entire class, but that will especially benefit the students with speech impairments. Rachel and Leah really stressed the importance of never singling out a student or pointing out a student’s disability in front of the class. They both mentioned that rather than only stressing these strategies for the students with speech impediments, there are many activities that could be done as a whole class. For example, Rachel mentioned, “You can have all the kids try to make the tricky sounds.” She then went on to say, “So when you play these games you don’t talk at the child with the speech impairment, you play it with the whole class and everyone’s so keen and eager to try and say the word and sounds.” They both mentioned that these strategies would help the students with speech impairments without singling them out, as well as reinforce these sounds for the rest of the students in the class at the same time.

Also, Rachel and Leah both talked about the importance of using poetry and songs with the students. Rachel pointed out that, “poetry and songs are very good for students with speech impediments”. Leah mentioned, “As a class, we do a lot of finger rhymes, and poetry and songs in the morning where the children have a chance to sing.”

Leah mentioned that when helping students in correcting their speech, “don’t draw attention to it. You want to make it as subtle as possible. Give them lots of opportunities in group
things to participate in, like with poems, just so that they’re not singled out.” This is consistent with the findings from Hourigan’s (2008) study. Hourigan (2008) emphasized how important it is to include all students in group activities and to give all students the same opportunities.

Leah and Rachel both also mentioned that you could let the students use puppets when speaking in front of the entire class or in small groups. Rachel mentioned that having the puppets speak for them, “detracts attention from them and makes it seem like the puppet is the one making mistakes rather than the child” which can encourage the students with speech impairments to speak in front of the other students in the class and try new sounds and words.

**Theme 2: Impacts of Inclusion**

- **Impact on Teachers**

  This sub-theme focuses on the impacts that teachers face by having students with speech impairments in their classrooms. Both participants had a positive attitude towards including students with speech impairments in their mainstream classes. Rachel mentioned that in her kindergarten class, “there’s no reaction because they are just adorable and half of them can’t speak properly anyways”. She said, “It makes no difference to me whether a child can speak or not. If I see them smiling, if I see them working with us and cooperating and learning, it doesn’t matter how much they produce in terms of sound.” She also stressed, “I would NEVER mimic a child, and I would never tease them or anything like that.” She also said, “You really want to help the students because speech is part of who they are. My only advice is to be very accepting and not to judge the kids.”

  Similarly, Leah also mentioned that she had no negative feelings towards having students with developmental speech delays in her classroom. Rather, she mentioned, “I think at the
beginning my main concern was socially, were these kid going to be made to feel isolated? Were they going to be made fun of? So that was my first reaction. Not so much what I would do because I knew I could help them. It was the reaction of the other kids in the class.”

Both these findings are consistent with findings from my literature review. In the studies by Low and Lee (2011), Sadler (2005), Lindsay et al. (2005), and Gelston (2004), they all found that teachers felt that having students with developmental speech delays in their classroom had positive impacts on their teaching. The teachers in these studies saw the benefits of having students with speech impairments in their classroom because it allowed the other students in the class to learn about inclusion. All of the reported challenges revolved around the lack of time that these teachers were able to give one-on-one support to these students due to large class sizes.

• **Peer Impacts**

Both participants mentioned that they have experienced negative impacts from the students in their classes towards students with speech impairments. Rachel started out by saying, “Kids can be really cruel!” She went on to say, “It’s hard for the other kids to understand what these kids are saying and they are less tolerant than the teacher, and they try to butt in.” She also mentioned an experience she had with one student with speech impairments where “the other kids didn’t want to play with her. They used to think she was stupid and they used to tease her and it was horrible.” She also mentioned that, “as you get older, kids will become teased and become bullied if they say things badly, but not as much now [in kindergarten].”

Both Rachel and Leah said that it is important to create safe and accepting environments in the classroom and to address the students about being tolerant of others’ differences. Rachel said, “you want a safe, risk-free environment for them. At the very beginning we teach the
children acceptance at this very young age. You got to make them feel safe to take risks in the classroom.” Rachel recommended, “the quicker you nip it in the bud, the better!” Leah also mentioned how she had a problem once in her class where,

The one kid was saying the other kids’ names and saying them differently, and the kids started laughing. So then we stopped and we had a whole discussion about how all of us are different and we all have different strengths and the way we sometimes see things and say things makes us special, and that’s that. So one of the challenges we had was at the beginning of the school year, he didn’t want to participate in things so he did start becoming withdrawn and when he had the chance to be a superstar and call on other kids to come and help with things he didn’t want to do it. So after we had our discussion about inclusion then his confidence started to improve.

This is very consistent with the findings from my literature review. Gelston (2004) mentioned how important it is that teachers create an inclusive classroom environment, especially in kindergarten when the students are still young. He also recommended to allow students to play and interact with one another in order to get them to know each other better so that they become tolerant and accepting of each other’s differences (Gelston, 2004). Nilholm and Alm (2010) also stressed the importance of creating an inclusive classroom where the students were all given the right to speak, and all students had to respect one another despite their differences.

When working with a student who had a stutter, Rachel mentioned, “I would actually tell the class, ‘When X is speaking, you have to give her a chance. She is trying to get her words out so you have to give her a chance. Everybody needs a chance’. You can’t be private about that.” She mentioned, “The very first thing we try to teach the kids is to raise your hand and to give everyone a chance”. Rachel also said that another strategy to stop bullying is, “I can just tell them how I feel when people tease me”. She also added that it never disrupted the flow of the class while waiting for a student to try to articulate their words.
Theme 3: Teacher Training

- Teaching Experience

Both of my participants have over 20 years of teaching experience. When talking about her teaching, Rachel said, “I have been teaching for 23 years. I’ve taught mainly in the grades, so grade 1 through 6, but my last 6 years have been in the kindergarten department, so I spent 2 years in SK and this is my fourth year in JK”. She also mentioned that she has taught “regular classes”.

Leah said, “This is my 20th year teaching, and I have always been in kindergarten. I taught JK and then I went into SK and now I’m back into JK”. She also mentioned, “It’s always been typical classrooms where there’s been an integration of kid with more needs than others.”

- Special Education and Speech Therapy Training

Both Rachel and Leah have their special education specialists. Rachel mentioned that, “most of my speech stuff I did in South Africa. I did speech and drama training there. I have my special education but it’s from South Africa. It’s actually called Didactic Remedial there.” As well, Leah said, “I have my special education specialist, and I have all three levels.”

When asked whether they felt like they had adequate training in order to implement these strategies, Leah replied, “I do but it’s something especially hard in a large group. It’s much easier to implement some of the strategies in a small group or working with them one-on-one. And they’re not difficult to implement.” Rachel replied by saying, “I’m not adequately trained. I’m not a speech therapist by any means. It’s not like I have absolute training. Because I know that there is help down the line, if I mess up there isn’t a lot of pressure. I don’t feel like from beginning to end I have to fix anything.” She also added in,
A regular lisp I can work with, but a lateral lisp, no teacher can do… that’s for a speech therapist. And if there’s a lot of saliva in their mouth, like I’ll say go speak to your doctor… But I can’t fix that. I’ve had kids in South Africa, very bad like with a cleft palate, which was completely not in my realm and a therapist was dealing with them and I don’t know how to fix that.

In the findings from my literature review, Sadler (2005) also mentioned that the teachers from his study did not feel adequately trained to be working with students with speech impairments, and did not feel very confident in doing so. Gelston (2004) also reported that some teachers in his study were not adequately trained to support students with speech impairments and did not know how to effectively communicate with these students.

- **Consultation with SLPs**

  Both Rachel and Leah have consulted with SLPs. Rachel mentioned,

  We have one here that comes into the school. We actually work really well with the support that comes in! It’s weekly, so kids meet with them once a week for half an hour. And she’ll say to me, “This is what he’s doing, and this is how you have to correct it.” And she says to make eye contact, and hold his hand or whatever so that you know he’s looking at you. And to show him how your mouth is moving. Whenever we have a speech therapist come in, she would usually come in and talk to me after the session and say this is what we covered, this is what I’m sending home for the mom to do, so we are fully on board knowing what is happening. And whatever report she sends home, I get a copy of so then I can read the report as well if we haven’t had the chance to speak because sometimes she’ll come back when I’m not in the classroom, but then the report will be on my desk. So we do get what the parents get which is good! And if I don’t understand something I can always ask her.

  Leah mentioned that aside from the SLPs that come into her school, she spoke with one of her student’s private SLP in order to get advice for her student. She said that she spoke with her once and, “she gave me some strategies and suggestions that she was doing. So I got back to her where I think he is and that his speech is improving.”

  When asked about the benefits and concerns with consulting with SLPs, Leah mentioned that there were both positive and negative outcomes with this. She explained that it was
beneficial working with SLPs because, “you get to learn the appropriate speech strategies.” However, she mentioned, “A concern with using SLPs is that they sometimes overstep their mark with their [speech] realm with other realms of development that they’re not trained in, like fine-motor skills. That is a concern because it alarmed the mom who then alarmed me, when it really wasn’t an issue.” A big part of speech production is the movement and articulation of one’s mouth, so Leah explained to me that it was beneficial working with SLPs because they taught her how the fine-motor movements of the students’ mouths were effected. However, she said that they would sometimes also try to fix the other fine-motor issues of these students aside from their speech production, which was meant for a physiotherapist and not a SLP.

Something else that Rachel mentioned that was interesting was she said, “I think that the speech they get at school is too short. Like if they’re [SLPs] writing such a long report, how much time are they actually working with the kids? It’s only half an hour. Because it’s immediate, you get it [their report] right away, so they’re obviously writing as they’re working. So I think the reporting becomes the focus rather than the working with the kids.”

According to the findings from my literature review, teachers see the benefits in consulting collaborating with SLPs. Mroz and Letts (2008) found that teachers found it beneficial to work together with SLPs because they were able to learn about effective teaching strategies for students with developmental speech delays. Murphy (2013) found the same results, and also found that special education teachers also found it beneficial collaborating with SLPs in order to learn strategies that were specifically responsive to students with speech impairments. As well, Lindsay et al. (2005) found that teachers felt more confident in supporting students with developmental speech delays in their classrooms once they collaborated with SLPs.
• **Personal Experiences**

Rachel told me about her personal experience she has had with working with children with speech impairments. She told me,

My middle child had a speech impediment. I personally went private [SLP] because I’m not sure how much they can get done at school in half an hour. Like I know when we did it privately they were an hour the sessions and I sat in on them so I watched everything, and I could copy what they were doing at home. And she gave me exercises to do at home, and that’s where I got my Silly Sack of Sponges from. I made them up because of her and I use them with the students too.

**Theme 4: Parent Involvement**

• **At-Home Help**

When asked about what help these students receive from their parents at home, both participants mentioned that there was not a lot of parent involvement for their students. Leah mentioned, “This particular mom is more concerned about his overall development than just his speech. In the beginning she was concerned that he might be teased because of the way he was saying certain letters but we now reassured her and said it wasn’t happening so she was okay.” Rachel also mentioned, “Unfortunately, moms like how they [children with speech impediments] sound because it’s cute, so they don’t want to correct them.”

• **Private Speech Therapy**

In regards to parents taking their children for privatized speech therapy outside of school, Rachel said, “The parents don’t want to be bothered with taking them and picking them up. So it’s easier just to be done when it’s at school. I don’t think it’s ideal.” Leah said, “It is nice though to see some parents are proactive and that they are willing to get the right help for their kids, and that it really does benefit them.”
• **Parent Communication with Teachers and In-School SLPs**

When asked about the parents’ communication with teachers and with the in-school SLPs, Rachel had a lot of insight. She told me that, “The parents get the report [from the in-school SLP] as well as the teacher, and I think the parents get the initial meeting with the SLP and they discuss the issues. So there will be an assessment and then a report back to the parents to let them know how they’re going to proceed with the treatment.” When asking her about her communication with the parents, she said,

I do think open communication is the answer. Speaking to the parents and see what strategies they use at home. Because a lot of the time parents don't ask the children the right questions and so they don’t get to hear the children speak so much. I tell the parents about my children because that’s what I did, that you practice the sounds in the bathroom. I can always suggest to the parents, you know, can you work with them and point things out to them. And if in a few months, like if I think they still need help, I’ll speak to the parents. I will often suggest to them that when you read a book, you have a kid retell the story, point to pictures, like let them explore with their language, and the more that you read with them, the wider their vocabulary is, and the more chances of you hearing sounds that are incorrect are going to be than if you just stick to the same small little bank. I say, “Don't plug them in front of the TV, put them in front of a book with you and have conversations, and ask them questions.” Take pictures and send them home… mom can say, “What are those?” and she can hear the child speak. And they can also do what I do which is repeat the words back and show them how to pronounce the words with their mouths.

**Theme 5: Self-Esteem**

• **Students with Developmental Speech Delays**

When asking my participants whether their students have improved socially, academically, behaviourally, and emotionally after implementing their strategies in the classroom, Leah replied that she saw improvements in, “All of them! Because they all had to do with confidence. You know, even kids at the age of four are able to know if they are not saying names properly. Other kids will make fun of them. So once they felt confident about how they
were saying the words, all of these areas improved.” She also reminded me about one of the boys in her class that she had mentioned earlier and said, “After we had our discussion about inclusion, then his confidence started to improve.” This is consistent with the findings from Gelston (2004) as he mentions that once students speech skills start to improve, their self-esteem also improves, and then they feel more confidence in participating in class discussions.

Rachel also mentioned, “The kids get very happy when you praise them and you tell them they’ve done a good job!” Gelston (2004) and Murphy (2013) also emphasized the importance of praising students with speech impairments. Rachel also said, “You try your best to make these kids feel special and be your helper.” She also added, “I’ve never found speech to be a problem with behavioural or emotional because they’re so egocentric. Because they need to learn the language, they will. Kids will never do anything to put themselves at jeopardy. I haven’t found that kids with speech impairments have felt so bad about themselves that there’s ever been a behavioural issue. And I don’t think speech impacts their learning at all.”

- **Peer Impacts on Self-Esteem and Confidence**

Both Rachel and Leah mentioned that the rest of the students in the class could have an impact on the self-esteem and confidence of children with speech impairments, which is consistent with what Gelston (2004) reported. Both Rachel and Leah mentioned how puppets could be used to build the confidence of these students because as Rachel put it, “The puppet’s on them and it detracts attention from them and makes it seem like the puppet is the one making mistakes rather than the child, so those are just little things you can do to detract from them.” As well, Rachel also mentioned that in order to build the confidence of these students, “when you
play these games you don’t talk at the child with the speech problem, you play it with the whole class and everyone’s so keen and eager to try and say the word and sounds.”
CHAPTER 5: DISCUSSION

In this chapter, I will reflect on the findings to my research and link them to the findings from my literature review. I will then discuss the implications and recommendations from my study, sharing what I learned about my topic and how it has influenced my thinking as a researcher and as a teacher. Next, I will discuss some limitations of this study, as well as provide recommendations for future growth in this research area.

Links to Literature

In this section, I start out by revisiting the themes and sub-themes that I highlighted in my literature review and connect them with my research findings.

Teaching Strategies and Outcomes

Looking at my review of past research, I found many helpful teaching strategies that teachers implemented in order to help their students with developmental speech delays. Some of these included turn taking, object-picture matching, imitating vocalization, one-on-one activities, modeling, playing word games, and including students in class conversations. After conducting my research, I learned effective teaching strategies that can help students with developmental speech delays. Some of these strategies overlapped with strategies found in my literature review, like turn taking, one-on-one activities, modeling, playing word games, and imitating vocalizations. Both my participants and researchers from my literature review stressed the importance of including students with speech impairments in conversations, whether it is one-on-one, in small groups, or as a whole class. They all agreed that it is important to encourage these students to speak whenever possible in order to practice different sounds and words.
One major difference was in my research of past literature, teachers reported to use correcting as a teaching strategy. Both of my participants really stressed how important it was to not correct student with speech impairments, rather to repeat things back to them and ask the students if that was what they meant. They also suggested asking the students to “try it out again” in order to self-correct rather than the teacher correcting them. They said that this was because students will become less confident once they are corrected and will be less inclined to speak or try again. Instead, inviting them to repeat what they said gives them another chance to say their words correctly in a more positive and encouraging way.

Impacts of Inclusion

Impacts on Teachers

According to my literature review, teachers felt that there were both challenges and benefits with the inclusion of students with developmental speech delays in their mainstream classrooms. Both of my participants felt positively towards the inclusion of students with developmental speech delays in their mainstream classrooms. Both commented that they wanted to help their students improve academically, as well as socially and developmentally. Their main concerns were how they were going to help their students, to ensure that they established an inclusive, safe, and accepting classroom environment for all of the students in the classroom, and that their students practiced mutual respect and acceptance for those with differences.

Impacts on Students with Developmental Speech Delays

According to my literature review, students with developmental speech delays were faced with some challenges being included in mainstream classrooms. According to my study, the
students described by my participants felt comfortable in their mainstream classes once the classes had discussions about inclusion, and once a safe and accepting environment was created. The teachers emphasized how it is important to remind the students that everyone has differences but that it is important to be accepting of these differences and to not make fun of one another. Once this safe space was established in their classes, the students with speech impairments felt accepted in their classes and felt more comfortable participating in class activities and discussions.

**Peer Impacts**

According to my literature review, the other students in the classroom had both positive and negative impacts on the students with developmental speech delays in their classes. This was consistent in my research. My participants reported that they have experienced instances where other students in their classes made fun of the students with speech impairments and some even did not want to be friends with these children. Again, they said that this changed once they had conversations with their classes about the importance of inclusion and about accepting individual differences.

**Collaboration/Consultation with SLPs**

Findings from the literature emphasized the importance of teachers collaborating and consulting with SLPs in order to better help their students as well as to learn effective teaching strategies from them. Many teachers reported consulting with SLPs and learning strategies from these SLPs. As well, many of the researchers reported that the teachers in their studies collaborated with their in-school SLPs in order to maximize the help that they could give to their
students. This was consistent with the research that I conducted. My participants both consulted with private SLPs as well as the in-school SLPs. They both agreed that it is very important to have open communication with SLPs so that they were both on the same page in terms of the progress of their students. They also said that they learned many helpful teaching strategies to use with their students with speech impairments from SLPs.

Adequate Training for Teachers

According to past literature, most teachers did not feel adequately trained or confident implementing teaching strategies that are responsive to students with developmental speech delays. My participants mentioned that they were not adequately trained in speech therapy, but that they felt that they were able to help their students with speech impairments having learned different strategies from various SLPs, as well as during their training and years of experience. My participants felt confident that they could help their students’ speech improve, but did not feel duty-bound to correct anything on their own. They both mentioned that they were more concerned about these students’ social development and inclusion rather than having to develop their students’ speech skills. They also mentioned that there were certain speech impairments, like a lateral lisp for example, which they are not qualified to provide therapy for, rather speech therapy was required in order to improve these impairments.

Implications/Recommendations:

As a teacher, I have not only learned a great deal about working with students with developmental speech delays, but I have also learned many practical teaching strategies for working with all students. First and foremost, my research questions were thoroughly answered.
I now have a wide range of practical and effective teaching strategies that I can use with students with developmental speech delays. I have also gained insight into the dynamics of team teaching and working with other specialists in the school like SLPs.

As well, I have learned strategies that are not only important to use with students with speech impairments, but also for the other students in the classroom. “Wait time” is a strategy that was really emphasized by both of my participants. They explained how it is extremely important to give a sufficient amount of time to allow students to articulate what they have to say on their own without rushing them. They also said that it is very important to use this with all students, not only students with speech impairments.Allowing students the time that they require to think and respond to a question is very important. I have personally seen the benefits of this in my practice teaching, especially in my work with students with special needs.

I also learned about the importance of creating a safe and inclusive environment in the classroom from the very beginning of the school year, and from early grades. It is very important that students are tolerant and accepting of others’ differences and learn to be open-minded individuals. This will not only help with the inclusion of students with special needs or different learning abilities, but it will also teach the students to become more tolerant members of society.

In addition, I also learned that it is very important to never single out a student for his or her differences, rather, when trying to help this student, use the teaching strategy with the whole class. For example, in a kindergarten class, rather than making a student with speech impairments repeat a word back correctly, have the entire class repeat the word all together. This will encourage the student with the speech impairment to keep trying to say the word correctly and can also benefit the entire class as they are practicing saying different words and sounds. However, certain strategies are more practical and age-appropriate for certain grades, so it is
important to be mindful of the students’ age when selecting different strategies to implement with the students.

Another important teaching strategy that I learned while conducting my research is to try to change the way we ask questions and talk to students in order to promote their speech. One of my participants mentioned that it is difficult to try to rewire our brains in order to say things to promote our students’ speech, but once we are able to do this, it will allow the students to speak a lot more and to practice different words and sounds. It is important that students have practice speaking with others in order to improve their oral communication skills. This can be beneficial when working with all students, especially students with speech impairments and students who usually opt out of speaking, like students who are shy or students who are English Language Learners.

While conducting my research, one of my participants said something that really stood out to me and had a big impact on the way I looked at my topic. She said, “You really want to help the students because speech is part of who they are.” This quote resonated with me because it really pointed out to me that one’s speech abilities is something that can really impact someone’s quality of life. Speech is the most common form of communication among humans and allows people to share their thoughts. When she said this, it really emphasized the fact that teachers are there to help their students succeed and reach their full potentials in order to become successful human beings. As a teacher, I hope to improve my students’ quality of life by helping them improve both academically and developmentally.
Limitations

There were a few limitations regarding my study. Firstly, because of the time constraints in conducting my research, I was only able to conduct interviews with two participants. Had I had more time to conduct my research, I would have been able to interview more teachers in order to get a broader sample of data to analyze. This may have allowed me to discover even more teaching strategies for students with developmental speech delays. This also would have given me more perspectives on different opinions, such as perceived challenges with including students with developmental speech delays in mainstream classes.

As well, both of my participants were JK teachers. If I had more time, I would have liked to interview teachers from kindergarten to grade 6 in order to see the different strategies that teachers in older grades implement with students with speech impairments.

In addition, it would have been interesting to actually see teachers using these teaching strategies with students with developmental speech delays. Because of the ethics review for this study, I was not able to include any students in my research.

Further Study

After completing this research study, I would still like to find out additional strategies that could be used for students in older grades, mainly junior grades. Future studies may want to conduct research on teachers who have had more experience teaching junior grades in order to find out about teaching strategies that are responsive to students with developmental speech delays in higher grades. They may also want to include more teachers in their studies.

I would also recommend a longitudinal study looking at the progress of students who are taught using these teaching strategies and to track their speech development and improvement.
over time. It would be interesting to see which strategies show the most improvement in students’ speech.

Another suggestion for future research would be to research different resources that teachers use in the classroom in order to support students with developmental speech delays. It would be interesting to find out about the different tools, books, games, and other various resources that could aid teachers in supporting these students.

In addition, it would also be interesting to investigate the effects that speech impairments have on students’ spelling abilities and word decoding. Having worked with students with speech impairments, I know that many of these students often had trouble when it came to spelling words, because they spelled words the way that they sounded them out. It would be interesting to see how speech development correlated with improvements in spelling and word decoding.

In conclusion, this research project is important for educators as it teaches very significant and effective teaching strategies that can not only be used for students with developmental speech delays, but can also be used to benefit all students. As one of my participants effectively said, speech is a huge part of communication, and helping students to improve this skill can really help to improve their overall quality of life. As a teacher, I want to provide as much support as I can in order to help my students improve in all aspects of their development, whether it be academically or developmentally. I want to ensure that I have tried my best in order to improve the quality of life for all of my students to the best of my abilities.
REFERENCES


APPENDICES

Appendix A: Interview Questions

My interview questions are directly related to my research question and sub-questions to help me investigate my topic. Below is a list of questions that I used in my interview. These questions are divided under different headings in order to help with the flow and organization of the interview.

About the Interviewee:

• Can you please tell me a bit about yourself and about your teaching experience?
  • How long have you been teaching?
  • What types of classrooms have you taught in?
  • What grades have you taught?

• What training have you had for special education?

Teaching Experience with Students with Developmental Speech Delays and Training:

• Can you please describe some of the teaching strategies that you use with students who have speech impairments?

• Do you feel adequately trained to be using these teaching strategies?

• After using these strategies, which strategies showed improvements in your students socially, academically, behaviourally, and emotionally?

Attitudes Towards/Issues with Inclusion:

• What were your reactions towards having these types of students in your classroom?
• How did other students in your class react to having these students in your classroom?

• What challenges did you, the students with speech impairments, and the other students in the class face by having students with speech impairments in the classroom?

Consultation with SLPs:

• How often do you consult with a SLP?

• What are the benefits and concerns with consulting with SLPs?

Parent Involvement:

• What parent involvement or support do your students with speech impairments receive?

Moving Forward:

• Can you offer any advice for teachers that have students with speech impairments in their classrooms?

• Do you have any further comments or insight on a related topic that I did not mention?
Appendix B: Letter of Consent for Interview

Date: __________________________

Dear __________________________,

I am a graduate student at OISE, University of Toronto, and am currently enrolled as a Master of Teaching candidate. I am studying teaching strategies that are responsive to students with developmental speech delays who are integrated into mainstream classrooms for the purposes of investigating an educational topic as a major assignment for our program. I think that your knowledge and experience will provide insights into this topic.

I am writing a report on this study as a requirement of the Master of Teaching Program. My course instructor who is providing support for the process this year is Dr. Mary Lynn Tessaro. My research supervisor is Gerri Burns. The purpose of this requirement is to allow us to become familiar with a variety of ways to do research. My data collection consists of a 40-minute interview that will be tape-recorded. I would be grateful if you would allow me to interview you at a place and time convenient to you. I can conduct the interview at your office or workplace, in a public place, or anywhere else that you might prefer.

The contents of this interview will be used for my assignment, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a conference or publication. I will not use your name or anything else that might identify you in my written work, oral presentations, or publications. This information remains confidential. The only people who will have access to my assignment work will be my research supervisor and my course instructor. You are free to change your mind at any time, and to withdraw even after you have consented to participate. You may decline to answer any specific questions. I will destroy the tape recording after the paper has been presented and/or published which may take up to five years after the data has been collected. There are no known risks or benefits to you for assisting in the project, and I will share with you a copy of my notes to ensure accuracy.

Please sign the attached form, if you agree to be interviewed. The second copy is for your records. Thank you very much for your help.

Yours sincerely,

Researcher name: Ally Krystal

Phone number, email: __________________________

Instructor’s Name: Mary Lynn Tessaro
Phone number: _______________ Email: ______________________
Research Supervisor’s Name: Gerri Burns
Phone #: _____________________ Email: _____________________

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 at any time without penalty.

I have read the letter provided to me by ____________________(name of researcher) and agree to participate in an interview for the purposes described.

Signature: __________________________________________

Name (printed): ________________________________

Date: __________________________