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Flight of the Midnight Owl



**BRANDON
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CENTRE FOR



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INTRODUCTION BY THE EDITOR

Marion Terry, Ph.D.

Welcome to the twelfth issue of the *BU Journal of Graduate Studies in Education*, devoted to rural, northern, and Aboriginal education. Our authors for volume 6, issue 2, are BU Faculty of Education graduate students. I thank these educators for sharing their work. Together, they have produced a collection of articles that share topics of interest to Manitoba schools, post-secondary institutions, and the broader community.

- Barbara McNish's research report describes the findings that emerged from her study of a women's anger management group.
- Andrew Collins' refereed article critiques Cultural Proficiency Frameworks from the perspective of liberation pedagogy.
- Stephanie Frieze's refereed article explains the role that parental involvement plays in the formal schooling of First Nations children.
- Jill Ferguson's refereed article examines opportunities to improve female involvement in STEM-related trades training.
- Tammy Webster's refereed article considers differentiated instruction within the context of inclusive classrooms.
- Vicki Lamb's refereed article recommends staff collaboration to overcome the obstacles related to Response to Intervention programming in schools.
- Amy Schiltroth's refereed article suggests ways that educators can support FASD-affected children in mainstream classrooms.
- Alissa Cheung's refereed article offers strategies to cultivate meaningful reading habits in middle years students.
- Melissa Hart's refereed article discusses evidence-based interventions as a means to address emotional and behavioural disorders in youth.
- Andrew Neufeld's refereed article applies Leithwood et al.'s (2008) framework of leadership actions to instructional leadership and student learning outcomes.
- Susan Barteaux's refereed article extols the Universal Design for Learning as a framework that values social, emotional, and academic diversity in school.
- Janelle Murray's refereed article evaluates the use of augmentative and alternative communication interventions with children on the autism spectrum.

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RESEARCH REPORT

Anger Is Okay: My Reactions Are Not Always Okay

Barbara McNish

I became curious as to why the anger group “Just the Tip of the Iceberg” that I was facilitating was succeeding. The women are required to complete a 20-hour workshop and write a letter to the Court or to their worker, explaining what they have gained or learned in this process. I was interested to find out how the presentation of material was making the difference.

When asked at the very beginning of group about their goals, the most common answer was that they wanted some tools to use to express their anger so that they would not get in trouble. They wanted to know why some people made them really angry and then they “lost it.” The women who attended made comments such as “Everyone should take this course,” and “I went home and told my partner, and we actually talked.” One woman who had come from work told me, “For the first time in a long time, I was not pissed off at my job.” Did these remarks mean that the group had some value? These comments and questions brought me to a place of reflection about the group, and I wanted to explore why it seemed to be effective.

Research Question

My research question was, “What are the components in this “Just the Tip of the Iceberg” anger group that are working and that motivate women to make changes that are life altering or shifting?”

Data Collection

Field Notes from Classroom Observation

I collected data from the field notes that I gathered over the course of the 20-hour workshops. This observation of nonverbal communication and insight was helpful in my field note taking. The discussions with individuals were part of these notes as the women shared some of their stories, thoughts, and feelings outside the official group.

Group Evaluation Form

The participants completed anonymous evaluations at the end of each workshop. This feedback helped the facilitator gain insight into what worked, and to evaluate the effectiveness of the group. The evaluation form included questions such as “What has this group helped you realize about yourself?” and “What have you learned about you and anger?” The answers yielded data that could be used to adjust the course content in order to meet the needs of the women attending the group.

Field Notes from Casual Conversation

I acquired some further information from past clients, the legal system, and colleagues who have facilitated groups. These casual conversations were verbal, but after each conversation I recorded accurate field notes.

Feedback from Self-Evaluation on the Group Experience

The women wrote a letter “To Whom It May Concern,” and the feedback from these letters was useful to pull data from their viewpoints on the progression of changes within themselves as they attended the group. Throughout each workshop, the women were continually asked to self-evaluate their learning process.

Feedback from Checkouts at the End of Each Session

At the end of each group session, we did a checkout that asked these questions: “What would you say was one thing you will take away from the group?” and “From all the sessions you have attended, what do you want to share with the group that really just made a difference for you?”

Findings

Theme 1: Knowledge/Learning

The skills or tools that the group members found most useful were the “I” messages. The women learned that a sentence with “you” is a blame message and shuts off communication or puts the other person into a place of defensiveness or attack mode. This was a huge eye opener for the women. They learned that “I feel” and “I need” statements could be used at home. A deeper and more complete understanding of the old messages, beliefs, and thoughts is a very basic tool to begin to uncover some of the hidden hurts, or core beliefs, that are exposed by communication styles and responses that are given out to others. This knowledge is the beginning of self-awareness, the understanding that the triggers beneath anger are old thoughts or messages.

The workbook was also seen as a tool. The facilitators did not look at the book or the women’s answers to any of the exercises. It was used as a personal response journal. The women felt comfortable recording and owning their own thoughts and feelings, and began being as truthful to themselves as they needed. It was their process, and they needed to own it. This was a powerful knowledge tool to be reused again and again.

Theme 2: Awareness

To reinforce awareness, body cues were broken down into levels. The levels were coloured on a body map. A three-level scale was used whereby low is yellow, medium is orange and high is red. The women have a temperature gauge; they interpreted their body cues and started to look at how the temperature rose with non-intervention skills. They discovered that it is easier to intervene in the yellow or orange area. The idea that anger is okay was reaffirmed, but violent or hurtful responses or actions were not acceptable. The goal was to learn self-calming tools so that the women would not reach their boiling point. Each step helped them to learn another skill to decrease the negative behaviours.

Once the building blocks of old messages, body cues, and understanding reasons for their anger were in place, then the feelings and thoughts that are associated with the cues and the reactions were explored. The group began to understand the consequences of their reactions as they discovered the similarity between the iceberg and anger. The feelings produced a reaction and now there was a consequence to those reactions. The women were amazed with the connections, and took that next step to embrace their learning and internalize the information in order to start shifting some of their thinking.

This process awoke something inside them and taught them that they had tools to use. It was exciting for the women, and that gave them hope of change. The women learned about

slowly breaking down the cycle to give them some thinking time before reacting. Owning and accepting responsibility for their actions was an eye-opening moment.

Drawing an iceberg was important to show a connection to what is hidden under the surface. Just like a ship that may sink if it hits an iceberg, so might the relationships of the women. This awareness of self and even others was a helpful stage of the group process and was like team-building skills. The leadership role was now seen as having value, and the learning was embraced by most of the individual group members.

Theme 3: Responsibility

The women explained that knowing that anger is a choice was a powerful message. Anger is a choice, so they needed to choose proper actions, manage stress levels, and keep boundaries intact. In choosing their actions carefully, by slowing down, taking a time out, the women could change some things. They could work on accepting the things that they could not change and learn to say “No.”

Theme 4: Abuse in Relationships

The women learned about domestic violence and the new laws related to family violence. They looked at the abusive part they themselves might have played in a relationship that was unhealthy. We discussed children and how they are affected when parents are fighting. The women discussed their own experiences from their own childhood.

Theme 5: Acceptance

If you listen and actually hear someone, will that impact how you learn? If you invest in people by building trust and encouragement, how will those qualities influence how you want to invest in your own learning?

The women liked the personal stories. They stated, “Sometimes it feels like you lived in my house because that is how it sounds when you talk about anger.” They said, “It feels like you understand me and know exactly what I am going through, and I am reassured that I am not alone.” They now felt like they were accepted and not judged. The use of self-disclosure is a very powerful tool to encourage women to see that change is possible.

Theme 6: New Ways

The women believed that they had changed themselves, and they liked it. They had a new way to react. The whole process came back to understanding their anger, knowing their own triggers, body cues, thoughts, feelings, and being able to express those all in a respectful way. It is “okay to be angry but it is never okay to hurt someone, yourself, or something in your anger” is a mantra that is used in the group. What is going on for them and how they respond in a safe way for all is important information on their own self-awareness.

When facilitating this group, it was important to engage the audience and draw from the experiences that were common to the clients, in order to build an understanding. Identifying with the women and showing compassion were valuable to this cohesion in the process.

Interconnection, incorporation, and internalization of the information shared in the group brought an awareness and insight into the possibility of change for the women. When women feel like they have hope and are not alone, they have an acceptance and non-judgmental response to why their action or behaviours have caused them to have to attend an anger management group. These are powerful realizations that provide motivation to change.

Conclusion

In conclusion, I return to the question of what is it that makes this group so successful or at least sustainable. What works is making women feel accepted, giving them tools and skills, telling stories, giving personal examples so they can see the dynamics of how it works, and giving the women handouts that they can refer back to and practise with. It is important to let the women know that they are okay and that change is possible. When someone believes in you, then you begin to believe in yourself, too, and that produces change. Active interventions with goals that are personalized to the women rather than theory directed, and conversation from the women's world view, were incorporated into a learning opportunity.

This group data supports this viewpoint and works toward the brief solution focus, choice therapy, and WDEP models. When given the tools, encouragement, and support, change is possible if the women have the confidence to use the skills that they have already have within them. Perhaps the answer to the question about why this group works is that the women want to change and they have fun doing it along with the skilled facilitators. Storytelling and self-disclosure can be used to form an alliance that says, "I understand and I have some tools that can help you."

About the Author

Barbara McNish is in Brandon University's graduate diploma program, specializing in guidance and counselling. She works as a woman's counsellor and facilitates the anger group for woman. She has worked in the field of counselling for the past twenty years. Barbara enjoys researching genealogy, seeking family history, and travel experiences.

REFEREED ARTICLES

Cultural Proficiency Frameworks Analysed Through the Lens of Liberation Pedagogy

Andrew Collins

Abstract

While often used with the most noble of intentions, Cultural Proficiency Frameworks (CPF) do not sufficiently challenge underlying power-dynamics or address societal inequalities. Those of disadvantageous social standing, who are outside the perceived norm, benefit from CPFs, but not to an extent that changes their underlying status within Canada. Liberation pedagogy provides a theoretical framework for analysing the dynamics of CPF as they relate to hegemonic repression and cultural reproduction. Liberation pedagogy goes beyond CPFs' improvements of existing institutions and educational practices to challenge underlying components of learning and teaching. Through the lens of liberation pedagogy, CPFs can be analysed in terms of theoretical underpinnings, teacher-student relationships, and the purpose of education.

The espousal of Cultural Proficiency Frameworks (CPF) entails an understanding of school change and educator change as an act that is an “organic, nonlinear process” (CampbellJones, CampbellJones, & Lindsey, 2010, p. 16). It requires an understanding of cultural barriers based upon moral consciousness and metacognition. CPFs, however, do not necessarily take into account over-riding hegemonic power-dynamics. Frameworks addressing the culturally diverse classroom do not sufficiently address inequalities of “social, economic, and political conditions that give a ruling group power over others” (Gutek, 2004, p. 236). They therefore do not necessarily go far enough in addressing the needs of the culturally marginalized such as Canada’s Aboriginal populace.

The intentions of CPFs are noble, but they merely bridge cultural divisions instead of directly challenging societal inequalities. The frameworks address the needs of the classroom, but do not impact the wider societal context. As the group that is arguably least served by existing power dynamics, Aboriginal learners may be used as a case study to analyse the effectiveness of each theoretical position. For these learners, CPFs do not facilitate real change, but merely enhance inter-classroom cooperation. They may provide teachers with a way to understand their own cultural biases and the needs of their Aboriginal learners, but they do not provide a way to usurp the power dynamics that repress the Aboriginal populace. The theoretical framework of Freire’s liberation pedagogy may be used to analyse CPFs in terms of their theoretical underpinnings, their understanding of student-teacher relations, and their ontology of education’s purpose.

Theoretical Underpinnings

Freire’s ideology of liberation pedagogy argues for an education that “frees a person from domination and oppression” (Gutek, 2004, p. 236). The theoretical underpinnings demand a commitment to change on a broader scale. Liberation pedagogy requires a desire for large scale social change and a consideration of students in their larger societal role. It necessitates a realization of the inequalities and repression, both historic and contemporary, which impact the Aboriginal populations of Canada. Illich maintained that “the process of deinstitutionalization must begin with de-schooling . . . grassroots settings, should create the educational processes that serve them best” (Gutek, 2004, p. 238). The ideology requires a rejection of modern institutions that “actually enrich and empower a few, but dehumanize and

impoverish many” (Gutek, 2004, p. 238). The Western Eurocentric educational system is therefore seen as fundamentally counterproductive to enhancing Aboriginal liberation. Liberation pedagogy acknowledges the contextualism that is predicated upon the idea that society involves significant power dynamics that empower some while disadvantaging others.

CPFs, in contrast to liberation pedagogy, aim to bridge cultural differences and bring equality to existing cultural components. CPFs represent more of a smoothing over of cultural differences - the cracks in society - than a dramatic change in fundamental power dynamics and norms. CPF proponents would have “educators . . . work more successfully with students who represent the many different cultural, ethnic, linguistic, religious, and economic subcultures” (Lindsay, Roberts & CampbellJones, 2005, p. xv). For the Aboriginal populace, this would mean an incorporation of cultural components, without an examination of how the repression of Aboriginal students can be countered.

An understanding of culture comprises “the totality of ideas, beliefs, values, activities, and knowledge of a group or individuals who share historical, geographical, religious, racial, linguistic, ethnic or social traditions” (Davis, 2002, p. 7). The concept of cultural diversity, however, requires an understanding that “no single person can be said to be diverse, culturally or otherwise except in reference to other persons or environments” (Barrera & Corso, 2003, p. 6). Greene (2011) noted that assumptions made by educators can be predicated upon stereotypes. In contrast to liberation pedagogy, many authors of CPFs purport that cultural proficiency is a tool to incorporate a multicultural classroom and a teacher within a framework that benefits both.

Liberation pedagogy would argue, however, that teachers have been co-opted to serve the dominant hegemonic perspective by ignoring the potential liberation of their students. Lindsey, Robins, and Terrell (2005) described cultural proficiency as “a way of being that enables both individuals and organizations to respond effectively to people who differ from them. Cultural competence is behaviour that is aligned with standards that move an organization or an individual toward culturally proficient interactions” (p. 1). The argument can be made, however, that these incorporations are a beneficial counter that aims to maintain the status quo. By ensuring that some components of minority cultures exist within the classroom, the focus is drawn away from changing the underlying hegemonic domination.

Student-Teacher Relations

Freire admonished that “teachers can not remain neutral or hide behind a veil of objectivity” (Gutek, 2004, p 240). A teacher is not given the option of a self-deceiving neutral position. The teacher is forced into making a decision between being a tool of further oppression or an agent of liberation for their Aboriginal learners. Potentially, one could argue some concern over the perception of a western educator, raised in a modernist society, enshrining him/herself in a self-concept of a heroic liberator, but the true embracement of liberation pedagogy would ideally move the educator away from older cultural narratives. As Gutek noted, “The goal of Liberation pedagogy is the creation of a new social order. Creating the new world will come from opening the self and society to new possibilities for leading a richer and fuller life” (2004, p. 240). The educator must ultimately decide what role aligns with their concept of morality.

Proponents of CPFs espouse the need for a teacher to create a culturally responsive classroom that facilitates collaboration between teacher and student (Tileston & Darling, 2008). Similarly to liberation pedagogy, the teacher’s own cultural biases eliminate the potential for an absolutely objective position. The teacher creates an environment that values the students of different cultural backgrounds as contributors rather than outsiders. An educator using a CPF would infuse cultural components, such as the Seven Sacred Teachings, into the classroom as elements with weighting equal to any other cultural norm. Leadership within the CPF uses information and skills “to avoid unintentional slights or hurts (i.e., micro-aggressions) and to improve the quality of life for school and home communities” (Lindsey, Robins, & Terrell, 2009,

p. 14). The creation of culturally responsive classrooms must entail a concerted effort by the educator that values student input.

For educators, providing students with a culturally and linguistically diverse education is a “tangible representation of professional collaboration” (Lewis, Rivera & Roby, 2012, p. ix). The teachers’ goal is to enrich their students’ lives by establishing positive teacher-student relationships. An educator of Aboriginal students would not focus on the wider societal challenges, but merely the challenges within the classroom. Fogel (1998) argued that the guiding principles of improving student-teacher relationships include that “communication illuminates the self’s relationship to others . . . communication that leads to renewed self-understanding is a creative co-construction of the participants” (p. 11). The goal is not to liberate the student, but rather to ensure the best possible education and communication pathway within the existing hegemonic dynamic.

Education’s Purpose

Freire’s liberation pedagogy argues that “it is possible, indeed necessary, to challenge the status quo and bring about humanizing institutional, social, political, economic, and educational change” (Gutek, 2004, p. 238). This change requires the ability to think critically and empower students to “penetrate through the ideological mists of false consciousness” (Gutek, 2004, p. 242). For Aboriginal learners, this critical meta-cognition would enable them to examine the cultural hegemony being imposed upon them. They could examine the importance of text and the tools used to re-create power dynamics. The cultural biases within the material and potentially within the educator would lead to a greater understanding of inequalities within society. The historical abuses and political dynamics that have led to the oppression of Aboriginal peoples and their counter-reactions to Eurocentric educational models can be examined in light of the Manitoba curriculum that students are expected to learn as doctrine.

In comparison, Lindsey, Jungwirth, Paulh, and Lindsey (2009) explored an idea of education around focusing on “valuing diversity, an essential element of cultural competence, and its interaction with the tenets of learning communities” (p. 76). This education is centred on culturally proficient learning communities that examine cultural competencies among staff. Collaborating and confronting inequalities facilitate an analysis of poverty’s role in education. The goal is not to change the hegemonic power dynamic, but rather to elevate those ensconced in poverty to a position of upward mobility. These ideas work to expel myths around poverty and inadequate solutions used to close the achievement gap, but they do not change the underlying society (Tileston & Darling, 2009). Quezada, Lindsey, and Lindsey (2012) indicated that “adapting to diversity is about making a commitment to have diversity be a central tenet of . . . substance” (p. 100). CPFs offer a way to adapt to the wider realities of a changing society – not to change society to adapt to the needs of the marginalized.

Conclusion

When viewed through the lens of liberation pedagogy, CPFs can be found lacking in their end goal. It is not that usage of CPFs is negative, but merely that it is a stop-gap solution when a larger alteration is necessary. Many challenges, both cultural and societal, are commonly recognized by both liberation pedagogy and CPFs. Liberation pedagogy results in a change in power dynamics, but CPFs merely temper these dynamics within a classroom or school. The underlying ideological beliefs differ in the scope of change that is envisioned. The teacher-student dynamic is critical in the ontologies proposed by liberation pedagogy and CPFs.

While CPFs implore metacognition to examine cultural biases and modify cultural interactions, liberation pedagogy views teachers as potential catalysts for societal change. Teachers liberate students’ thought processes as they examine their place within the existing power dynamic. The goal of education itself differs between CPFs and liberation pedagogy.

CPFs aim to improve the existing power dynamic and increase the input from differing cultural sources. Liberation pedagogy uses the classroom to challenge the power dynamic. While both seek to ensure that change exists, the scope of change is dramatically different. For Aboriginal learners, CPFs are simply not adequate to address the needs that exist within such a large scale.

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First Nations Parental Involvement in Education

Stephanie Frieze

Abstract

There is a correlation between the Levels of student achievement in formal Western schools and the levels of involvement that their parents have in this education. Many First Nations students have low levels of achievement, which can be attributed to a lack of parental involvement. The negative perception of school left behind from residential schools is often cited as a reason for this lack of involvement. Teachers and school leaders need to develop strategies to lessen these negative perceptions and encourage First Nations parents to become actively involved in their children's formal education. If the efforts of educators are successful, the low achievement rates of First Nations students will rise.

Parental involvement at home and in education plays a major role in student achievement within the Western schooling context. Students with parents who have a high level of involvement typically have higher rates of student success than students with parents who are less involved. First Nations parents often have a lower level of involvement, which results in First Nations students having lower levels of achievement in school. The residual effects of residential schools, coupled with the ways that current schools make parents feel uncomfortable, contribute to the lack of First Nations parental involvement in formal schooling. Through the effort of educators, parental involvement in education can be increased for First Nations and non-First Nations families.

Parental Involvement

All parents are involved in children's lives in different ways. Family A might consider parental involvement as having supper together every night while discussing each family member's day, reading bedtime stories, and taking part in different activities such as swimming, ice skating, and going to the movie theater. Family B might consider parental involvement as making supper for the children, sending them to bed at their bedtime, dropping them off for swimming or skating lessons, and inviting other children over to play on the weekends. Family B is making sure that the children are fed, getting adequate sleep, attending extracurricular activities, and having fun; however, the parents are not interacting with their children to build interpersonal bonds. The differences between the involvements of these two families may have resulted from a lack of understanding of what parental involvement is, or not knowing how to interact with their children.

Participating in a child's life is the main descriptor of parental involvement. Some parents, such as in Family B, are physically present but are not mentally and emotionally present. Family A shows that the parents are mentally and emotionally present by connecting with their children and taking part in activities that are important to the parents and children. Family B may not understand the true meaning of being involved; the key word missing is "participating."

Not knowing how to engage and participate in activities with children may be one of the reasons that some parents are not as involved in school as others particularly parents who have fallen heir to the intergenerational legacy of institutionalized life in residential schools. Making an effort to attend extracurricular activities is important to children ("Eight Ways," 2014). One-on-one time gives parents and children opportunities to connect and talk about their lives. Supporting children and cheering them on in endeavours that they pursue shows that they are believed in and encourages them to work hard and try new things. More specific suggestions of how to participate in activities with children include reading at home, limiting the amount of television that children watch, and setting routines (Friedel, 1999). Schools have a role to play in

teaching parents these strategies to build healthy relationships with their children. It is then up to those families to decide how they implement such notions into their lives. Involvement in home life and extracurricular activities is essential, as is parental involvement when children enter school.

Parental Involvement in Education

From September to June, children ages 5-17 spend the majority of each day at school. It is important for parents to show a high level of involvement in their children's education by interacting with the school (Meador, 2014). School teachers and administrators have a responsibility to communicate with parents regarding their children's learning and teach them how to talk to their children about their school experiences. This parental involvement shows children that education is important and motivates them to work hard and to succeed.

There are many ways that parents can become involved in their children's education. While some parents maintain a high level of involvement by volunteering at school events, other parents cannot due to time and financial constraints. One of the most important ways to be involved is by communicating regularly with the school about student achievement and behaviour (Ireland, 2014). This involvement can be achieved through different means, such as phone calls, emails, parent-teacher meetings, and/or written notes. Of course, helping children with homework is important; however, going beyond completing the homework sends a more powerful message. Providing books for children to read at home and reading with them supports literacy development and sets the foundation for children to enjoy reading (Friedel, 1999). Parents can take note of what is being taught at school and extend learning into after-school and weekend activities. Examples of extending learning include visiting a museum or watching a movie based on a topic that the class is studying. Teachers can support these endeavours by recommending activities that parents can do at home to support their children's in-school learning. Incorporating these suggestions is crucial in demonstrating to children that their parents value education, which in turn makes the children do the same. Supporting the disciplinary actions taken at the school level and enforcing discipline at home also shows children that their parents and educators are working together. Teachers see the effects of the levels of parental involvement through their students' behaviour and academic performance.

Effects of Parental Involvement on Students

Teachers have students in their classes who come from families with a range of levels of parental involvement. As teachers learn about their students throughout the school year, they develop an understanding of how involved their parents are. Parents are in control of their participation in their children's lives and education. These controllable factors "account for almost all of the differences in average student achievement" (Friedel, 1999, p. 11). Children whose parents have a high level of involvement generally have better behaviour records and achieve higher on standardized tests than children whose parents are less involved.

Children with involved parents typically follow school rules, respond respectfully to suggestions made by teachers, and achieve at or above level on standardized tests. Student behaviour is a direct result of parental involvement, because when parents are involved teachers use a humanistic control ideology, and use more conflict management strategies (Karakus & Savas, 2014). Teachers with a humanistic control ideology build connections with their students and run their classroom as a cooperative community. Students respond better to these types of ideologies and strategies, as opposed to dominating strategies. Teachers who use dominating strategies often do not understand their students' needs, and are often impersonal, do not trust the students, and demonstrate a hierarchical approach to classroom management. Involved parents ensure that their children attend school regularly and complete their homework (e.g., home reading, sight word practice, math facts); therefore, their children

spend more time learning than children of parents who are not as involved. Furthermore, children with involved parents are more likely to develop the passion to succeed in hopes of making their parents proud.

Children with less involved parents often have behaviour issues and perform below grade level. Children with parents who do not see education as a priority learn not to value school. In some situations, teachers never meet the parents of their students. Teachers often use more dominating strategies to deal with these children (Karakus & Savas, 2014). Children with poor attendance and who do not complete their homework have less learning time than children who attend school regularly and return their homework to school. Parents who are disinterested and do not value education pass their beliefs on to their children, resulting in lower levels of student achievement.

Children who are interested in learning are eager to take part in activities and work hard to learn new concepts. Students who are disinterested in education often act out and sabotage learning activities. These disruptions jeopardize the learning of all students in the classroom. It is in these types of situations that teachers surmise which students have parents who value and encourage learning, compared to students with parents who do not. First Nations parents are often deemed lacking in their involvement in their children's education.

First Nations Student Achievement

Many First Nations students perform below grade level. Some may wonder whether this level of performance is true of non-Aboriginal children as well, but research has found that Aboriginal students generally achieve lower than non-Aboriginal students on measured outcomes such as literacy rates (Congress of Aboriginal Peoples, 2010). The poor academic performance of First Nations students is often rooted in the lack of parental involvement in education.

First Nations parents attend school activities (i.e., celebrations, field days, performances, parent teacher meetings) less often than non-First Nations parents. Furthermore, due to their lack of participation, Aboriginal parents "are held partially responsible for the overwhelmingly negative statistics concerning Aboriginal education" (Friedel, 1999, p. 5). Educators blame the parents for their lack of involvement, and do not understand why these parents do not become more involved.

Lack of Involvement by First Nations Parents

First Nations parents are generally less involved in their children's formal schooling than non-First Nations parents. Members of the educational system "see the participation levels of Aboriginal parents as a problem" (Friedel, 1999, p. 3). First Nations parents and educators at mainstream Western schools cite different reasons for this lack of involvement. Educators believe that Aboriginal parents feel that their influence is irrelevant because they do not know enough about education. They also believe that parents with low income "do not feel welcome or comfortable in the school" (Friedel, 1999, p. 12). First Nations people, however, have a different perspective concerning their lack of involvement.

First Nations parents have a variety of reasons for not participating in their children's education. First, Aboriginal parents feel that the only time they are contacted by the school is when there are disciplinary problems (Friedel, 1999). Second, Aboriginal parents and non-Aboriginal staff have negative opinions toward one another, and negative encounters reinforce these opinions. This reinforcement makes it difficult for parents and educators to trust, respect, and understand one another. Third, First Nations parents are considered to be minority group parents in some schools. This group of parents "does not have access to the cultural knowledge of how to act appropriately or positively" (Friedel, 1999, p. 20). This lack of cultural knowledge results in parents not reacting at all, which makes it look like they do not care.

Lastly, residential schools have left survivors with damaging memories and negative feelings about schooling (Friedel, 1999). First Nations parents and grandparents do not want their children to repeat the experiences that they had in residential schools. However, the parents who have inherited these attitudes and memories remain unmotivated to “support or promote the school” (Friedel, 1999, p. 21), resulting in “low student achievement and lack of parental involvement” (Friedel, 1999, p. 24). The First Nations experience in residential schools produced negative opinions and attitudes, lack of trust, and lack of respect for the educational system. While educators have their own beliefs regarding why First Nations parents are uninvolved in their children’s formal schooling, it is important for them to learn about the First Nations experience in residential schools, and how these experiences affect children today.

History of Residential Schools

For over 150 years, First Nations children were forced to attend residential schools, where they were abused and deprived by religious and government leaders. Duncan Campbell Scott created such schools to “get rid of the Indian problem” (Legacy of Hope, 2014, “A Brief History,” para. 2). In order to assimilate Aboriginal people, children were taken from their families and communities (“Aboriginal Education,” 2014). The children who attended these schools were forbidden to speak their native languages and take part in cultural practices (Legacy of Hope, 2014). Some learning happened at residential schools, but the students were denied opportunities to participate in their traditional ways of life and were taught only how to live “in the lower fringes of the dominant society” (“Aboriginal Education,” 2014, para. 11). The system was “designed to kill the Indian in the child” (Legacy of Hope, 2014, “Establishment,” para. 1). The experiences at residential schools were traumatizing, and have had long-lasting effects on residential school survivors and their descendants.

Residential school survivors have negative attitudes toward the Western schooling system. Even though most residential schools have been closed for several decades, the residual effects still impact the lives of First Nations people today. Residential schools created a generation of people who do not understand “what it means to be part of a family or how to create a healthy family of their own” (Mussell, Cardiff, & White, 2004, p. 15). The First Nations students at residential schools learned abusive behaviours instead of parenting skills, which continues to cycle through generations of their offspring (Legacy of Hope, 2014). The intergenerational effects of this abuse causes First Nations children of today’s society to experience trauma themselves, making it more difficult for them learn. Residential schools tainted the concept of school to the extent that “school for many Aboriginal people is much more an object of fear to be avoided than a place of learning” (“Aboriginal Education,” 2014, para. 12). These negative perceptions of the formal educational system are passed on to today’s First Nations children through lack of parental involvement, resulting in the children having a lack of respect for their educators, and a disinterest to learn. Educators today need to take steps to address these negative perceptions and encourage First Nations parents to become more involved in their children’s education.

Increasing Parental Involvement

Since the closure of residential schools, First Nations people have been working through the effects of their trauma. It is the responsibility of educators to change their perceptions of formal schooling and encourage them to be involved in their children’s education. There are many different models of how the relationship between schools and First Nations people can be mended. Two models focus on involving parents in a multi-dimensional way, and including Aboriginal parents in building student success.

The first model involves multi-dimensional involvement in schools (Rapp & Duncan, 2012) by involving parents in a positive way through the roles of the principal, school staff, and

parents. The first suggestion is for the principal to encourage parents to share ideas and opinions, and also for parents to be part of the decision making process. It is important that principals make themselves aware of the different needs of parents in their school and take opportunities to meet those needs. The teachers also play a part in creating a “parent-friendly school environment” (Rapp & Duncan, 2012, p. 10). It is proposed that teachers learn about cultural practices and traditions in which their students participate. Also, teachers should be in contact with parents regularly about their children’s progress, and not just when disciplinary action is taken or when a child is struggling. In order to encourage parents to attend parent-teacher conferences, the teachers should provide a “relaxed, comfortable environment” (Rapp & Duncan, 2012, p. 11). A final suggestion for teachers is to communicate with parents proactively and treat parents fairly, equitably, and ethically.

Parents can complete the partnership between school and home by encouraging their children to be high achievers, setting learning goals, keeping track of their children’s progress, staying in touch with their children’s teachers, and visiting their children’s learning environment. While the school may do an excellent job of relaying information to parents via letters, phone calls, or the school website, it is just as important for parents to “return communication back to the school” (Rapp & Duncan, 2012, p. 12). In order for this model to be successful, the principal, school staff, and parents must work together. If this model is successful, all parties will see an increase in student achievement as a result of increased parental involvement.

The next model is a program that is more specific to involving Aboriginal parents in education. The Building Student Success with Aboriginal Parents (BSSAP) program provides funding to support schools in “developing partnerships and programs with parents and the community” (Manitoba Education and Advanced Learning, 2014, “BSSAP Home,” para. 1). These partnerships contribute to Aboriginal student success. In order to be considered for the program, schools must submit proposals to demonstrate that their school plans make Aboriginal student and parental involvement a priority. Since the program started in 2004, the schools selected to receive funding have “formed and maintained effective family-school partnerships that positively influence all students’ learning” (Manitoba Education and Advanced Learning, 2014, “BSSAP Home, para. 4). These partnerships have increased student motivation, engagement, progress, attendance, and well-being. The funds provided by this program aid in the implementation of the practical applications suggested in the multi-dimensional involvement model.

Creating an environment wherein principals, other school staff, and parents work together is easier said than done when the school does not have the funds to support the application of such programming. The BSSAP program is an opportunity to access funds to implement the suggestions made in the multi-dimensional involvement model. By adopting suggestions made in the first model, accessing funds provided by the BSSAP program, or combining the two, educators can increase the involvement of parents in their schools.

Conclusion

Increasing student success is important for all students, but it is critically important for First Nations students. Low levels of student achievement are attributed to low levels of parental involvement. Thus, in order for student success to improve, First Nations parents need to become more involved in their children’s education. Residential schools have caused First Nations people to perceive the school system negatively. However, through the encouragement of educators, these negative perceptions can be reduced and parental involvement can be increased. When parental involvement increases, their children will experience higher levels of student success.

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About the Author

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Improving Female Enrolment in STEM-Related Trades

Jill Ferguson

Abstract

In 2014, the provincial government of Manitoba announced new initiatives to encourage young women to explore a career in non-traditional trades. While new government funding programs and job opportunities are laudable, there will not be a significant increase of female enrolment in Science, Technology, Engineering and Mathematics (STEM) fields unless our early, middle, and high school curricula are revamped to include experiential learning that demystifies STEM careers. Additionally, there is a need for long-term initiatives that empower young girls to explore education in all fields of study, provide gender-neutral learning environments, and encourage businesses to create gender-balanced workplaces.

On October 2, 2014, Manitoba Minister of Jobs and the Economy, Theresa Oswald, announced three new initiatives to encourage women and girls to explore careers in non-traditional trades. The three initiatives consisted of the Trade Up! Program, which will provide guidance, testing, and financial aid to those women who are interested in trades; the training of 12 certified female journey people to become vocational educators; and a pre-apprenticeship cooperative program to be delivered by the International Brotherhood of Electrical Workers (IBEW), which will hold 10 spots in reserve for female participants (Province Hopes, 2014, paras. 1-7). While these initiatives as set out by the Manitoba government as a means to encourage women and girls to explore careers in non-traditional fields are laudable, they will not be successful unless they are married to other long-term initiatives that empower young girls to explore education in all fields of study, include hands-on learning that eschews gender socialization, and encourage businesses to create gender-balanced workplaces.

Eliminate the Concept of Gender-Specific Jobs

Currently in Canada, less than one-third of females obtain a post-secondary degree or diploma in the Science, Technology, Engineering and Mathematics (STEM) fields, yet women account for more than 50% of all post-secondary graduates (Muzzafar, 2014, "Strength in Numbers," paras. 2-3). This low enrolment and subsequently low graduation rate of women in STEM fields may be attributed to the persistence of gendered curricula in the Canadian school system, which still makes a distinction between men's and women's jobs (Ingram, 2014). The lack of exposure to what are traditionally male-dominated STEM fields at a young age may explain why there continues to be low female enrolment in the trades and technology domains. Exposure to trades and technology at an early age is one way to encourage girls to consider post-secondary education in a STEM domain (STUDENTS, 2014).

Gendered curricula and lack of exposure to STEM fields of study are not the only barriers to female participation in trades and technology. Parental pressure may be the main reason that stops women from investigating a career in STEM (Walters, 2013). Many parents believe that manufacturing in Canada is on life-support, so they do not know about, and therefore cannot speak to, their daughters about the opportunities for exciting and well-paying careers in STEM-related fields. On average, a woman in Canada enters the trades at age 29, after she has already explored other careers outside of the STEM fields. These additional barriers highlight a need for a national program that emphasizes not only the monetary rewards that await women who enter into STEM careers, but also the chance for personal growth, especially since a woman's expository nature and creativity are a good match for the innovative manufacturing sectors (Walters, 2013).

Perhaps the largest obstacle to more young women entering a STEM or trades career revolves around the well-worn trope that women are not suited for what has traditionally been considered men's work. The long-held idea that women's emotional, feminine natures do not gibe with the rational, scientific personality needed for STEM, nor do women's soft and weak physicality apply well to the strength needed for trades work, is reinforced by some disheartening statistics. In Canada, fewer than 4% of women are employed in the construction trades and even fewer are employed in other skilled trades (Sorenson, 2014, para. 2). These low numbers can in part be attributed to the notion that women possess a feminine weakness that makes them ill-suited to working in the masculine, "tough" trades environment (Ness, 2012, p. 663). When that perceived physical weakness is coupled with the concept that women in a male-dominated workplace cause an increase in distracted work practices, disruption to business, and an increase in harassment claims, one has the recipe for a very female-unfriendly work environment. It is of note that these barriers for women working in trades are slowly eroding: many women in these workplaces have reported to being treated as "just one of the guys" while also being recognized as valuable employees (Ness, 2012, p. 664). Furthermore, over the span of five years, enrolment in trades programs at Thompson River University in British Columbia has increased by 17%, due in part to administrators who have created a more respectful, genderless atmosphere in the university's shops and classrooms (Sorenson, 2014, paras. 29-34).

The Government of Manitoba's newly announced initiatives to increase female participation in STEM fields, while commendable, are simply not enough. There will undoubtedly be tens of women who enrol in or explore the trades, thanks to reserved training spots, but that number needs to be in the thousands. This increase of women in STEM fields will occur only when young girls and boys are exposed to early and middle school curricula that do not delineate between men and women's work. Young girls should be continuously encouraged to excel in science, technology, math and manufacturing fields, and we, as a society, must actively work together to disabuse the notion that jobs that have traditionally been performed by men are forbidden territory for women. There is a certain irony that the International Brotherhood of Electrical Workers (IBEW) is attempting to be inclusive by reserving 10 training spots for women, when that inclusivity could be better achieved by replacing the word *brotherhood* in its name with a more gender-neutral term. The province's plan to increase female participation in trades is a step in the right direction; however, it just scratches the surface of a problem that requires long-term attention from both the public and private sector.

Practise Non-Gendered, Experiential Learning

Despite the Government of Manitoba's belief that its newly announced efforts to increase the participation of females in trades will be easily achieved, a noticeable appreciation of women in the field will not be seen until the provinces of Canada modify how curricula are taught to all students. When surveyed, a group of Toronto-area high school students noted that most of their studies treated gender equality as a non-issue in Canada. This belief existed despite the overwhelming feeling that discussions regarding women's contributions to society took place only when they were studying early Canadian settlers, suffragettes, or sex education (Ingram, 2014). This lack of acknowledgement of the skills, aptitudes, and contributions of current and historical female figures outside of three instances, combined with the pressure to conform to traditional mores of femininity, created tension for several of these girls as they tried to figure out their own identities. A more gender-balanced teaching of early, middle, and high school curricula could go a long way to lessening the confusion that many young females experience when trying to determine what might be their future careers.

This confusion was shown in the remarks made by a level one pre-employment carpentry student who, in the spring of 2014, asserted that despite her lifelong interest in carpentry, she would not have enrolled in the program had it been open to men. The female student's

apprehension about enrolling in the program was based on the belief that men would enrol and be better equipped with prior knowledge of carpentry practices, leaving her at an academic and practical disadvantage (Migneault, 2014). While it is admirable that a women-only class was created to allay the fears of females who were anxious about embarking on a career in male-dominated trades, these segregated learning environments should not have to exist. Early, middle, and high school curricula should provide a balanced perspective of the abilities and achievements of both genders, lessening the perception that women who have created societal change and have contributed to the growth of our communities through science, technology, engineering, and manufacturing are the exception as opposed to the rule.

Unfortunately, the delivery of curricula without favoring one sex over another will not occur overnight. In the interim, however, several programs have been developed to present the possibilities of STEM careers to young women. Girls in Engineering, Mathematics, and Science (GEMS) is a program that has been developed by female scientists and their students in the United States (Dubetz & Wilson, 2013). Unlike their male coworkers, these women were not encouraged to explore the science and math fields. This shortfall led the women to create a succession of GEMS workshops that offer middle school girls the opportunity to explore STEM careers. Presented in an all-female environment, GEMS workshops give young females the chance to experience and enjoy math and science without the fear of being seen as too intelligent and, therefore, less feminine. One of the many highlights of the GEMS program is the emphasis on experiential, hands-on learning, which helps to demystify the STEM field, aids in retention of learned material, and encourages young women to expand their academic horizons.

In Manitoba, Career Trek offers similar experiences for young boys and girls to experience hands-on learning experiences in a university, college, or apprenticeship environment ("Steps," n.d.). While it is equally important to encourage both genders to learn through expression and application (McCabe, 2014), programs such as Career Trek cannot be relied upon to compensate for the lack of gender-neutral curricula and experiential learning that is still largely absent in early, middle, and high schools. Student success depends on student engagement, and engagement relies on well-structured pedagogy and teaching practices that support the learning process through the student's entire educational career (Gottheil & Smith, 2011). If those in the STEM fields in Manitoba wish to engage under-represented student populations, they must place pressure on the province to institute a curriculum that places less significance on a gender-driven narrative, while emphasizing the importance of experiential learning through hands-on demonstrations that provide real-life applications for all students.

Emphasize the Benefits of Gender-Balanced Workplaces

Despite decades-long efforts to create a more gender-balanced leadership structure in many Canadian workplaces, it is a sad reality that, for most businesses, diverse leadership structures still do not occur naturally (Grogan & Shakecraft, 2011). This inequality exists despite research that indicates executive committees that have a balanced proportion of men and women have 56% higher revenues than those companies that have no women in their leadership structures (Muzzafar, 2014, "Strength in Numbers," para. 4). Even though increased profit makes a strong case for the inclusion of women in leadership roles, the persistence of gender socialization can erect barriers to full female engagement in those roles (Ingram, 2014). Nevertheless, these barriers are gradually being overcome; what was once a predominately hierarchical leadership model is gradually transforming into a more collaborative atmosphere for many businesses (Muzzafar, 2014), and gender-balanced teamwork at a leadership level is an excellent way to model successful working communities for all branches of a business (Blanchard, 2012). This gradual shift into a more cooperative leadership structure will undoubtedly have a trickle-down effect, whereby women in STEM fields are not seen as an anomaly but rather as a valuable resource.

While the government has limited say as to whom a business can hire, or for what reasons, as a business itself the government can act as an exemplar by promoting competent women to leadership positions. This philosophy has already taken root at the Toronto Stock Exchange where, as of December 31, 2014, all listed companies are obliged to disclose all female representation on their boards of directors (Shecter, 2014). Endorsed by every province with the exception of Alberta, it is hoped that this initiative will increase shareholder analysis regarding how companies hire and advance women within their organizations. Although one may think that this obligation to disclose the amount of female representation at a high level of leadership borders on too much government interference, it is a powerful tool to compel multinational companies to think about diversity at every level of their corporate structure.

Conclusion

It is predicted that by 2016, Canada will be facing a shortfall of 100,000 STEM workers (Muzzafar, 2014, "Strength in Numbers," para. 3). For many women, this deficit could present a golden opportunity to embark upon a rewarding career in a well-paying field, but less than one-third of female graduates are in STEM-connected areas of study. This dearth of women in STEM education highlights the shortsightedness of the recent announcement by the Government of Manitoba of initiatives to increase female participation in trades and technology. Arranging career counselling, allocating training space, and providing education grants are noble plans that only superficially address the goal of increasing female interest in STEM training. For many women who investigate a career in STEM after high school, it is too little information, too late in their lives; they have not been encouraged to take the math or science needed to further their education and therefore do not have the qualifications to enter the discipline. STEM fields can be daunting if one is unfamiliar with experiential learning, has not been encouraged to excel in math and science, and has been witness to persistent sexism in business environments. That is why it is imperative that the government create programs that run during the early, middle, and high school years in order to demystify the misconceptions around STEM careers. Promoting the concepts of gender-neutral jobs, experiential learning, non-gendered curricula, and gender-balanced workplaces in schools and business is an effective way to normalize STEM careers and therefore increase female participation in this poorly staffed domain.

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The Inclusive Classroom

Tammy Webster

Abstract

In today's classrooms, inclusion is evident on many levels. Educators are given opportunities for professional development on creating inclusive classrooms that respect and embrace diversity, and they are gaining confidence in their ability to apply differentiated instruction that engages all students in their learning. Using differentiated instruction helps learners to become confident in their abilities and comfortable in their learning environment. Not only are educators being provided with opportunities to see the benefits of inclusion, parents are also being educated on the importance of inclusion and how it benefits their children, with or without a disability.

As members of an educational team, teachers require education and training on the importance of creating an inclusive classroom. It is essential to acknowledge the benefits that inclusive classrooms have on students with and without disabilities. Creating an inclusive classroom means not just putting students with disabilities into the classroom, but also finding ways to help all students benefit without exclusion. In inclusive education, regular and special needs learners are together in the same classroom (Ekeh & Oladayo, 2012, p. 2). Creating an inclusive classroom setting requires strategies and techniques that meet the needs of all students, not just those with disabilities. Inclusive classroom environments respect diversity and, while doing so, they create a warm and welcoming environment. Providing teachers with appropriate education encourages them to use inclusive strategies that support diverse learners. Teachers in inclusive classrooms practise differentiated instruction to engage students in their learning and accommodate their needs. Inclusive classrooms have a clear direction to help their students and work as a team with the parents, educating the parents about inclusion.

Environment That Respects Diversity

Inclusive classrooms are warm and welcoming environments that create and respect diversity. Inclusion of all learners in the classroom is most beneficial in the areas of academic achievement and social interaction (Lampert, 2012, p. 1). Including students with disabilities in the regular classroom can be successful only when those students feel that they are truly part of the classroom. Students feel like they are part of the classroom when they have support and feel socially successful with their peers (Australian Research Alliance for Children and Youth, 2013, p. 9). Leading open conversations about differences, backgrounds, and abilities is crucial in developing student confidence and comfort in the classroom environment.

It is important that students with special education needs be in the regular classroom. Having these students in the regular classroom creates diversity, since all students enjoy a much higher level of social acceptance (Cawley, 2002, p. 430). In an environment that respects diversity, the teachers recognize that diversity refers to all children and their diverse personalities and learning needs, not only children with exceptionalities (Katz, 2012, p. 5). Being mindful of the variety of backgrounds, values, and beliefs that students bring to school will help the teacher to provide quality education for all students in the regular classroom.

Inclusion Education for Teachers

Teachers who are educated with inclusion produce and create diverse learners. When the teachers are confident in what diversity and inclusion truly mean, their confidence spreads among the children, creating a welcoming environment that respects all areas of diversity. Inclusion happens not simply with student participation; inclusion means that the regular

classroom teacher takes ownership of the whole class (Bennett, 2009, p. 2). Having the proper education helps teachers take ownership of every student. Education on the topic of inclusion enables teachers to produce and create diverse learners in an inclusive classroom.

Teachers need to be on board on all aspects of inclusion to create diversity. Otherwise, the technique often falls short of desired change, or teachers become overwhelmed. Many teachers have discovered that the application of one piece of inclusive practice rarely has the desired effect (Katz, 2012, p. 22). Providing the teachers with adequate resources and staff training leads to an understanding of all pieces of inclusive practice (Australian Research Alliance for Children and Youth, 2013, p. 9). When teachers learn to become confident about inclusion, they create an environment that respects diversity and naturally includes all students.

The inclusion method of teaching challenges teachers to think about how their students learn as individuals and as a class. Using inclusion methods gives the teacher the opportunity to learn more about how inclusion benefits the students by seeing them all engaged and motivated to learn. With teachers facing the challenge of meeting all of their learner needs, it is extremely beneficial that teachers pursue professional development on inclusive education. Providing the teachers with opportunities to gain new knowledge about inclusion opens new doors to student success in the classroom. Confidence and a clear understanding of inclusion lead to an inclusive classroom, which enables the teacher to apply appropriate strategies and techniques. With strong education on the topic of inclusion, teachers will learn to embrace the diversity in their classrooms, not only students with disabilities, but students with a variety of ethnic backgrounds and values, creating inclusion across the classroom.

Support for Inclusion in the Classroom

Providing students with academic support is essential in creating an inclusive classroom. Since classroom environments have the ability either to improve or impede a student's ability to learn, it is key to provide the students with academic support that will enhance their learning (Bucholz & Sheffler, 2009). In today's classroom of high standards and tests, providing the needed supports is more important than ever. Without this support, students become afraid and fall short of the expected standards and test scores. However, offering this support becomes a difficult task for teachers who are attempting to accommodate students from different ethnic groups, language groups, cultures, family situations, economic situations, and different purposes for learning and learning styles (National Institute for Urban Schools, 2000). Although some of the supports needed may be obvious, a child may be wrongly placed because there is no proper technological assessment available (Mariga, 1993, p. 29). Having the appropriate assessment tools is a prerequisite to recognizing the support that a student needs.

Educational assistants are a positive support in the classroom. However, school boards do not usually provide educational assistants unless the students' disabilities are severe. Without educational assistants, it is up to the teacher to provide the needed support for students to reach their personal goals. A teacher can incorporate daily support by grouping students according to pace and reading levels, which creates a sense of belonging for the students. When the students begin to feel like they belong with their peers, regardless of their exceptionalities, inclusion has begun to take place, with or without the support of an educational assistant.

Differentiated Instruction and Inclusion

Differentiated instruction and inclusion in the classroom increases student engagement for all students. It is important to remember that no students are alike. All students learn differently and bring different challenges to the classroom, including academic, physical, and mental disabilities. Providing the students with visual, auditory, and kinaesthetic learning opportunities is important in helping them feel like they belong in the classroom. Inclusive teachers who

provide students with a variety of ways to learn and demonstrate their learning will increase student engagement.

To engage students in their learning, lessons should include and publicly value the participation of all students across the social and cultural backgrounds found in the classroom (Australian Research Alliance for Children and Youth, 2013, p. 15). Creating routines and teaching skills in natural daily activities, occurrences, and settings will nurture longer lasting achievement for students with or without disabilities (Katz & Mirenda, 2002, p. 18). When students are free to express their learning in a variety of ways, they begin to feel comfortable in their environment. They develop confidence in their own abilities and are willing to demonstrate them to their peers and teachers. With their newly found confidence, students become more engaged in the new topics taught in the inclusive classroom. Providing the students with opportunities to work with other students of a variety of abilities and backgrounds further stimulates a sense of inclusion for the students.

Educating Parents on Inclusion

Educating parents on what inclusion means and the benefits that inclusive classrooms have on their children is extremely important. When the parents are educated on the benefits that the inclusive classroom can have on their children with or without disabilities, they gain confidence in the capacity of the school to understand and educate their children (Elkins & Van Kraayenoord, 2013, p. 122). When parents see the positive socialization among all students with or without disabilities, they develop a positive attitude toward inclusion.

Some parents have misconceptions about what an inclusive classroom can teach their children. Parents often feel that their children may have to keep up with the other students in the classroom. In order to have an inclusive classroom, not all students have to perform at grade level (Causton-Theoharis & Kasa, n.d. p. 4). It is important for the teacher to explain to the parents that inclusive classrooms ensure all students' success at their own level, and that while doing so, the students gain a sense of belonging in the classroom.

Parents are an essential part of the inclusive classroom team. Whether or not the children have disabilities, it is essential to hear what the parents have to say (Hill, 2009, p. 6). Creating individualized education plans, along with having open communication with the parents, welcomes the parents to see first-hand where their children fit into the classroom and how the inclusive classroom is going to support their children's learning. Collaborative decision making with everyone who is affected should take place (Hill, 2009, p. 9). Parents need to understand the importance of an inclusive classroom. Parents who are educated about the inclusion process, will see the benefits that an inclusive classroom has on their own children. Including parents as part of the team and educating the parents on inclusive classrooms will help to create diversity inside and outside the classroom.

Conclusion

Creating an inclusive classroom does not happen overnight. It could take months for a teacher to create a safe and inclusive classroom wherein all learners feel comfortable and are reaching their fullest potential. It is an ongoing commitment to press schools to become more inclusive (Slee, 2013, p. 4). Inclusive teachers create inclusive classrooms when everyone in the classroom respects diversity. Using inclusion methods creates and maintains a warm and welcoming environment for all students, not only those with exceptionalities. With knowledge gained from professional development opportunities on inclusion strategies and methods, teachers will be confident to provide differentiated instruction to support their students' needs and increase their students' engagement. Parents also play a vital role in an inclusive classroom. Inclusive teachers who establish open lines of communication and collaborative meetings will help the parents see the benefits of an inclusive classroom. Learning in an

inclusive classroom helps our students to gain confidence in their personal abilities and shapes them to accept others for who they are.

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About the Author

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Obstacles in the Implementation of Response to Intervention

Vicki Lamb

Abstract

To meet the increasing needs and diversity of students many schools are adopting the Response to Intervention (RTI) model. Three main obstacles interfere with the successful implementation of this three-tiered intervention structure: failure to deliver quality whole-class instruction, problems with early identification and monitoring, and lack of diversification in the school setting. Schools need to ensure that all students receive quality, whole-class instruction. Educators must continuously monitor and identify students who require additional support. This is only possible when all staff collaborate to meet the diverse needs of all students. Full commitment is required by all staff to overcome the obstacles that threaten the successful implementation of the RTI structure.

Response to intervention (RTI) is a preventive, three-tiered system. It was developed to facilitate the inclusion of students with exceptionalities into the classroom, but later evolved into an instructional and intervention structure to meet the needs of all students (Gilbert et al., 2013; Sugai & Horner, 2009). The philosophy of RTI is an intentional and comprehensive model designed to be implemented school wide. However, there are obstacles in the implementation of RTI in the classroom and school setting. First is the need for quality whole-class instruction. Second is the need for early identification and monitoring, which is supported by collaboration. Third is the need for diversification to educate all students. Many schools are implementing portions of the essential elements, but must address the obstacles that interfere with successful tiered system delivery.

Quality Instruction

It is crucial that educators ensure that whole-class instruction is explicit and purposeful, based on the needs of all students. In a whole-class setting, all students, including at-risk students, receive the majority of instruction, so effective, quality instruction is essential (Fuchs, Fuchs, & Compton, 2012; Nelson-Walker et al., 2013). Educators need to organize their whole-class instruction based on skills necessary for at-risk students to develop academically (Algozzine et al., 2012; Sandall & Schwartz, 2013). This quality of instruction can result in more significant and meaningful gains than simply increasing the length of instruction (van Kraayenoord, 2013). Providing quality whole-class instruction can minimize the need for supplemental instruction for the students who are unresponsive to whole-class instruction (Gilbert et al., 2013). The assumption is made that at-risk students had explicit, expert whole-class instruction whereby the majority of their classmates thrived prior to the recommendation for further intervention (Algozzine et al., 2012). High-quality, whole-class instruction can mitigate the need for additional intervention for most students.

Explicit instruction and interventions must be delivered by knowledgeable and trained educators. Skilled educators offer at-risk students interventions that are flexible and based on individual student needs, in order to ensure substantial improvements (Fuchs et al., 2012; Curenton, Justice, Zucker, & McGinty, 2013). Inexperienced teachers may lack the confidence and ability to provide whole-class quality instruction (Winton, 2013). Therefore, it is imperative that knowledgeable educators mentor and support new teachers and support staff with the implementation of instruction and intervention. However, interventions should not be a replacement for explicit, quality whole-class instruction whereby students are given the opportunity for success (Gilbert et al., 2013; O'Connor & Fuchs, 2013). We need all classroom educators to be proficient at differentiating instruction to meet the needs of all students

(Grisham-Brown & Pretti-Frontczak, 2013). Empowering and supporting new teachers with the skills and strategies necessary to differentiate instruction and intervention instruction is a crucial role of experienced educators.

Lack of quality whole-class instruction can lead to behaviour issues. Students may exhibit academic difficulties and/or behavioural issues that need to be addressed (Sugai & Horner, 2009). Dealing with problem behaviours can impede the quality of whole-class academic instruction (Algozzine et al., 2012). Educators must plan to meet the diverse academic, social, and emotional needs of their students in order to establish an environment wherein students can thrive. Enriching the whole-class instruction results in positive gains for at-risk students (Nelson-Walker et al., 2013). Therefore, educators must be skilled at providing students with essential academic skills while managing behaviour through good classroom management. It would be a mistake to believe that educators can teach academic or behaviour skills in isolation, especially in schools with higher numbers of at-risk students (Algozzine et al., 2012). An inclusive and purposeful system of quality, explicit whole-class instruction is necessary to meet the vast academic and behavioural needs of all students.

Continuous Monitoring

Quality whole-class instruction may not be sufficient to meet the needs of the most at-risk students. Some students will require additional support. The RTI model emphasizes the collaboration of all educators and staff who are responsible for the implementation. Educators make intervention decisions based on initial assessments, continuous observations, and constant monitoring (Grisham-Brown & Pretti-Frontczak, 2013; Sandall & Schwartz, 2013). Educators need a support system that includes time to assess student progress, collaborate with colleagues, and adjust interventions (Dodge, 2013). Most schools do not provide professional collaborative time to share, discuss, and reflect on the effectiveness of interventions (Algozzine et al., 2012). Staff collaboration is one of the key elements necessary for the success of the RTI model (van Kraayenoord, 2010). Without this dedicated time, it is difficult to establish consistent collaboration to reflect on the success of interventions.

Time to collaborate facilitates the early identification and implementation of interventions. Students who are experiencing difficulty mastering academic skills benefit from supplementary intervention (Curenton et al., 2013; O'Connor & Fuchs, 2013). Adapting interventions based on continuous assessment is crucial to the successful implementation of RTI (Algozzine et al., 2012). Students who are unresponsive to tier 3 interventions are referred for further assessment and the possible need for an individual education plan (Curenton et al., 2013; Sugai & Horner, 2009). Interventions are continuously monitored and examined in order to determine the success of interventions (O'Connor & Fuchs, 2013; van Kraayenoord, 2013). Educators use their observations and assessments to direct their instruction and intervention (Grisham-Brown & Pretti-Frontczak, 2013). Education is essential for all staff in the identification, monitoring, and interventions necessary for implementation, which includes time dedicated for collaboration.

Many schools implement RTI, but neglect to monitor the long-term progress made by students. There is a lack of continuity and objectivity when passing student progress from teacher to teacher or school to school. Providing consistent, explicit, quality whole-class instruction from year to year is the foundation of monitoring positive student achievements (Dodge, 2013; Sandall & Schwartz, 2013). The objective of RTI is to provide long-term positive outcomes for all students (Gilbert et al., 2013). Simply repeating the instruction provided in previous interventions is not an effective or positive intervention; the instruction must be specific to the needs of the individual student (Grisham-Brown & Pretti-Frontczak, 2013). However, schools lack the continuity of intervention strategies when students move to a new grade and/or new teacher. Students who receive and make positive gains in supplemental interventions do not necessarily avoid future academic deficiencies (O'Connor & Fuchs, 2013). There is a need for continuous monitoring of all students in the subsequent grades, to ensure they are

maintaining success and prevent further difficulties (Gilbert et al., 2013). Monitoring and communicating long-term progress of at-risk students will ensure consistency in the delivery of comprehensive strategies throughout the students' academic career.

A goal of the RTI model is to provide resources, assessment tools, and time to collaborate, in order to establish the most appropriate interventions. A supportive learning environment is essential in the implementation of a tiered system that emphasizes quality whole-class instruction to encourage successful interventions (Algozzine et al., 2012). Mutual respect and positive connections must be established and integrated with explicit whole-class instruction, in order to create an environment beneficial to student learning (Dodge, 2013). The RTI model can support the decision making and planning process of both educators and administrators (van Kraayenoord, 2013). The educators responsible for student assessment and interventions are often not involved in the long-term planning and often change on a yearly basis, which hinders consistency. The RTI model structure offers whole-class instruction based on best practices and assessment, in order to make collaborative team decisions regarding the need for interventions (Sugai & Horner, 2009). Therefore, it is crucial that not only collaboration, but consistency of strategies, is encouraged and implemented.

Diversification

Our schools are becoming more diverse. Students are entering school with a wide range of abilities, backgrounds, and socio-economic statuses that influence their educational needs. More students enter school with language and academic deficits due to a variety of factors, including EAL or socio-economic status (Curenton et al., 2013). Educators must take into consideration the students' academic skills, social and emotional well-being, cultural diversity, and abilities (Grisham-Brown & Pretti-Frontczak, 2013). In addition, students may be lacking in only one area or skill, for example weak oral language, which emphasizes the importance of individualized support to meet the specific needs of students (Curenton et al., 2013). A student's academic progress is influenced by his background experiences, oral language, and vocabulary (Fuchs et al., 2012). As our school populations become more diverse, there is more of a demand on educators.

A team of educated and knowledgeable staff is essential to the successful implementation of the RTI strategies, especially with the increasing diversity in our classrooms. Many interventions are provided by educational assistants who are not trained or knowledgeable about academic and literacy interventions. However, early intervention can improve the reading outcomes of at-risk learners (Gilbert et al., 2013). Some students enter school with large discrepancies in language and literacy backgrounds and abilities, which are predictors of later school achievements (Dodge, 2013). Educators must be knowledgeable in programming for quality, explicit instruction, especially when teaching students who lack well-established language and literacy skills.

The successful integration of the RTI model requires whole-school implementation to meet students' diverse needs. The organization and collaboration of all educators, educational assistants, and specialists are an essential component of the RTI model (Sandall & Schwartz, 2013). When all staff is actively engaged in the philosophy, benefits, and implementation of RTI, there can be positive results for both the school and students (Algozzine et al., 2012). Implementing best practices can be a challenge for many reasons, including staffing changes, complacency, and lack of support by administrators (Winton, 2013). RTI should facilitate the organization of best practices (Sugai & Horner, 2009), but educators must be prepared to implement the suggested strategies. Educators can be well-informed about RTI instructional practices but still fail to implement in a manner that result in positive student results (Nelson-Walker et al., 2013). Encouraging all staff to adopt best practice strategies and work collaboratively is indispensable in meeting the diverse needs of all students.

Often, professional development is offered to only a few select staff, which rarely includes educational assistants. However, educational assistants routinely work with the most at-risk students. Therefore, training and education must be provided to all staff, including educators, educational assistants, and specialists, to encourage the change process (Algozzine et al., 2012). The professional development must be organized and implemented around the specific school culture and needs (Sugai & Horner, 2009). Education must be continuous and based on current best practices, intentional, and provided to all staff to facilitate the cohesive implementation of quality instruction and interventions (Nelson Walker et al., 2013). The professional development must be based on the resources available, establishing supportive systems and providing guidance (Winton, 2013). Professional development also facilitates the opportunity for school staff to develop strategies, communicate, and collaborate (Sandall & Schwartz, 2013; van Kraayenoord, 2010). Administrators can provide leadership and guidance in creating an environment conducive to respectful collaboration (Winton, 2013). Whole-school education and training must provide the opportunity for collaboration and development of consistent best strategies, assessments, and interventions necessary for implementation by all staff, including educational assistants.

Conclusion

The RTI model has reshaped the traditional approach to delivering instruction. It is a preventative model that emphasizes the need for whole-school implementation. Many obstacles interfere with its effectiveness. Schools need to ensure that all students receive explicit, quality, whole-class instruction. This instruction must include continuous monitoring, early identification, and implementation of interventions to meet the needs of all students. There must be school-wide professional development and collaboration to meet the needs of the diverse school populations. The goal is to meet the needs of all students, including the most at-risk students, in a three-tiered intervention system. Many schools have integrated portions of the RTI model, but must continue to work toward full implementation. This implementation requires a commitment of time, financial resources, materials, and professional learning opportunities.

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Promoting Success with FASD-Affected Students

Amy Schiltroth

Abstract

The purpose of this article is to provide educators with information to support the increasing number of Fetal Alcohol Spectrum Disorder (FASD) affected students in mainstream classrooms. Educating FASD-affected children requires a thorough understanding of identifiable and non-identifiable characteristics, common behavioural and social traits, and effective teaching strategies. This knowledge will help educators and families to support the diverse needs of affected children and promote success both inside and outside of the classroom.

For students with Fetal Alcohol Spectrum Disorder (FASD), school can be an unforgiving place. Because most students with FASD attend regular schools, determining suitable programming and using appropriate teaching strategies can be challenging for even the most experienced teacher (Blackburn, Carpenter, & Egerton, 2010). Teachers need to develop a thorough understanding of FASD, and of the trademark characteristics and other labels that fall within the FASD “umbrella” (Blackburn & Whitehurst, 2010, p. 123). Students who have been diagnosed with FASD exhibit numerous characteristics that often mirror other behavioural or attention-related disorders (Blackburn et al., 2010). This deception can hinder appropriate planning for FASD-affected students. Developing learner profiles and individualized learning pathways for FASD-affected students requires a team approach and family support (Mitten, 2013; Symons, 2008). However, local services and resources for families, including children in adoptive or foster care, can be limited or non-existent, depending on the geographic location (Fuchs, Burnside, Marchenski, & Mudry, 2010). The enduring nature of FASD, and the social stigma associated with it, compel educators to understand the lifelong implications, along with developing suitable programming and parental support, in order to promote a positive learning experience for affected students.

Due to the prevalence of FASD, the sheer complexity of the disorder, and the poor prognosis for students whom it affects, FASD remains a topic for concern in today’s classrooms. The effect of alcohol on infants born to mothers who drank while pregnant was first noted in 1968 by Lemoine in France and then named fetal alcohol syndrome (FAS) by Jones and Smith in 1973 (Blackburn et al., 2010). FASD is completely preventable and continues to be the most common cause of intellectual disabilities in the Western world, affecting 1-6 in 1,000 live births (Blackburn & Whitehurst, 2010, p. 124; Fuchs et al., 2010, p. 233). In Manitoba First Nations communities, the estimated FASD occurrences are as high as 55-101 per 1,000 live births (Fuchs et al., 2010, p. 234). These frightening statistics must alert educators to recognize a need for further understanding of the problem, especially in consideration of the stigma attached to FASD.

Because FASD is the title given to a range of effects and characteristics, it is important for educators to note the subtle differences and appropriate labels. Four labels describe prenatal exposure to alcohol: “fetal alcohol syndrome (FAS), alcohol-related neurodevelopmental disorder (ARND), alcohol related birth defects (ARBD), and partial fetal alcohol syndrome (PFAS)” (Blackburn & Whitehurst, 2010, p. 123). Children with FASD have both intellectual and physical disabilities, all of which are presented on a broad spectrum (Winzer, 2002). Physical and intellectual damage depends on several factors, including the quantity of alcohol and timing of consumption by the mother, and the mother’s present health and medical condition (Whitehurst, 2011). By understanding the subtle differences between the FASD labels, educators can correctly identify other common characteristics.

FASD-affected children are often born with noticeable characteristics. Obvious growth deficiencies, facial and physical anomalies, and central nervous problems are all associated

features of FASD (Blackburn et al., 2010). Facial anomalies are the distinctive characteristics of FAS, which typically identify the syndrome at birth when confirmed maternal alcohol consumption is not present. These facial characteristics can dissipate as a child ages, making a diagnosis in grown children much more difficult (Blackburn et al., 2010). While some children may have observable features of FASD, others may not. For educators, the hidden impairments become difficult to detect and differentiate from other learning or behavioural disorders.

Many children with FASD display only behavioural and neurobehavioural problems. Due to central nervous system damage, children with FASD exhibit difficulties in language, behavioural, and social domains (Mitten, 2013; Olswang, Svensson, & Astley, 2010). These behavioural problems, often compounded with other mental health issues, can result in a life-long struggle both academically and socially. Caring for and educating these children require an “informed approach that relies on reflective practice and adaptive teaching techniques” (Blackburn & Whitehurst, 2010, p. 122). Because these underlying issues are not as obvious as facial or physical anomalies, educators must attune to their students’ unspoken needs and the effects of the hidden impairments.

Language delays, including both receptive and expressive language, can be another identifiable characteristic of a student with FASD. More specifically, children with FASD exhibit “general communication delays, speech impediments, and problems with word comprehension” (Blackburn & Whitehurst, 2010, p. 124). Teachers must be prepared to use “clear, concrete, simple language backed up with visual cues” (Blackburn & Whitehurst, 2010, p. 127), in order to ensure that FASD-affected students understand directions and content in the classroom. Symons (2008) recommended avoiding figurative language and multistep instructions, and using visual aids to support learning experiences. FASD individuals are typically hands-on or visual learners (Mitten, 2013), and they benefit from differentiated instruction strategies (including assessments) for core academic subjects (Symons, 2008). Educators must be adaptive in their teaching practices in order to ensure student success.

Recognizing the difference between a symptom of FASD and a general behavioural disorder can pose many challenges inside the classroom. FASD-affected children do not understand or follow general theories of learning. For example, they do not typically apply rules and understand the consequences of their actions (Blackburn et al., 2010). Olswang et al. (2010) noted an increased level of assertive, unpredictable, impulsive, and aggressive behaviour in FASD-affected children. Educators must be prepared to handle extreme behaviour by developing specialized learning pathways that align with the students’ personality strengths and talents (Symons, 2008). More importantly, these risk-taking students will require additional supervision (Mitten, 2013), along with structure and routine (Blackburn et al., 2010). Unfortunately, impulsivity does not dissipate over time, often continuing into adulthood (Blackburn et al., 2010). Through the use of clear, concise, and immediate consequences, FASD-affected students will develop a greater sense of self-regulation, which may lead to better self-management as adults.

Children with FASD often experience disconnected or troubled social interactions. Olswang et al. (2010) observed that “difficulty with peer interactions is a recurring theme” (p. 1689), creating obvious challenges inside the classroom for both the teachers and FASD-affected students. Because these children do not understand the reciprocal effects of a relationship and lack language proficiency, preserving friendships and other social interactions can be extremely challenging (Blackburn et al., 2010). Unfortunately, FASD-affected children have noticeable difficulties engaging in pro-social behaviours such as “sharing, turn taking, and co-operative play” (Blackburn & Whitehurst, 2010, p. 126). Educators should be aware that these children often do not understand social cues or body language like other children (Olswang et al, 2010). As children age, these social gaps become more noticeable and aspects of their social interactions are viewed as immature (British Columbia Ministry of Education, 1996). Blackburn et al. (2010) recommended “repeated neuropsychological assessment” throughout a child’s life, in order to determine suitable plans and goals (p. 143). These social implications can lead to an

unfortunate and troubled school experience. Teenagers and adults with FASD have tendencies to engage in poor social relationships and are at an increased risk of developing “addictive behaviours (alcohol and drug related), inappropriate sexual behaviours, problems with the law, and mental health issues” (Blackburn et al., 2010, p. 142). To ensure that these students are prepared for adulthood and independent living, educators must provide positive social interactions, develop age-appropriate social skills, and promote healthy lifestyle choices.

When educators develop individualized plans for FASD-affected students, their parents or caregivers are an essential component to consider. There has been little research conducted on the impact that FASD has on families, but Whitehurst (2010) reminded professionals, “The news that a child has, or is at risk from, a developmental disability is often amongst the most frightening and confusing pieces of information that parents will ever receive” (p. 40). Parents often share common experiences around the diagnosis and the challenges of FASD; however, noticeable differences are commonly found in professional support and other services (Whitehurst, 2010). Educators should be sensitive and considerate of FASD-related stigma, and recognize the worthy insights that can be attained from the families or care providers.

Many children with FASD have been removed from their homes due to factors related to poverty-stricken environments and being placed in foster care. About 11% of Manitoba children in care are affected by FASD (Fuchs et al., 2010, p. 243). Family histories of mental illness, poverty, and drug or alcohol abuse are typically present in FASD-affected children, complicating their diverse profile. Dumaret, Cousin, and Titran (2010) noted a decrease of 18 IQ points in each generation affected by FASD, combined with other factors such as genetics, access to care, and poor nutrition (p. 1319). Similarly to educators, many caregivers are ill-prepared for the complex needs of their children.

Educators have a responsibility to advocate for appropriate services and provide FASD-related information to parents, foster parents, and other providers (Fuchs et al., 2010). Appropriate planning encompasses a long-term commitment to FASD-affected children over time, while preserving any cultural implications. Maintaining a strong sense of identity and “a sense of belonging” can be critical for children, especially those from Aboriginal cultures (Public Health Agency of Canada, 2013, para. 5). While focusing on long-term planning, transitions into adulthood and independence must accurately reflect their level of intellectual functioning (Fuchs et al.). Destigmatization is an important aspect of moving adults with FASD forward. Promoting FASD-affected students’ success throughout school and into adulthood will require a multifaceted approach from both an educational and familial standpoint.

Despite the myriad of challenges that confront children with FASD, including the stigma that their mothers face, teachers, families and other involved professionals must determine how to equip these children for academic, social, and personal success. Through deliberate research to acquire foundational knowledge about FASD, educators will develop a thorough understanding of FASD and, ultimately, better support for affected students and their families. Because each child presents his/her own unique set of challenges, involved educators must personalize learning pathways for meaningful education. Developing a relationship with families or caregivers may link educators to background and hereditary insight, which results in accurate, personalized programming. Well-informed educators will meet the needs of these complex children and their families through in-depth planning and advocacy for appropriate services for families and involved caregivers.

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Reading for Meaning in the Middle Years Classroom

Alissa Cheung

Abstract

Reading in the 21st century classroom looks quite different from what it looked like years ago. The days of assuming that the groundwork for reading has been laid by the primary teachers, and that all students entering middle years know how to read, have long passed. Reading takes place in every classroom and every subject. It is through a variety of strategies, collaboration, and time that lifelong meaningful reading takes shape in all classrooms.

Teachers everywhere strive to produce lifelong readers in their classrooms. The teacher's role is to create readers who not only read the words, but comprehend the texts. Teaching the formal reading process begins in the early years classrooms and moves into the middle years classrooms. The primary teachers lay the foundation and building blocks for reading, and it is therefore assumed that by middle years students have the necessary strategies to understand various texts and are truly reading for meaning. However, in 21st century classrooms, having all students read for meaning in the middle years classroom is far from the truth. These assumptions have led to students falling between the cracks in literacy. The role of literacy in middle years is changing, and it is now up to the middle years team to continue teaching strategies and finding ways to ensure that students are, in fact, comprehending what they are reading. Teaching for understanding, promoting dialogue, read alouds, guided reading, independent reading, book talks, reading notebooks, collaborating, and teaching reading cross-curricular are all crucial components in fostering an environment wherein middle years students read for meaning.

In order for students to demonstrate their understanding and provide evidence that they are reading for meaning, they must know what the verb *to understand* involves. The idea of students understanding what they are reading encompasses more than reciting what they hear, answering questions related to texts for a short period after their reading, and taking away a couple of new vocabulary words. When students are able to answer questions, restate, retell or summarize in their own words, as well as learn content-related vocabulary, then they truly are understanding and reading for meaning. Teachers in the middle years must move students beyond the understanding of basics, in order to ensure that each child is, in fact, reading for meaning. When opportunities in the classroom are created for teachers to analyse their students in their immediate learning, these experiences and language can enhance their understandings further (Keene, 2012). Teachers can then move their students beyond the point of only reading words, to a time in which each child is deeply immersed and involved in the literature.

Moving students beyond simply reading words begins with dialogue. Teachers who incorporate dialogue around the literature that their students are reading tend to create an atmosphere wherein students are comfortable sharing their voice. Fecho, Coombs, and McAuley (2012) described a classroom using dialogue as teachers and students being immersed in discussion as though they had found a bottle of sand, released to find a genie who had recharged not only the students but the teacher himself (p. 476). Open conversations with students lead to new understandings as they hear themselves and others talk about the literature. Open dialogue leads to an environment wherein students feel safe to talk, and safe to share their own interpretations of the texts. Deeper meaning is often found through connections between their worlds and the books that they are reading (Fountas & Pinnell, 2006). Students feel a sense of purpose when they speak about their reading, and therefore tend to immerse themselves in the texts, anticipating the dialogue that will be centred on their own literature.

Dialogue can also begin through a read-aloud. Read-alouds are typically a piece of literature, read by the teacher who captivates on opportunities to pause and discuss various components of the text with the students. This strategy is used for both fiction and non-fiction materials, giving time for students to synthesize and respond to the big ideas in texts. Read-alouds modelled effectively by teachers can lead students to synthesize on their own (Cummins & Stallmeyer-Grand, 2011). Synthesizing effectively means that the students fit all of the smaller pieces together to come up with the central big idea. As the teacher is reading aloud, students may be jotting key notes or ideas on their paper, or may be thinking of questions to ask. The teacher pauses and discusses the ideas that each student may be wondering about. This dialogue aids in the understanding of the texts by creating opportunities to discuss.

Effective dialogue assisting in overall reading comprehension can also be found throughout a successful guided reading program in the classroom. Typically, students' reading levels are assessed and then students are grouped according to their reading levels. The end goal is to foster lifelong readers. Initially, teachers choose the books with the students in mind, in hopes that with effective teaching, they will be able to handle more difficult texts in time and on their own (Fountas & Pinnell, 2012). Guided reading was typically taught in an early years classroom, however; it is becoming more popular in middle years as well. Teachers can move from picture books to chapter books in guided reading sessions. Students feel safe in their guided reading groups, as they are reading texts they are comfortable with, and in return feel comfortable sharing their thoughts and ideas. The dialogue within the group once again results in the overall understanding of the literature.

As part of the guided reading program, teachers introduce independent reading. Independent reading is a time when teachers are faced with excuses from students regarding why they choose not to read, and how difficult it is to locate books that they will be fully immersed in. Effective teaching and modelling of appropriate books for each student is crucial. Often, teachers assign books that they know their students will not enjoy, because they feel pressure from the curriculum to do so (Kittle, 2013). Middle years teachers must move away from this idea, and understand that whole-class novels, whereby each child reads the same piece of text, may no longer be effective. Students require guidance and recommendations for texts that will be suitable for their reading levels as well as their interests. Authors everywhere are devoting their time to writing novels for adolescents, however; it is up to the teacher to introduce them to the plethora of materials available. It is time to set aside the classics, and engage readers in new literature for their independent reading time.

Finding and introducing literature is difficult for middle school-aged children, particularly boys. This is especially true for boys. Boys tend to see reading geared toward females, and view little purpose for reading outside the confines of the school (Smith & Wilhelm, 2002). Understanding students, where they come from and their interests as well as their reading levels are all necessary components in making independent reading successful in the classroom. Aside from knowing each student, sharing literature through book talks is a key component. Book talks are used as a short introduction to books that available for students to read. The teacher or students in the classroom take fifteen minutes to explain the books that they have read or are reading. Typically, the genre is discussed, and then a brief synopsis of the plot is given. Often, students take this opportunity to recommend the same book to their peers. Therefore, when students hear of other classmates enjoying a book, they are more likely themselves to pick that book up and read it. Book talks lead to valuable sharing between the two students once they have both read the book. Exposing students to as many books as possible is crucial in helping struggling readers find a book (Kittle, 2013). When teachers show interest in their students, and provide opportunities to become engaged in text, reading for meaning will happen naturally.

When students are fully engaged in their literature, teachers can assess their understanding by using reading notebooks. Reading notebooks act as written dialogue exchanged between the teacher and student. These notebooks act not as a play-by-play synopsis of what the child has

read, but as an opportunity to display deeper meaning. Students can respond to any genre of text, whereby the purpose is to write about what they are thinking while they are reading, not just recite a chapter or paragraph (Kittle, 2013). The thoughtful responses, or lack thereof, provide evidence to the teacher related to the students' comprehension. The written dialogue between teacher and student is something that each child in the classroom looks forward to reading. Having a letter addressed solely to them in their notebooks gives students a sense of purpose for reading. Many students in the classroom will read more in order to have something meaningful to share with their teacher. Teachers steer students toward different books if it is evident in their notebooks that the text is too difficult. Reading notebooks provide the needed one-on-one written conversation to display whether students are truly reading for meaning.

Understanding students in the classroom, where they come from, and their personal stories, allows teachers to guide students in the right direction when choosing their own literature. When students are given choice, they feel empowered. When that power is taken away from students, they are less likely to be engaged in forced literature (Miller, 2014, para 1). The end goal in allowing students to choose their own literature is that they will become lifelong readers, submersed into their books for the pure enjoyment of it. In order for lifelong reading to happen, a new approach must be taken, whereby offering choice leads to pleasure, involvement, and initiative (Atwell, 1998). Students are more likely to choose literature they will enjoy when they are given opportunities to choose.

Teaching students to read for meaning through their own choice is effective not only in the English classroom, but also cross-curricular. Teaching reading should not be the sole responsibility of the English teacher; it is the responsibility of every teacher teaching every subject. The Interactive Strategies Approach-Extended (ISA-X) responds to the need of struggling readers across the curriculum. A variety of texts are chosen for students, based on the curricular outcomes of science and social studies. Among these texts are a variety of genres, exposing students to literature that they may otherwise not have read. Lessons are centred on these books, giving students exposure to texts they may not have been exposed to before (Gelzheiser et al., 2014). Providing a variety of texts in all subject areas persuades each student to learn about all subject areas regardless of reading level.

Teaching reading in all subject areas is definitely becoming more prevalent in 21st century classrooms. Cross-curricular reading requires collaboration among all staff members, and restructuring of previous units taught, ensuring that the material they are using to teach is, in fact, reader friendly (Fang, 2014). The content area teachers rely heavily on the English teachers as well as the literacy specialists within the school. Classroom teachers in all subject areas are taught the necessary skills and strategies to assist the readers in their classrooms. Language specialists have the difficult task of ensuring that all teachers are conscious of the importance of literacy in their classrooms (Fang, 2014). The movement from literacy being primarily taught in the English classroom, to being taught in the content area courses as well, is beneficial to students. Often, teachers in the content areas assume that all students in their courses are, in fact, reading for meaning. However, with collaboration, teachers are seeing the value in choosing leveled texts to aid in their students' understanding.

Every child must be given the opportunity to read for meaning. Previously, it was assumed in the middle years classrooms that children entered grades five through eight and knew how to read. They came equipped with the necessary strategies to sort their way through difficult texts. Literacy in the 21st century classroom however, has taken a shift whereby reading for meaning happens through the programs set up in the classroom. Meaningful dialogue, guided reading, independent reading, book talks, reading notebooks, choice, and cross-curricular collaboration are all key in the success of adolescent readers' reading for meaning.

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A Review of Evidence-Based Interventions for Youth with Emotional and Behavioural Disorders

Melissa Hart

Abstract

Youth with emotional and behavioural disorders (EBD) are often misunderstood and marginalized. Their behaviour can adversely affect their schools, families and communities. The schools' relationship with youth who have EBD can either promote negative behaviour or support student success socially, emotionally, and academically. The key to promoting student success for students with EBD is for schools to use evidence-based interventions through the use of multidisciplinary teams and effective classroom practices. However, educators must be mindful of the manner in which evidence-based interventions are interpreted and implemented.

Youth with emotional and behavioural disorders (EBD) are often the most difficult students to reach and the most challenging students to teach. Their behaviour can impact their lives socially, emotionally, and academically (Lambros, Culver, Angulo, & Hosmer, 2007; Lane, Kalberg, & Shepero, 2009; Vannest, Temple-Harvey, & Mason, 2009). Schools have traditionally taken a reactive approach to managing students with EBD, including zero-tolerance consequences such as suspension and exclusion from mainstream classrooms (Cole, Daniels & Visser, 2012). These punitive measures are ineffective because schools fail to provide affected students with social/emotional and academic supports (Banks & Zions, 2009; Rotatori & Bakken, 2012). Since the development of the *Individuals with Disabilities Education Act* (IDEA) in the United States, schools are legislated and accountable for the inclusion and education of all students, and are tasked with implementing more proactive and effective interventions for student programming (Vannest et al., 2009). In Manitoba, Bill 13 (passed in 2005) provides the same level of commitment to providing appropriate educational programming to ensure the success of all students. Manitoba's philosophy of inclusion supports the concept of equal participation both socially and academically in all provincial schools (Manitoba Education, n.d.). As a result of this legislation, Canadian schools are moving in parallel toward tiered, evidence-based behavioural programming through the use of multidisciplinary interventions and classroom interventions, in order to provide students with EBD the very best of supports.

Tiered Evidence-Based Behavioural Interventions

Schools are taking on the difficult task of providing students with social/emotional and academic programming. Response to Intervention (RTI) – also originally an American concept – is one way to provide students with EBD the supports and resources that they need through evidence-based means (Hoover & Love, 2011). Tiered interventions include three levels. Tier one addresses the majority of the school's student body; programming involves universal supports provided by classroom teachers and other general staff in the school (Rotatori & Bakken, 2012). Tier two programming addresses students who fail to respond to universal supports, but are not yet considered to have prolonged behavioural issues (Hoover & Love, 2011). Tier three interventions address the smallest number of students with severe behavioural issues; they have complex concerns, take up the majority of staff time and energy, and require individualized supports. Typically, students with EBD fall into tier three programs because they require individualized supports (Rotatori & Bakken, 2012). The tiered system of program delivery is currently the most inclusive and efficient way of providing social/emotional and programming supports to students with EBD.

Many school divisions in Canada are moving toward RTI and away from the pre-referral model. The pre-referral model is a traditional approach to accessing student services that

requires a multistep process of teacher referral, assessment, and placement into special education (Hoover, 2010). Teachers who have been in the educational system over the past ten years have seen a continual shift in educational theory. Recurrent change has left them with feelings of confusion and dismissive attitudes toward new educational models (Lane, Kalberg, & Shepero, 2009). Researchers are concerned about teachers' lack of regard for evidence-based interventions, because the failure to recognize evidence-based interventions results in negative effects on student learning and success (Vannest et al., 2009). Studies are lacking at the secondary level, which makes identifying criteria for behaviourally based interventions difficult to identify and hard to implement. However, the movement away from pre-referral methods and toward tiered interventions will most certainly benefit students with EBD.

Multidisciplinary Interventions

Providing social/emotional, mental health, and academic supports to youth with EBD requires collaboration among school, community, and families. Not only do youth with EBD struggle physically, emotionally, and academically, they also often have anxiety disorders and other mental health issues (Lambros et al., 2007). Youth with EBD struggle to interact socially with teachers and peers, which affects their ability to graduate and to secure employment once they transition out of school (Lane et al., 2009). Youth with EBD also struggle academically: 91% of students with EBD were significantly below grade level in 2003 (Vannest et al., 2009, p. 73). Schools alone do not have the expertise or resources to provide students with individualized, holistic programming. However, the school is often the most effective location for a team to provide multidisciplinary supports (Lambros et al., 2007). An evidence-based methodology that is proving to be an effective multidisciplinary intervention is the wraparound approach (WRAP) (Hardman et al., 2014). This system of care and planning involves teaming and coordinating services through a youth's natural community and school supports which are "community based and family centred" ("Wraparound Protocol," 2013, p. 7).

The wraparound approach identifies proactive and positive behavioural supports that can reduce the chance of repeat offences and poorly coordinated teaming. This approach creates a more inclusive family friendly, youth-focused environment (Hardman et al., 2014). In Manitoba, a wraparound team must be enacted for a student to receive level three EBD funding and programming supports ("Wraparound Protocol," 2013). The wraparound team protocol moves through four phases: (1) the team is coordinated based on student issue, need, and collected data; (2) a plan is developed by all stakeholders, data are reviewed, strengths are identified, and an intervention plan is developed; (3) the team implements the plan, successes are documented and shared at frequent meetings, and communication is ongoing with all stakeholders; (4) once evidence and data show success, the team discusses transition down to tier two supports and shares methods to access resources with all stakeholders ("Wraparound Protocol," 2013). Intervention goals include enhanced family relationships, emotional and behavioural growth, less interaction with the justice system, and improved academic performance (Hardman et al., 2014).

While the wraparound approach has proven to be an effective evidence-based intervention, implementation can be complex and problematic. The wraparound approach is a structured protocol that requires attention to detail and exceptional coordination (Epstein et al., 2003). If the wraparound team does not follow the protocols, principles and procedures, then interventions developed by the team could compromise the students' success in their schools and their communities (Quinn & Lee 2007). One dependent variable that can make or break the wraparound process is family involvement. Epstein et al. (2003) found that families were often not included in the wraparound meetings due to work conflicts, general apathy, or lack of coordination and communication from the wraparound team. The lack of family contribution effectively negated the wraparound process. Therefore, it is the wraparound team's

responsibility to remain flexible, non-judgemental, and inclusive in order to provide effective evidence-based interventions and avoid complex and problematic implementation.

One essential criterion of tier three supports for youth with EBD is a functional behavioural assessment (FBA). Though not fully recognized as an evidence-based practice, the process is still mandatory under IDEA and Manitoba Education ("Wraparound Protocol," 2013). FBAs were first used in clinical settings for children with developmental disabilities, and then the practice moved into school behavioural programs in the 1990s (Rotatori & Bakken, 2012). In today's schools, FBAs are typically implemented by the wraparound team and address antecedent conditions that cause negative behaviour. The team designs relevant, proactive interventions that improve students' functional behaviour (Lane et al., 2009).

Canadian school divisions view the FBA as an integral part of tier three student behaviour management programs. However, researchers question the validity and practicality of this assessment, particularly when studying secondary-aged students (Lane et al., 2009). The majority of the information required for FBAs comes from the students' classroom teachers. Unfortunately, teachers have little knowledge of the FBA process (Hathcote, 2011). Researchers have shown that teachers find the FBA process confusing, time consuming, ineffective, and the information provided to the team reflects personal judgment of the student rather than objective observation (Rotatori & Bakken, 2012). Like the wraparound protocol, teams and teachers must focus on understanding and properly implementing the FBA process to improve programming validity and practicality.

Classroom Interventions

Once student support teams have been established, the flow of support moves down to the classroom level. At this level of service delivery evidence-based interventions are put into motion, beginning with positive behavioural interventions and supports (PBIS), emotional and behavioural interventions, and academic interventions. Evidence-based research has moved modern education away from punitive and reactive strategies toward positive behavioural interventions and supports (PBIS). This proactive approach can be used from tier one to tier three (Hathcote, 2011). PBIS provides schools with consistent, data-driven strategies to improve behaviours (Rotatori & Bakken, 2012). On a tier three level, the wraparound support team should collaborate with a behavioural support team to assist in building clear, understandable, positive, and measurable interventions (Hathcote, 2011).

Students with EBD require specialized supports in a caring and nurturing environment. Traditionally, students with EBD either withdrew from the school system or were found in the "special ed." classroom, segregated from the rest of the school population. Today, students are integrated in mainstream classes and those students who require intensive supports are attached to specialized classrooms that are structured, engaging, comfortable, and comforting (Cole et al., 2012; Hardman et al., 2014; Morrison & Ramsay, 2010). The primary goal of teachers in specialized classrooms is to develop positive relationships with their students. Specialized staff are qualified, committed well-trained and understand the needs of students with EBD. Specialized classrooms typically offer some academic support; however, the main focus is meeting students' social/emotional needs, teaching communication skills, developing self-esteem, creating a safe space, and providing a sense of belonging in the school community (Cole et al., 2012). The results of providing a caring and nurturing classroom environment include academic success and positive social/emotional development.

The goal of the specialized classroom is to provide programming that is short term and goal based for students who exhibit extreme behaviour. Because individualized programming is moving toward evidence-based practices, schools must diligently select the appropriate staff and consider the potential for stigmatization of students who attend specialized classrooms (Cole et al., 2012). Historically, mainstream classroom teachers have felt unprepared to provide for the complex needs of youth with behaviour issues (Wagner et al., 2006). In order for

behavioural-based supports to be effective, it is vitally important that specialized classrooms, and well trained teachers become an integral part of a school's infrastructure.

With the increased direction to work toward more inclusive practices (Regulation 155/2005), students with EBD are moving from secularized learning environments to inclusive mainstream classrooms, and the classroom teacher is becoming their primary educational provider. The mainstream classroom teachers are increasingly pressured to provide holistic programming that focuses on social/emotional programming and academic success (Vannest et al., 2009). With individual support from guidance counsellors and resource specialists, classroom teachers are better prepared to create engaging, evidence-based programming such as differentiated instruction, which in turn improves students' academic performance (Rotatori & Bakken, 2012). Classroom teachers can also support the development of self-determination by encouraging "choice making, decision making, goal setting and achievement, self-advocacy, and leadership, self-awareness, self-knowledge, self-evaluation and self-regulation" (Carter, Lane, Crnobori, Bruhn, & Oakes, 2011, p. 101). For these reasons, it is imperative that a student's primary educational provider have the training and skills necessary to deliver inclusive programming.

As students with EBD transition into mainstream classrooms, issues can arise, and uninformed classroom teachers can experience hardship. Often, teachers in mainstream classrooms lack knowledge of evidence-based interventions such as differentiated instruction and self-management strategies, and in the end students suffer (Fitzpatrick & Knowlton, 2009). If teachers are uninformed, they tend to struggle with students behavioural issues, which in turn leads to lack of academic focus and teacher burnout (Wehby, Lane, & Falk, 2003). It is evident that teachers need more support from behaviour and resource specialists who can act as a bridge between the research and the programming to reduce teacher hardship.

Conclusion

Special education has changed significantly in the past twenty years. Now more than ever, schools are responsible for providing holistic programming to prepare all students for a complex and difficult world. If we as educators are unable to meet the challenge, ultimately society will pay the price of youth who continue lives of trauma and tragedy. In order for students to receive the exceptional education that they deserve, school divisions must use evidence-based interventions. Collaboration is the key to students' success. It takes a team of dedicated professionals to wrap themselves around troubled youth and their families. As professionals, we all need to lean on each other and recognize our strengths. Though increasing expectations are a requirement of the classroom teacher, they should not have sole responsibility for providing appropriate programming for students with EBD. Like their students, classroom teachers must feel acknowledged, supported, and part of a larger team. This move toward tiered, evidence-based behavioural programming is the basis for building successful multidisciplinary and classroom interventions that will give students with EBD the very best of supports.

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School Leadership and Student Achievement: Supporting a Framework of Leadership Actions Known To Improve Student Outcomes

Andrew Neufeld

Abstract

School administrators have the second greatest effect on student learning, after classroom instruction. The author's literature review shows Leithwood et al.'s (2008) framework of leadership actions to be influential in instructional leadership and student success. School leaders are advised to (1) build vision and set direction, (2) develop staff capacity, (3) redesign the school organization to match the vision, and (4) manage the teaching and learning program. This combination of leadership actions improves staff engagement, student engagement, and student achievement.

Recent research agrees that school leadership has a significant effect on student achievement and on school reform as measured by student achievement (Lending & Mrazek, 2014; Webber, Scott, Aitken, Lupart, & Scott, 2013; "Why School Leadership," 2011). This effect is primarily indirect, as the principal exerts influence on the management of the school organization and the teaching staff (Leithwood, Harris, & Hopkins, 2008). Given this knowledge at a time when school leaders are challenged by their current role expectations while also expected to lead school and system reform (Fullan, 2008; Marsh, Waniganayake, & De Nobile, 2014), it is increasingly important that instructional leaders efficiently focus their attention on those actions known to improve student learning (Leithwood, Patten, & Jantzi, 2010). A framework of four leadership actions has been proposed and shown to have a significantly positive effect on school reform and student achievement (Leithwood et al., 2008; Ward, 2013). School administrators are advised through this framework to (1) build vision and set a direction for their school, (2) develop the capacity of their staff members, (3) redesign the organization to match the vision of the school, and (4) manage the teaching and learning program, as they work with their teaching staff to improve student achievement in the 21st century.

Challenges

Many challenges are associated with the modern principalship. Not least of these is the challenge to stay effective in the position while the demands of the job description grow. A growing educational reform movement, advancing technology, and a changing society create additional significant challenges (Marsh et al., 2014). While constrained by the performance expectations of their job descriptions, principals are also expected to be reform leaders at both the school and systemic levels (Fullan, 2008). Four other specific areas of difficulty have been identified for modern principals: principals are unable to please all stakeholders at all times, and are faced with the task of balancing "the competing and often conflicting demands from various interest groups" (Stewart, 2006, p. 6); principals are required to make difficult decisions on a daily basis; administrators are challenged by the "business of the job" as they function in the role of facility managers; finally, a principal's leadership defines the effectiveness of his/her school in the eyes of the stakeholders (Odhiambo & Hii, 2012). Competing for attention in this myriad of challenges and distractions is instructional leadership, which is considered to be the primary role of the school principal (Rigby, 2013). Because modern principals face such a varied set of challenges within their job description, an intentional framework of actions is needed to guide school leadership.

While wading through the various challenges connected with a principal's job description, administrators also find themselves trapped within a system that research has determined is increasingly ineffective and irrelevant. Principals, for example, are required to hold their staff members accountable for their instructional practices, despite the impossibility of possessing the necessary depth of content knowledge to assess every teacher's knowledge and practices reliably (DuFour & Marzano, 2009). The administrator may not even be the primary educational expert in the school (Stewart, 2006). In fact, research has found that when the focus of the principal was primarily on staff observation and performance evaluations, student achievement decreased; this relationship was thought to be a result of the negative pressure placed on teaching practice (Walker, Lee, & Bryant, 2014). The prevailing model of the principal as an "educational superhero" ("Why School Leadership," 2011, "Leaders," para. 4), whereby the leader is the "centre of expertise, power and authority" (Stewart, 2006, p. 7), is considered by current researchers to be inadequate and inappropriate for the needs of the 21st century (DuFour & Marzano, 2009; Marsh et al., 2014; Odhiambo & Hii, 2012). A new and relevant approach to school leadership is needed at a time when society is changing so quickly "that the skills and customs [one learns as a child] are outdated by the time" one reaches the age of 30 (Stewart, 2006, p. 2).

School leadership is considered to be the second greatest effector on student achievement, following direct instruction (Leithwood et al., 2008). In consideration of this knowledge, school leaders and planners have been advised to direct their focus to those leadership practices that are known to improve instruction and student achievement (Leithwood et al., 2010). Leaders have been found to improve teaching and learning indirectly, and most powerfully, by influencing "staff motivations, commitments and working conditions" (Leithwood et al., 2008); it is important, therefore, that school leaders adapt their leadership and management practices to affect the performance of their staff in these identified areas. Leithwood et al. (2008) proposed a framework of leadership actions that positively affect staff performance and student achievement in just such a way. This framework can be summarized as performing the following actions: "building vision and setting direction, developing people, redesigning the organization, and managing the teaching and learning program" (Leithwood et al., 2008, pp. 29-30). Given the effect of school leaders on student achievement, principals are advised to develop their schools by using this framework.

Building Vision and Setting Direction

In the vision building stage, an effective leader plans to create a new school culture that creates a sustainable "continuity of direction" that the school will continue to travel, even when the present leader is gone (Fullan, 2008, p. 19). The vision of the effective school leader is developed and discussed with all staff members at the beginning of the school year (Ward, 2013), and then explicitly stated for all stakeholders ("Why School Leadership," 2011). The principal faces two primary tasks when setting a new direction in the school: staff members need to be motivated to accomplish the goals that have been determined for the school, and the skills and attitudes needed for the accomplishment of these goals must be identified and assessed (Leithwood et al., 2008). Developing an educational vision that is shared with all stakeholders and assessing the attitudes of the staff make up the first stage in this leadership framework.

Developing People

Given the known relationship between teacher effectiveness and student learning (Fullan, 2008), an important component in developing the capacity of staff members is creating a culture of trust between the school leader and staff members. When this trust is developed, staff members tend to view "their own contribution to the school positively" (Marsh et al., 2014, p.

34). This process is initiated when a leader maintains “presence” in the school, whereby presence is defined as “an overarching personal quality possessed by leaders who invest and are skillful in building trusting and supportive relationships, which enhances individual agency” (Marsh et al., 2014, p. 24). “Individual agency” can also be described as “teacher efficacy,” which has been described as the amount of confidence staff members have in their ability to implement initiatives expected to improve learning (Leithwood et al., 2010, p. 676). When staff members have a strong sense of professional efficacy, positive effects have been observed, including increased confidence to implement these school initiatives and taking greater responsibility for student learning, rather than blaming other existing variables (Leithwood et al., 2010; Odhiambo & Hii, 2012). An important component of developing staff, therefore, is growing and nurturing trust between the staff members and the administrator.

Related to the idea of increasing staff efficacy, inevitably leaders will encounter the need to promote change in the attitudes, practices, or behaviours of staff members (Gordon, 2013). Facilitating these types of changes can be accomplished through staff accountability when staff members are valued (and feel valued) by leadership, and are included as members of a team who are working together to accomplish a common purpose (Gale & Bishop, 2014). Staff members who have a high level of professional efficacy and are committed to working together to achieve common goals are then ready to begin taking on more significant leadership roles and working in increasingly collaborative settings. It is vital that leaders promote and develop those attitudes and practices necessary to achieve identified school goals.

Redesigning the Organization

In redesigning the structure of the organization, the primary focus of the school leader should be on developing a collaborative culture that promotes a shared voice, while emphasizing accountability for staff professional growth. Developing this collaborative culture should include emphasis in two areas: shared leadership and professional learning communities (PLCs). Though the principal is the “pivotal figure in promoting the vision” of the school, a school culture is built upon the contributions of a collection of adults all working together on behalf of students (Gale & Bishop, 2014, “Relationship,” para. 6). Therefore, it is important that the leader values shared voice with the school staff, and gives all stakeholders the opportunity for input in school decision making wherever appropriate. Research has demonstrated that when leadership is shared or distributed among staff members, teaching capacity is much stronger than when leadership is maintained solely with the principal (Leithwood et al., 2008). Because distributing leadership and shared voice in a spirit of collaboration among staff members has a positive effect on teaching practices and student learning, these are important actions for principals to take.

In the present educational climate of increased school accountability for student achievement, the principal is obligated to provide staff members with the “time, structure, training, resources and clarity of purpose” needed to succeed in their tasks of maintaining and improving student achievement (DuFour & Marzano, 2009, p. 67). There is a positive connection between school PLCs and student achievement (Leithwood et al., 2010), and the effective principal provides time for staff PLCs to meet within the daily or weekly school schedule, promotes the use of PLCs to further the vision of the school, and protects assigned PLC time from the many competing demands for the time of teachers (DuFour & Marzano, 2009; Fullan, 2008; Webber et al., 2013). The significant positive effects of collaboration and a commitment to staff PLCs on improved student learning create an obligation on the school leader to take action in these areas.

Managing the Teaching and Learning Program

There is a relationship between the engagement of teachers in their profession and the engagement of students in their learning (Gordon, 2013). It is, therefore, important that administrators create a positive work environment for teachers, because five out of ten American teachers can be categorized as being disengaged from their work and workplace, wherein disengagement is characterized as follows: performing requested tasks but not exerting any energy beyond what is required, demonstrating negative attitudes toward the workplace, and possessing a compulsion to spread negativity among other staff members (Gordon, 2013). Fortunately, the school leader can exert a strong positive influence on the feelings of a school staff regarding their working conditions: when school leaders attempted to improve teacher working conditions in a systematic and purposeful manner, improvement in both teaching practices and student achievement was observed (Leithwood et al., 2008). Administrators should focus on those variables that are within their capacity to influence. Staff should be protected from “initiative overload,” and be allowed to work with students in an environment as free from distraction as is possible, given the demands of the profession (Leithwood et al., 2010). The principal is advised to assign staff members to the grade level or area of expertise in which they are most likely to be successful, and to provide staff members with the materials and equipment “to do their work right” (Gordon, 2013, p. 14; Ward, 2013, p. 68). When relevant information is shared with staff members in a concise and timely manner, and principal-led meetings are conducted efficiently, student achievement improves (Walker et al., 2014). It is important for school programs and interventions to be assessed as well; where ineffective, these programs should be replaced with others grounded by research, connected to school data, and supportive of teachers’ work (Ward, 2013). Other working conditions should be considered as well, including class sizes, ability groupings within classes, and the amount of instructional time available, all of which affect student achievement (Leithwood et al., 2010). Consideration should be given, therefore, to the working conditions of teachers, as improved working conditions increase staff engagement, student engagement, and student achievement.

Conclusion

School leadership has a significant and positive effect on student achievement, because principals influence the management of the school organization and direct the teaching practices of staff members. Despite many competing challenges, principals have the ability and the resources to effect a positive change in student outcomes, through the practices of the teaching staff, by focusing school efforts on those actions known to improve student achievement results. Leithwood et al.’s (2008) framework of leadership actions positively influences both school reform and student outcomes. By setting a clear vision and direction, developing the staff, redesigning the organization to fit the direction of the school, and positively managing the teaching and learning program, school leaders can expect to see measurable and significant improvements in student achievement.

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Universal Design for Learning

Susan Barteaux

Abstract

The Universal Design for Learning (UDL) is a framework for instruction that values the social, emotional, and academic diversity in the classroom while using this diversity to create a classroom environment of respect and appreciation for others. Through multiple means of representation, expression, and engagement, the UDL framework demands that curriculum is accessible to all learners, including gifted students, special needs learners, English language learners, and students with behavioural challenges.

The Universal Design for Learning (UDL) is an educational model that creates access to the general classroom, curriculum, and learning experiences for all students, including those with special needs and behaviour challenges, average learners, and gifted students. The UDL framework assists educators in meeting those diverse needs while transforming instructional methods and the classroom environment. Inspired by architects' use of Universal Design for products and environments, UDL has been turned into an educational framework.

What Is UDL?

UDL is loosely based on the universal design for products and environments, whereby architects make physical environments accessible to everyone, regardless of potential barriers such as physical, cognitive or developmental barriers (Courey, Tappe, Siker, & LePage, 2013; Katz, 2012). To make physical environments accessible and beneficial to all, the principles for universal design were considered by architects while designing buildings ("What is Universal Design?" 2014). These principles require that physical products and environments are equitable, flexible, require minimal physical effort, and minimize hazards by effectively communicating information in a variety of forms, while leaving adequate size and space for diverse people to use them ("Everyone Can Learn," 2005-2014). By witnessing how architects planned physical environments to create accessibility, educators began to apply the principles of Universal Design to education, later forming the basis of the factors of accessibility in education within the UDL framework (Katz, 2012).

By using these factors of accessibility in education, teachers began to make the general classroom accessible to all learners (Courey et al., 2013), by means of instructional practices and curricula that consider students' needs and capitalize on their skills from the planning stages, creating more control and personalization of each student's education (Abbel, Jung, & Taylor, 2011). When implementing UDL, educators must consider the following factors: teaching practices that contribute to a positive class climate of diversity and inclusivity, delivery methods that are accessible to all learners, and encouragement of genuine interactions between students while providing ongoing, specific feedback from the teacher ("Everyone Can Learn," 2005-2012; Katz, 2012). Educators must instruct in a way that is educationally demanding for all students and can be achieved through varied and ongoing assessment, while using engaging resources and technology in spaces that are physically accommodating to everyone (Courey et al., 2013).

The factors of accessibility in UDL reduce barriers by creating flexibility of curricula through varied goals, methods, materials, and assessments, in order to create classrooms that are physically and academically accessible to all students (National Centre for Learning Disabilities, 2012). Through examining the four areas of existing curricula, and using various forms of goal setting, instructional methods, resources and materials, in addition to frequent formal and informal assessments of learners, teachers can identify existing barriers while optimizing the levels of challenges and supports in the classroom (Courey et al., 2013; "UDL Guidelines –

Version 2.0,” 2013; Katz, 2012). That is not to say that UDL is diluting content, but rather it is the intentional planning of curricula to capitalize on, and appreciate diversity in the classroom by requiring a high-level of engagement, participation, and ultimately achievement by all students (Gargiulo & Metcalf, 2013). When all learners are achieving academic and social goals within the general classroom’s walls, then true inclusion has been achieved (Katz, 2012).

The UDL Framework

The UDL framework requires that educators, administrators, and learners begin to consider the complexity of learning in terms how small pieces, such as the factors of accessibility, the principles of UDL, and neuroscience come together to create a larger puzzle, rather than just understanding the smaller pieces themselves (Perkins, 2009). Brain networks and the following three core principles of UDL work together in planning learning experiences that address diversity among classroom groups:

1. multiple means of representation
2. multiple means of expression
3. multiple means of engagement

In understanding how multiples means of representation, expression, and engagement relate to brain networks – the “how,” “what,” and “why” of learning – the three core principles of UDL guide educators in creating meaningful learning experiences for all students.

UDL relies on 30 years’ worth of brain research on how a child’s brain gathers information, learning styles, and learning differences (Hall, Meyer, & Rose, 2012). Using information on brain networks – recognition networks, strategic networks, and affective networks – UDL creates a neuroscience-based approach to diverse learners with regards to all three networks (Courey et al., 2013; Katz, 2012; “What is UDL?” 2013). Recognition networks, or the “what” of learning, are essential to understanding how students gather and process data, because students primarily collect data through their five physical senses (Katz, 2012). While recognition networks are physically based brain networks, strategic networks tell learners “how” to do something, such as learning multiple ways to understand or represent a concept, and are a much more abstract brain process (Courey et al., 2013). Finally, affective networks are the most abstract of all brain networks. They determine the “why” of learning, regulating what is deemed most important and providing motivation for students’ learning (“What is UDL?” 2013, “Universal Design for Learning” figure). UDL offers variety and choice to learners, based on each type of brain network, to form the three core principles of UDL.

The three core principles of UDL require teachers and curricula to offer multiple means of representation, expression, and engagement to form the second piece of UDL (Lapinski et al., 2012; Ralabate, 2011). UDL requires the use of different means of representation by giving learners a variety of opportunities to physically acquire information through the affective networks (Abbel et al., 2011). By providing multiple means of expression, teachers create multiple opportunities for students to showcase their understanding through the use of various tools, increased access to these tools, and strategies to overcome barriers to learning (Katz, 2012). When educators provide multiple means of engagement through flexible options for control and choice, they capitalize on the affective networks of students’ brains (Samuels, 2007). In planning for multiple means of representation, expression and engagement, teachers create various means for students to access and showcase their knowledge of a topic. This flexibility in how knowledge is acquired and represented gives opportunity to create unique learning experiences for a diverse group of learners within one classroom.

UDL proactively combines the understanding of brain networks with the three core principles to enable teachers in creating an inclusive curriculum, which addresses the diversity of students by improving the learning goals, methods, and achievements for all learners (Ralabate, 2011). The framework for UDL requires that educators design learning that is intentional, and leads to a deep understanding of topics through genuine inquiry by students, in

order to build an authentic understanding of the content covered and to reach academic goals (Willms, Friesen, & Milton, 2009). When designing UDL for the classroom, teachers must advocate for methods that create these authentic learning experiences for students with different abilities, disabilities, ethnicities, language skills (“Everyone Can Learn,” 2005-2014), and learning styles (Samuels, 2007), by using materials and learning experiences based on skills needed, strengths possessed, and the multiple intelligences (Katz & Sugden, 2013). By doing so, educators create true experiences of inclusion for children whereby they can showcase their knowledge in a way that is as unique as they are, and to celebrate their achievements with classmates, because their learning is based on where they are developmentally regardless of age or grade level (Dalton & Brand, 2012).

When students can celebrate their learning with peers who respect where they are developmentally, celebrate the ways in which they learn, and help to build an authentic understanding of curricula, then the purpose of the UDL framework has come to fruition. This respect and celebration of diversity comes from thoughtful planning by educators, who have an understanding of the brain’s networks, and who intentionally create various means of representation, expression, and engagement within the UDL framework. This respect for diversity in students, their learning, and how they connect to curriculum content is so integral to the framework of UDL that Dr. Jennifer Katz created the Respecting Diversity program to augment the experience for students and their teachers (Katz, 2012).

Who Benefits from UDL?

UDL benefits students and teachers alike by creating a community of learners who appreciate each other’s similarities and differences. Students benefit from a learning approach that strays from a one-size-fits-all curriculum and offers equal access to all learners, increasing engagement and the flexibility of their learning (Gargiulo & Metcalf, 2013). Similarly, teachers benefit professionally by using an improved teaching methodology that creates a truly inclusive classroom, while collaborating with students and teachers. The UDL framework benefits all stakeholders involved by giving opportunities to understand and best serve learners from the very beginning of their education (“UDL Guidelines – Version 2.0,” 2013).

The purpose of the UDL is to benefit diverse learners, and while it was originally intended as a means to include special-needs learners in the classroom, it has become a generalized educational approach that provides flexibility for all students (Ralabate, 2011). UDL provides flexibility in product, process, demonstration of learning, and the means by which students engage with content (Katz, 2012). This means that if a student has strength in musical or kinesthetic learning styles, he/she has the opportunity to use that skillset to showcase his/her learning. Through this process alone, the final products of students become diverse, creating a variety of ways for students to reach learning goals. In this same process, and through connection with others, students are exposed to other ways in which students have demonstrated learning, opening them to possibilities in their own academic potential. UDL is applicable to all learners, as it can be applied to any subject and developmental age by making content available through a student’s choice of learning process or product (Perkins, 2009).

When students are given choice, control, and flexibility, they perceive their learning environment to be enjoyable, challenging, and engaging (Abbel et al., 2011). For students who have unique learning needs, including those students who are English language learners, gifted students, and students who simply learn differently, traditional education has failed to engage them, and UDL offers the promise of an engaging learning experience (Samuels, 2007). Prior to UDL, gifted students were often given more of the same work, students with learning challenges were given remedial work, and students with behaviour challenges were put in specialized classrooms (Willms et al., 2009). Success and engagement for all of these learners, who were previously marginalized, is possible in UDL. The learning makes sense, and when their learning makes sense, students are increasingly engaged (Katz, 2012).

For teachers who use traditional instructional approaches to curriculum, the work planned often does not achieve the desired result: engagement and achievement within their classrooms (Willm et al., 2009). Nationally and locally, educational stakeholders are seeking instructional methods that are effective for learners with varied learning styles and needs, in order to educate them in the general classroom (Dalton & Brand, 2012). Teachers who are usually flexible in their instruction have developed many ways within traditional instructional models to create student engagement and meet the needs of learners, usually creating significantly more work for themselves because they have retrofitted their instruction to inflexible curriculum (National Center for Learning Disabilities, 2012). The pressure to instruct a wide variety of learners, while using inflexible curriculum and traditional teaching methods, causes a great deal of stress for teachers (Katz, 2012). However, when educators approach curriculum through the lens of UDL, they can proactively address barriers while creating flexibility in order to serve all learners in a way that does not create extra work or stress (Ayala, Brace, & Stahl, 2012). The UDL framework builds upon a teacher's natural desire, skill set, and willingness to create appropriate learning experiences, by providing a framework to create flexible curriculum and use effective instructional methods (National Centre for Learning Disabilities, 2012).

A teacher at any level can use UDL to meet the demands of the classroom and manage the pressure of delivering an equitable education (Dalton & Brand, 2012), by creating flexible curricula and improved instructional methods, through collaboration with other educators. The framework for UDL encourages teachers to collaborate, relying on each other for constant professional discussions and co-planning of curricula (Lapinski et al., 2012). While there is a demand for collaboration between educators, UDL also requires that teachers have continued discussions with students about how they learn, their strengths, and what skills they need to acquire in order to experience further success. Through these discussions, students feel that their teacher understands how they learn, that their opinions have merit, and that they have a positive relationship with their teacher, therefore increasing their engagement and motivation for learning (Abbel et al., 2011). When teachers collaborate with students and other educators, they gain insight in instructional methods that will best meet the needs of their students.

Conclusion

At its core, UDL places value on the diversity of all learners by creating classroom environments that are academically, socially, and emotionally inclusive of all children. Educators create compassionate, safe learning environments for children when they create flexibility in how learners access curriculum through the use of UDL. Evolving from architectural accessibility designs and applying these concepts to knowledge of neuroscience, the UDL framework was created to benefit all educational stakeholders. Educators who use UDL can transform their classrooms, teaching practices, and the lives of their students.

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Using Augmentative and Alternative Communication Interventions To Increase Functional Communication for Children with Autism Spectrum Disorder

Janelle Murray

Abstract

Individuals with autism typically display inefficiencies in communication. With increasing numbers of children being diagnosed with Autism Spectrum Disorder, it is necessary to find effective methods of communication for these children. Augmentative and alternative communication interventions develop communication skills using unconventional techniques. The Picture Exchange Communication System and using Apple iPads as speech-generating devices are two of the most effective interventions available to develop functional speech for children with autism. There are advantages and disadvantages to each intervention, although both interventions use picture communication symbols to increase requesting skills in individuals with Autism Spectrum Disorder.

Autism is a neurodevelopmental syndrome characterized by impairments in social and communicative behaviours (Bernier & Gerdtts, 2010; Lord, Cook, Leventhal, & Amaral, 2000). The syndrome is steadily increasing in numbers and, as of 2014, approximately 1 in 68 children are diagnosed with Autism Spectrum Disorder (ASD, Centers for Disease Control and Preventions, 2014, "Who is Affected," para. 1). Children with ASD typically display impairments in verbal and nonverbal communication, receptive communication, and expressive communication (Manitoba Education, Citizenship and Youth, 2005). Although numbers vary, approximately one-third to one-half of children with ASD do not develop functional speech (Dundon, McLaughlin, Neyman, & Clark, 2013, p. 1; Hill, Flores, & Kearley, 2014, p. 1; Lorah et al., 2013, p. 637). Without functional communication, autistic children are not able to express their thoughts, needs, or wants (Dundon et al., 2013). Finding an effective way for individuals with ASD to communicate is imperative to enable them to reach their potential (Hill & Flores, 2014). The Picture Exchange Communication System and using iPads as speech-generating devices are two interventions that can be used to achieve this goal.

Background

Augmentative and alternative communication (AAC) methods develop communication skills of autistic children (Lorah et al., 2013). AAC is the replacement of natural speech with unconventional communicative methods (Boesch, Wendt, Subramanian, & Hsu, 2012). Most AAC interventions use picture symbols because individuals with ASD are visual learners (Manitoba Education, Citizenship and Youth, 2005). In order to cultivate their visual strengths, pictorial supports are used as often as possible to help children with ASD learn (Bernier & Gerdtts, 2010). AAC provides autistic children with a means to communicate with others (Dundon et al., 2013).

Picture communication systems and speech-generating devices are types of AAC strategies to develop the functional communication abilities of autistic children (Hill & Flores, 2014). Most picture communication symbols use cartoon-like images to represent specific objects (Gillespie-Smith, Riby, Hancock, & Doherty-Sneddon, 2014). One of the most popular picture communication interventions is the Picture Exchange Communication System (PECS). PECS is an effective system for developing the functional communicative skills of children with ASD (Boesch et al., 2012; Hill et al., 2014). Speech-generating devices (SGDs) are electronic devices that require their users to tap picture icons for the SGD to voice commands (Lorah et

al., 2013). Recently, Apple iPads have become highly popular for their effectiveness as SGDs (Dundon et al., 2013). AAC interventions, such as picture communication systems and SGDs, teach autistic children functional communication skills (Hill & Flores, 2014).

Picture Exchange Communication System

PECS is a picture-based communication system designed specifically for children with ASD (Barnes, Dunning, & Rehfeldt, 2011; Hill et al., 2014). The system was created to teach individuals with verbal language impairments how to exchange picture cards for preferred items (Cummings, Carr, & LeBlanc, 2011). The difference between PECS and other picture communication systems is that the student literally exchanges the picture card with the teacher, for his/her desired item (Boesch et al., 2012). PECS is based on the belief that in order for communication to occur someone's attention must be gained, and that simply pointing to a picture is not considered communication (Autism Canada Foundation, 2011). The goal of PECS is not to teach children with ASD to communicate verbally, but to have them understand why communication is essential within a social environment.

PECS is taught in six phases, with each phase building upon the skills learned in the previous one (Boesch et al., 2012). The first phase teaches a student how to exchange a picture card with a communication partner in return for a desired item. The second phase has the student retrieve the picture card, walk to his/her communication partner, and acquire his/her partner's attention before making the exchange. Phase three has the student differentiate between preferred and non-preferred objects, and between two or more preferred objects. With the addition of an "I want" card, the fourth phase teaches the student how to compose a sentence strip (Cummings et al., 2011). Phases five and six teach the student how to answer basic questions such as "What do you want?" and "What do you see?" For an individual with severe developmental disabilities, research has suggested that the completion of the first three levels, rather than all six, may be a more realistic goal (Barnes et al., 2011).

PECS is successful in developing purposeful communication for children with ASD. An evaluation of research studies, regarding individuals with developmental disabilities, revealed that 29 out of 36 participants increased their functional communication skills by using PECS (Hill et al., 2014). PECS has been known to instigate positive changes in communicative behaviour such as increases in requesting, symbol use, and initiating communication independently (Gillespie-Smith et al., 2014). Improvements in social-communicative behaviours have also been noted (Cummings et al., 2011). Although the goal of PECS is not verbal communication, several studies have reported that spoken language has been acquired by children through the use of PECS (Bernier & Gerds, 2010; Gillespie-Smith et al., 2014; Hill & Flores, 2014). Research has demonstrated that PECS is successful in improving purposeful communication skills in individuals with ASD.

The simplicity of PECS makes it easy to use (Cummings et al., 2011). Few prerequisite skills are necessary for a student to begin training with PECS. Children with ASD, of all abilities, are capable of communicating effectively with this system (Hill et al., 2014). Depending on the abilities of each child, some children are able to excel through the PECS stages in a fairly short amount of time (Cummings et al., 2011). Others, typically with more extreme developmental impairments, need to progress at a much slower pace but are still able to see improvement in their functional communication skills (Hill et al., 2014). The simplicity of PECS makes it easy for children with ASD to use.

There are advantages to using PECS, when compared to other systems, as a means of communication. PECS is an inexpensive way to communicate with others (Cummings et al., 2011). The system is also lightweight and portable (Boesch et al., 2012). It is not physically demanding to carry, as the cards are easy to handle and transport. Low-cost and portability are advantages to using PECS.

PECS does have some notable disadvantages. The cards often become worn from daily use and need to be re-created regularly (Boesch et al., 2012). Advanced PECS users may have difficulty carrying their booklets as more and more picture cards are added to it. PECS also lacks speech output. Therefore users have to gain the attention of their communicative partner before communication can occur. The communicative partner also needs to be trained on how to apply PECS properly so that the communication exchange is successful. This reliance on the knowledge of PECS reduces the users' independence and narrows the population with whom they can communicate.

Using iPads as Speech-Generating Devices

With the introduction of tablet devices such as the Apple iPad, their abilities as an AAC intervention are being recognized (Boesch et al., 2012). Software has been developed specifically for the iPad, to enable it as a communication tool (Hill & Flores, 2014). Programs can be installed that display picture communication symbols on the iPad screen (Achmadi et al., 2012). Because the iPad has a touch screen, the user simply touches the picture icon and the iPad emits the command in synthesized speech. The iPad offers a variety of programs that have been developed specifically for its use as a communication device, therefore opening an abundance of opportunities for children with ASD (Dundon et al., 2013).

Teaching a child with autism to use an iPad as a means of communication is typically done using the model, lead, and test (MLT) error correction procedure. This procedure consists of the teacher modelling the correct response, followed by the teacher and student doing it together, and then finally the student responding independently (Dundon et al., 2013). If the student responds correctly, then the teacher can move on to another task or encourage the child to complete the same task again. If the student does not perform independently, or does so incorrectly, then the MLT error correction procedure is applied again until the student is able to perform the task independently and correctly. In most cases, the assignment needs to be completed correctly, by the student, a certain number of times before a new assignment is attempted. The MLT procedure has been successful in teaching autistic children to communicate using an iPad.

iPads, used as SGDs, have been proven effective tools in developing communication skills of children with ASD. In a study conducted by Lorah et al. (2013), children had higher rates of independent requesting skills (85%) while using iPads as SGDs versus using picture exchange (64%) (p. 647). Using iPads, the children were also able to reach mastery criterion, of requesting specific items, in fewer training sessions than using picture exchange. The extra verbal modelling that iPads provide is believed to enable children to acquire language skills faster (Boesch et al., 2012). When used as SGDs, iPads are successful in developing communication skills of autistic children.

People of all ages and abilities are capable of using iPads (Hill & Flores, 2014). Even a preschool student with ASD was able to use an iPad independently (Dundon et al., 2013). The picture communication icons on iPads can be customized to suit the needs of specific individuals. People can have a variety of different icons and normally display commands that they use frequently. For individuals with severe language impairments, a limited number of single-command icons can be displayed to make it easier for them to discriminate between icons. For individuals with higher-functioning abilities, iPads are able to hold several pages worth of icons, including multistep commands. Even the size of the icons can be altered to make them larger for people with fine-motor impairments (Achmadi et al., 2012). iPads are communication devices that can be used by individuals of all ages and abilities.

Apple iPads are socially acceptable and enjoyable devices to use. Technology has made its way into modern classrooms, and most schools incorporate iPads into their educational settings. Many students look forward to using iPads and view them as a fun and engaging activity (Dundon et al., 2013). In the study by Lorah et al. (2013), four of the five participants

preferred using iPads, as SGDs, instead of picture exchange methods of requesting (p. 647). iPads may also be the most socially appropriate method for students with autism to communicate, as our society is accustomed to viewing people carrying tablets and other portable devices. Using iPads, autistic children can communicate to anyone within hearing distance of the tablet, similar to verbal communication. Unlike PECS, special training is not required to communicate using an iPad, therefore promoting independent communication by its user (Boesch et al., 2012). iPad tablets are socially acceptable devices that are enjoyable to use.

There are several practical advantages to using an iPad as an SGD. The Apple iPad is fairly small and lightweight, making it easily portable (Achmadi et al., 2012). The tablet is also inexpensive when compared to some SGDs (Hill & Flores, 2014; Lorah et al., 2013). There are also several free apps available to develop functional communication skills (Dundon et al., 2013). In addition, the synthesized voice output of the iPad is of high quality (Achmadi et al., 2012). These benefits of the iPad give it an advantage over other SGD devices.

Teaching autistic children to use iPads better prepares them for the future. iPads have the potential to develop students' existing skills and encourage their independence in regards to functional communication (Achmadi et al., 2012). Once children are able to use iPads for communication, however, they can also use them for other developmental needs (Lorah et al., 2013). There are several apps, tailored to varying abilities, in all different subject areas that can be downloaded and used. These apps, depending on the children's abilities, can advance their skills in areas other than communication. Technology is a part of our everyday life. Therefore having the skills to navigate it effectively makes autistic children better prepared for the future.

A disadvantage of the iPad is that it is an electronic device and is susceptible to technological problems. As with any form of technology, malfunctions can occur (Boesch et al., 2012). It would be beneficial to have a backup iPad as a replacement just in case the original breaks down. There is also the necessity of charging an iPad regularly to prevent it from completely depleting its battery, therefore leaving its user without any form of communication. Software updates also need to be installed as they become available. An iPad is fragile. Therefore a sturdy case is necessary to prevent it from being damaged. A weakness of the iPad is its vulnerability to technological problems.

Conclusion

PECS and using iPads, as SGDs, are useful AAC interventions for increasing functional communication in individuals with ASD. In several studies, participants were able to request specific items using both methods with comparable effectiveness (Boesch et al., 2012). It has been discovered that when exposed to both AAC interventions, individuals with autism develop a preference for either PECS or the iPad (Lorah et al., 2013). One set of researchers recommended using both systems, in progression, to teach communication (Hill & Flores, 2014). They proposed introducing picture communication symbols using PECS, and once learners master phases one to three, then have them progress to using iPads. Communication goals and intellectual functioning of the learners need to be considered before determining which AAC intervention will be most effective (Boesch et al., 2012). AAC interventions are, and will continue to be, effective in teaching individuals with ASD how to communicate functionally.

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