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INTRODUCTION BY THE EDITOR

Marion Terry, Ph.D.

Welcome to the thirteenth issue of the *BU Journal of Graduate Studies in Education*, devoted to rural, northern, and Aboriginal education. Our authors for volume 7, issue 1, are current and past BU Faculty of Education graduate students. I thank these educators for sharing their work. Together, they have produced a collection of articles that celebrate education in Manitoba schools and post-secondary institutions.

- Ingrid Gross's research report summarizes the findings from her case study comparison of two pre-service teacher education models

- Nicole Koroluk's refereed article connects the latest research findings of neuroscientists to the most effective teaching practices.

- Chris Barkman's refereed article explores the characteristics that typify effective school leaders.

- Carla Bonar's refereed article considers social skills interventions for children with neurological and emotional delays that affect social skills development.

- Alana White's refereed article explains how infusing Indigenous perspectives in formal schooling can help children heal from the wounds caused by residential schooling, the sixties scoop, and Child and Family Services.

- Andrew Collins' refereed article discusses ways to create an inclusive schooling environment for diverse learners.

- Brandi Graham's refereed article offers suggestions for providing effective formative feedback in the classroom.

- Patrena Mackie's refereed article extols high-fidelity nursing simulation as essential to best practice in post-secondary nursing education.

- Raisa Vallis's refereed article recommends remediation in social skills training for children with emotional and behaviour disorders (EBDs).

- Lori Neil's refereed article identifies the challenges that children from military families bring to school, and suggests ways to help military children cope with these stressors.

- Jennifer Wahoski's refereed article promotes video modelling (VM) interventions as a strategy that assists children with autism.

Also included in this issue is our "Celebration of Scholarship," to honour graduate students who completed their M.Ed. degrees with theses in 2014.

TABLE OF CONTENTS

RESEARCH REPORT

A Comparative Case Study of The Professional Development School (PDS) and Traditional Pre-Service Teacher Education Models

Ingrid Gross

Pre-service teacher education programs have undergone strong criticism with regards to their effectiveness in preparing pre-service teacher candidates for the teaching profession. This qualitative case study explored the influence two different pre-service teacher education programs had on pre-service teacher candidates' perceptions of readiness for the teaching profession. The professional development school (PDS) model provided an integrated learning experience for pre-service teacher candidates that was stretched over a five-month period. The traditional model was structured in a block system whereby pre-service teacher candidates first studied theoretical aspects of teaching and learning, and then were placed in a practicum.

Research Method

The research question that guided this study was as follows: How do the experiences of first year Bachelor of Education students who have participated in a professional development school model differ from first year Bachelor of Education students who have participated in a traditional Faculty of Education model with regards to their perceptions of readiness? In this study, pre-service teacher candidate data were collected at a university campus located in western Canada. Cooperating teachers' data were collected at public school sites: a grades 9-12 suburban secondary school, and two K-8 middle-years schools located in a city situated in western Canada.

The 23 participants were 15 pre-service teacher candidates and 8 cooperating teachers. The pre-service teacher candidates volunteered after a public presentation by the researcher, and the cooperating teachers were randomly chosen from PDS and traditional lists. The researcher conducted semi-structured interviews, using open-ended questions, with 15 pre-service teacher candidates and 8 cooperating teachers. Emergent and a priori themes were developed from textual data. Using the voices of traditional and PDS pre-service teacher candidates and cooperating teachers, this study attempted to identify the instrumental factors that facilitated strong self-efficacy in pre-service teacher candidates.

Conclusions
(based on data related to the seven research sub-questions)

1. Compared to their first term experience with the traditional model, and in comparison to the pre-service teacher candidates who experienced only the traditional model, did the PDS experience enable the pre-service teacher candidates to make stronger connections between theory and practice? If so, how? How did this influence their perceptions of readiness?

The case study research found that the professional development school experience did enable pre-service teacher candidates to make stronger theory-to-practice connections. The structural design of the professional development school and the four requisite learning conditions embedded within the PDS model were key factors that assisted pre-service teacher candidates to strengthen these connections.

The structural design of the PDS model enabled pre-service teacher candidates to take theory that they had just learned in their university classes and then immediately apply it within

the practicum environment. Learning became highly contextual, and as a result pre-service teacher candidate were provided with more opportunities, over a longer time frame, to engage in the process of praxis.

The four requisite conditions – time, collaboration, ongoing feedback and reflection – embedded within the PDS model worked together to formulate an integrated learning environment. Time, in the form of sustained participation, enabled pre-service teacher candidates to make more theory-to-practice connections over a longer period of time, but the ongoing feedback, collaboration, and self-reflection also engendered deeper theory-to-practice connections. Data revealed that PDS pre-service candidates saw the integrated components of the PDS learning environment as being tremendously powerful in providing them with strong perceptions of readiness for the teaching profession.

2. Compared to their first term experience with the traditional model, and in comparison to the pre-service teacher candidates who experienced only the traditional model, what were the PDS pre-service teacher candidates' perceptions of readiness in the areas of curricula, Backwards by Design planning, differentiated instruction, classroom management, and overall understanding of a teacher's job demands?

In the area of curricula, most PDS pre-service teacher candidates expressed having stronger perceptions of readiness with the PDS *[course title]* curricula compared to their previous curricula experiences in the traditional route. With regards to understanding curricula, PDS pre-service teacher candidates expressed a lack of conceptual coherence within their traditional model experience. Most PDS pre-service teacher candidates articulated feeling comfortable with deconstructing outcomes in the PDS *[course title]* methodology course, based on the instruction that they had received in this course. PDS pre-service teacher candidates reported that they were taught how to deconstruct outcomes. The modelling of how to deconstruct curricular outcomes and scaffold learning provided PDS pre-service teacher candidates with greater understanding of the *[course title]* curricula. As a result of their experience in this methodology class, many PDS pre-service teacher candidates expressed having greater confidence working with *[course title]* curricula.

Compared to the first term experiences and the experiences of the traditional cohort, PDS pre-service teacher candidates demonstrated greater understanding and confidence using a Backwards by Design approach. The majority of PDS pre-service teacher candidates effectively articulated, in great detail, the elements embedded in Backwards by Design planning. PDS pre-service teacher candidates noted that they felt greater confidence using the Backwards by Design framework because they had been taught how to use the framework in the *[course title]* PDS methodology course. PDS pre-service teacher candidates also expressed greater understanding and experience in how to design a year plan for a chosen grade level. PDS pre-service teachers spoke of the need to have greater emphasis placed on unit planning versus overemphasizing lesson planning skills.

With regards to differentiated instruction practices, PDS pre-service teacher candidates' perceptions of readiness mirrored the level of self-efficacy expressed by the traditional cohort. Both pre-service teacher candidate groups spoke highly of *[course title]*, which focused on how to address aspects of student diversity. These pre-service teacher candidates identified that this course provided them with important background information on various student exceptionalities, provided the opportunity to examine IEPs and behavioural plans, and discussed the role that differentiation played in meeting students' needs. Many traditional and PDS pre-service teacher candidates discussed that in their other courses teacher educators created an awareness surrounding differentiation, but they felt unprepared in knowing exactly what tools to use for particular subject areas.

PDS per-service teacher candidates' perception of readiness in the area of classroom management differed slightly from the traditional cohort and their previous experience in the

traditional model. Some PDS pre-service teacher candidates felt more confident in their classroom management techniques because the sustained participation enabled them to hone their classroom management skills. Many PDS and traditional pre-service teacher candidates expressed that they valued the practicum because they were able to apply various classroom management theoretical concepts to an authentic context.

The majority of both PDS and traditional pre-service teacher candidates expressed that their classroom management methodology course provided them with a comprehensive overview of various classroom management styles. A variety of PDS and traditional pre-service teacher candidates expressed that they valued classroom management theory, but they also articulated that their understanding of these theoretical concepts did not take place until they applied them to an authentic classroom context.

With regards to understanding the demands of the job, some PDS pre-service teacher candidates articulated having slightly stronger perceptions of readiness in the area of job demands compared to their the traditional cohort. They attributed their sustained participation in providing them with a deeper understanding of job demands. These individuals spoke of learning to develop better time management skills, to juggle timetable changes, and to set boundaries between their work life and home life.

3. How did daily contact time with the school influence PDS pre-service teacher candidates' perceptions of readiness?

PDS pre-service teacher candidates saw daily contact time with their school as positively influencing their perceptions of readiness for the teaching time. Learning became highly contextual, and as a result pre-service teacher candidates were provided with more opportunities, over a longer time frame, to engage in the process of praxis. Ongoing contact enabled pre-service teacher to engage in more collaboration and ongoing formative feedback. In addition, some pre-service teacher candidates spoke of having more opportunities to correct mistakes, which they perceived would not have been possible in the traditional model's rigid time schedule that excluded re-do opportunities.

4. Did the structure of the PDS enable pre-service teacher candidates to gain a more well-rounded experience that broadened their skills set and overall understanding of the teaching and learning process, in comparison to the pre-service teachers who experienced only the traditional model? How did this influence their perceptions of readiness?

The structure of the PDS model provided pre-service teacher candidates the opportunity to engage in a phenomenon identified as sustained participation. Sustained PDS participation was defined as spreading university coursework and the seven weeks of practicum time incrementally over a period of five months, from the second week of January to the first week of May. The sustained time period was *a* component, but not *the* component, that fostered deeper learning experiences. Rather, it was the integration of all four key requisite components – time, ongoing feedback, collaboration, and reflection – that enabled PDS pre-service teacher candidates to enter deeper learning domains.

During the sustained time period, many PDS pre-service teacher candidates encountered deeper and broader learning experiences, which they perceived as developing a stronger level of self-efficacy. Many PDS pre-service candidates articulated that the sustained participation enabled them to gain long-term planning skills that they could not have acquired in the traditional model. They developed stronger relationships with students, which enabled them to gain a clearer understanding of students' learning needs. As well, many student spoke of developing stronger formative assessment and differentiated instruction skills, experiencing a wider-array of curricula, and acquiring a stronger understanding of teaching duties due to the spreading out of course work and practicum time over a five-month period.

5. How did ongoing formative feedback from PDS stakeholders, over an extended period of time, influence PDS pre-service teacher candidates' perceptions of readiness, compared to their first term experience with the traditional model?

The sustained time period of the PDS model facilitated more opportunity to collaborate, to access feedback from a wide variety of stakeholders, and to enter praxis. Some PDS pre-service teacher candidates received more feedback from a wider array of stakeholders (teacher educators, cooperating teachers, field supervisors, and fellow PDS cohort candidates), and this feedback assisted the pre-service teacher candidates to improve their skill sets. In addition, some pre-service teacher candidates spoke of having more opportunities to correct mistakes, which they perceived would not have been possible in the traditional model's rigid time schedule that excluded re-do opportunities. These pre-service teacher candidates saw these opportunities to correct and re-calibrate skills and knowledge as positively contributing to their perceptions of readiness.

6. With regards to the delivery of university coursework, how did having teacher educators who had recent classroom experience influence the PDS pre-service teacher candidates' perceptions of readiness?

Many PDS pre-service teacher candidates perceived that methodology instruction provided by traditional and PDS teacher educators who possessed recent connections to public education was more valuable than methodology instruction provided by teacher educators with limited or no recent classroom experience. PDS pre-service candidates perceived the instruction by these individuals as facilitating stronger preparation for the teaching profession and thus positively influenced their self-efficacy.

7. What specific features of the PDS had a positive correlation with pre-service teacher candidates' perceptions of readiness?

The majority of PDS pre-service teacher candidates articulated that having sustained time within an integrated learning environment was a powerful factor in acquiring deeper knowledge and skill sets, which resulted in a higher level of self-efficacy. The sustained time period was not the only component that produced deeper learning experiences. Rather, it was the integration of all four key requisite components – time, ongoing feedback, collaboration, and reflection – that enabled PDS pre-service teacher candidates to enter deeper learning domains. For many PDS pre-service teacher candidates, the integration of all four key factors led to stronger long-term planning skills, understanding and implementation of curricula, relationship development with students and staff, formative assessment and differentiated instruction skills, and understanding of job demands due to the spreading out of course work and practicum time over a five-month period.

Recommendations for Practice

- Provision of a PDS option for pre-service teacher candidates in both year one and two of their Bachelor of Education programs.
- Implementation of a PDS model in every Bachelor of Education program. The PDS sustained participation environment creates stronger theory-to-practice linkages by enabling greater collaboration, formative feedback, and reflection, which lead to stronger skill sets and conceptual understanding of best teaching practices.
- Preparation of a "Pre-service Teacher Standards of Excellence" document, which articulates essential pre-service teacher learning domains and indicators of proficiency for each domain.

This document could be used by pre-service teacher candidates as an Assessment As Learning tool to track their growth and by teacher educators to anchor their course curricula.

- Creation of major and minor methodology courses that are six credit hours in length. Teacher educators would have more coaching opportunities to develop stronger skill sets in such areas as curricula, instruction, and assessment.
- Greater emphasis on developing stronger Backwards by Design unit planning skills versus the overemphasis placed upon lesson planning.
- Development of a cohesive faculty understanding around the expectations surrounding Backwards by Design unit planning and year planning, and as well a cohesive faculty-wide implementation plan.
- Use of the PDS model to facilitate dialogue around current best practices in teaching, and to initiate co-teaching opportunities in post-secondary and public education settings. This would provide opportunities for teacher educators to work in a public education setting and for exemplary public school educators to collaborate with teacher educators in a post-secondary environment.
- Creation of more partnerships between the university and the school division that were involved in this study, in order to facilitate renewal in pre-service teacher candidate programming, as per the National Network of Educational Renewal (NNER) articulation agreement
- Tailoring of professional development to PDS cooperating teachers' needs, in order to clarify their roles and responsibilities, to enhance their formative feedback skills, and to facilitate renewal opportunities for this cohort of learners.
- Integration of the principles of adult learning theory in the design of pre-service teacher education courses**.

About the Author

Ingrid Gross is the staff development specialist at Crocus Plains Regional Secondary School. She graduated from BU with a Bachelor of Arts (1991) and an After Degree in Education (1993). She has been employed with the Brandon School Division for the past 21 years. Ingrid has a passion for learning and believes that every student has immense potential to change the world.

REFEREED ARTICLES

Brain-Based Education

Nicole Koroluk

Abstract

Research about the brain has affected the education community and transformed the way that educators think about learning. The field of brain-based education looks at making connections between the latest research findings of neuroscientists and the most effective teaching practices for the enhancement of instruction and learning. Educators who are armed with knowledge of the working system of the brain, and who employ the latest brain-based learning strategies in their instruction, may find themselves to be one step closer in their search for the most effective teaching methods.

For centuries, educators have been searching for information that would guide their practice and assist them in becoming effective teachers. Highly respected educators have developed theories, and scientists have studied the brain. For the past two decades, educators and scientists have worked together, in the field of brain-based education, to determine how the brain functions, in an attempt to enhance teacher instruction and student learning (Spaulding, Mostert, & Beam, 2010). Research about the brain has provided sophisticated theories about how the brain learns. With information regarding brain-based education, educators have been able to guide and adjust their teaching practices to enhance instruction and learning.

The Theory

Many educators have devoted their careers to following the philosophies of some of the top educational learning theorists throughout the years, as they strive to employ the most effective teaching practices. As far back as 400 BCE, Plato cautioned educators against providing students with information without first evaluating their readiness (Willis, 2010). Vygotsky explained that students are able to learn best when they are guided by others, in social situations, to work in their zone of proximal development (Willis, 2010). Learners will be most successful when they are working slightly beyond their current ability level, in low-anxiety situations, according to Krashen and his theory of comprehensible input (Willis, 2010). Another widely accepted theory is Gardner's theory of multiple intelligences, which challenges the idea that every learner is capable of learning the same material, in the same way (Willis, 2010). From ancient philosophy to modern science, it remains evident that to teach effectively is to understand how people learn.

As educators strive to improve learning for all students, it is important that they understand how the brain works. Scientists in the cognitive neuroscience field investigate how the brain works, as they study what happens in the brain as it learns, stores, and uses new information (Van Dam, 2013). To understand how this information about the brain can affect education, experts turn to the field of educational neuroscience. Educational neuroscience is the partnership between the mind (psychology), the brain (neuroscience), and education (pedagogy) (Sousa, 2011). Connecting these disciplines to guide educational practices and policies is the fundamental purpose of this emerging field (Worden, Hinton, & Fischer, 2011). Thus, educational neuroscience is the synergy between what is known about how the brain works and how educators can use that knowledge to improve learning for all students.

Brain-based education has become an exciting topic for educators, as it has the potential to influence their teaching practices. It refers to a specific set of strategies that are used to engage

learners and are based on the principles of what experts know about how the brain works (Jensen, n.d.). Many of the brain-based programs and methods used by educators are based on the latest research findings of neuroscientists (Great Schools Partnership, 2013). Translating these findings into educational practice is the heart of what brain-based education is all about, and it enables educators to employ more effective teaching practices.

Practical Applications

The current brain research has already provided educators with significant information that has practical applications in the field of education. Knowledge of how the brain physically changes after acquiring a new skill has significant implications for learning (Van Dam, 2013), including how the chemicals in the brain can affect learning, and how those chemicals are enhanced by healthy lifestyle choices. The discovery of the brain's ability to rewire and remap itself, or to grow new neurons, has caused educators to rethink many of their previous notions about a person's capacity to learn (Great Schools Partnership, 2013; Jensen, 2008). Among other findings is the improved understanding that social conditions, emotions, and engagement have a greater influence on the brain than was previously thought. These scientific discoveries have made a tremendous impact in the field of education, and educators continue to benefit from this new knowledge about the brain.

Educators can develop more effective practices, based on the brain research, by understanding that the brain physically changes after a person has learned a new skill (Van Dam, 2013). Perhaps even more significant is the understanding that those changes will reverse if the person does not have an opportunity to use and develop that new skill. This information is quite substantial, as it implies that students stand a better chance of retaining the knowledge gained in the classroom if they are provided with opportunities to actually use it. Thus, educators should be encouraged to employ a hands-on learning approach in their classrooms, in which students have frequent opportunities for practice and application of new skills, as a more effective teaching practice.

Educators can use the brain research concerning the chemicals found in the brain and the effect that they have on learning. New knowledge is represented in the brain by generating new connections between brain cells, and the strength of these connections is enhanced by chemicals in the brain called growth factors (Van Dam, 2013). The accessibility of these growth factors can be improved by following healthy routines such as exercise and sleep. This knowledge would lead educators to believe that, with regular exercise and improved sleep habits, students would formulate stronger connections in their brains, thus leading to deeper retention of knowledge. Educators with this knowledge would find it beneficial to engage their students in regular physical activity and to promote healthy lifestyle choices, in an effort to enhance the chemicals in their brains and positively affect their learning.

The discovery that the brain can change and rewire itself has drastic implications in the field of education. Neuroplasticity is the concept that connections in the brain can be changed and reorganized over time as people "learn new concepts, have new experiences, or practise certain skills" (Doidge, 2007, p. xix; Great Schools Partnership, 2013, "Reform," para. 1). Knowledge of these changes is very significant for educators, as they understand that the networks in the brain can construct stronger connections, resulting in more efficient networks and enabling the learner to have lasting, long-term memories (Willis, 2010). As students learn new concepts, they are making connections between this new information and their "existing patterns of stored information" (Willis, 2010, p. 61). Thus, experience has a profound influence in shaping the brain, because the more experiences students have, the more opportunities they will have for their brains to connect and link new experiences to previous ones (Chita-Tegmark, Gravel, Serpa, Domings, & Rose, 2012). As students practise their skills and review their knowledge over time, they are building stronger connections in their brains (Jensen, n.d.). Practice and review are important components of the learning process, because "there is almost no transfer

to long-term memory without rehearsal" (Sousa, 2008, p. 52). Accordingly, a new adage is emerging: practice makes permanent. Educators who understand the ability of the brain to rewire and remap itself frequently provide their students with new experiences and opportunities to make connections, and constantly review new content with their students, in an effort to build stronger connections in their students' brains.

Brain research shows that the brain has the ability to grow new neurons, and that these new neurons are "highly correlated with memory, mood, and learning" (Jensen, 2008, p. 411). This information is particularly relevant to educators because the process of growing new neurons can be regulated and enhanced by exercise, diet, and low stress levels. Educators can support the growth of new neurons in their students by planning a variety of physical activities, including scheduling frequent movement breaks, incorporating good nutrition into school practices, and decreasing the stress levels in their students (Cozolino, 2013; Jensen, n.d.). Thus, learning can be positively or negatively affected by the quality of lifestyle choices made, and educators contribute to improving students' memory, mood, and learning by encouraging and promoting healthy lifestyles.

Stress can be a very concerning issue for students, as high stress levels can affect their "memory, social skills, and cognition" (Jensen, 2008, p. 411). Stress and trauma in early childhood can cause the release of a stress hormone called glucocorticoid, which causes substantial changes in the hippocampus, affecting the brain's ability to learn new information and form long-term memories (Doidge, 2007). In addition, neuroimaging shows that the brain has a reticular activating system (RAS) filter and that this filter acts as an intake system in the lower brain stem (Willis, 2010). Sensory input must pass through this filter in order to be received by "the higher brain" (Willis, 2010, p. 49). During stress or fear, the RAS filter will give preference to the input that is considered relevant to the perceived threat, instead of to the information that the individual is trying to learn (Willis, 2010). Therefore, students who experience continuously high levels of stress are likely to have long-term consequences (Fischer, 2012). In an effort to lower the stress levels of students, educators should consider fostering a nurturing environment, complete with movement, drama, and celebration (McCall, 2012), as well as including stress-management techniques into their daily practice (Cozolino, 2013). It is extremely important for educators to consider and monitor the stress levels of their students, in order to maximize learning in their classrooms.

The brain is highly affected by social conditions, and this realization has become more significant with the discovery of a special class of brain cells called mirror neurons (Jensen, 2008). These neurons are unique, as they "fire not only when an individual performs an action, but also when the individual observes someone else make the same movement" (Perry, 2013, para. 3). Prior to this discovery, many scientists thought that "brains use logical thought processes to interpret and predict other people's actions" (Perry, 2013, para. 4). Scientists now believe that it is people's feelings that help them to understand one another, rather than their thinking. This information is relevant for educators, because school is a highly social place, full of highly social experiences, and these experiences help to shape the students' character and develop their feelings of acceptance (Jensen, 2008). As a result, educators should be cognizant of social groupings, and be deliberate in the way that students are grouped, rather than rely on random social groupings that might be isolating or defeating to some students (Jensen, n.d.). Educators need to realize how significantly students are affected by their social conditions, and more consideration needs to be given to how much control and power students have over their own social environments.

New brain research has established connections between emotion and memory, which has significant impacts on education (Van Dam, 2013). Students are more likely to remember their experiences when they are connected to emotions, because their emotions "alert the brain's attention systems" (Sousa, 2011, p. 40). Dopamine is a "learning-friendly neurotransmitter" that has a significant influence on learning (Willis, 2010, p. 54). Increased levels of dopamine stimulate more pleasurable emotions and improve students' memory, focus, and motivation. In

addition, students' dopamine levels rise with their positive emotions and drop with their negative emotions. Thus, students learn better when they are experiencing pleasurable emotions. Many teaching strategies are associated with increased levels of dopamine, including opportunities for student choice, investigations that are driven by the students' interests, collaborative group activities (Willis, 2008), and frequent laughter breaks (Tate, 2010). By creating a positive emotional climate, educators can ensure that their students are provided with the most conducive environment for learning.

From brain research related to engagement, scientists have come to understand that engagement is a prerequisite for learning. The brain's RAS is particularly receptive to sensory input that triggers curiosity and "alerts the RAS to pay attention because something has changed" (Willis, 2010, p. 50). Educators can nurture curiosity in their classrooms by promoting student engagement. Students who struggle with engagement may find success with the use of technology (Jensen, 2008). Game playing, for example, is linked to increased levels of engagement, along with the added benefits of quicker information processing and improved ability to identify important material (Miller & Robertson, 2010). Novelty is another highly successful strategy used by educators to facilitate curiosity and engagement, because the brain is attracted to new information (Tate, 2010). Ensuring student engagement by arousing curiosity should be a focus for educators, because students are more likely to remember what they are learning when they are actively engaged. Whether educators choose to use technology to promote engagement, or one of many other practical applications, this new information, from the current brain research, has provided them with the tools necessary to affect their teaching practices in positive ways.

Conclusion

Educators have always searched for effective ways to teach their students, and throughout the years, learning theorists have offered their views. Recently, the fields of education and science have merged in an effort to shed some light on this topic. A new field has emerged, known as brain-based education, which suggests that "without knowing the working system of the brain, it is not possible to understand the nature of learning" (Duman, 2010, p. 2080). Brain research demonstrates that the brain has the ability to change itself as new information is learned. Research about the brain also suggests that people have the ability to affect the way in which they learn, by making healthy lifestyle choices that are essential for raising the good chemicals in the brain, rewiring the brain to make more efficient connections, and growing new neurons. Students can benefit when educators apply a variety of instructional strategies that are strongly correlated to improving student learning through low-threat environments, positive social situations, mood regulation, and engagement. Educators will continue to search for the most effective teaching methods, and with brain-based education they may be one step closer to finding their answers.

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The Characteristics of an Effective School Leader

Chris Barkman

Abstract

Principals are an integral member of a child's education. Their job is not only to manage the day to day affairs of a school, but to be an instructional leader. Much research has been conducted to determine the characteristics of effective school leaders and how these leaders turn their schools into effective learning spaces. Instructional leaders are interpersonally smart, professional and accountable. In the school, the leaders bring their own unique mix to the job and continually reflect on the day's events to promote life-long learning.

Principals are the individuals one hears over the daily announcements, those who wander the halls during class time, and the people students have to answer to when discipline becomes necessary. The school principal's role has been changing and evolving in the landscape of education. As a result, much time and research are devoted to studying effective principals and their effect on student learning and achievement. Teacher expectations are the first predictor of student success. Nevertheless, the principal as an instructional leader correlates to improving student achievement (Grissom, Loeb, & Master, 2013). Effective principals are instructional leaders who exhibit exceptional interpersonal skills and professionalism. These leaders are reflective learners who hold themselves and their staff accountable while creating a safe and welcoming climate. The above factors, when combined, create a high-powered learning environment essential for the success of a school leader.

Vision and Direction

The role of the principal has shifted from that of a manager to a visionary of instruction and curriculum. If the school is a high-achieving school, it is the principal who sets goals for the instructional staff. The instructional leader (principal) develops clearly articulated goals that ensure the success of all students who attend school (Mendels & Mitgang, 2013). The goals are clearly communicated to all students and staff. It is these goals that help to develop a shared vision between leadership and staff (Klar & Brewer 2013). These goals ensure that all stakeholders know the expectations and their role in achieving these aspirations.

Once a clear vision has been set and school goals have been clearly articulated, the principal can then spend time on various tasks related to instruction. The effective leader spends time coaching staff and developing educational programming. These two actions improve student learning (Grissom et al., 2013). Effective principals are consistently mindful of best practice while instructing and encouraging the teaching staff to adopt these learning techniques in the classroom (Whitaker, 2012). Ineffective principals are unaware of new approaches and do not keep current on research (Okutan, 2014). Despite the "tried and true" methods that many teachers practise within their classrooms, the principal insists on keeping current with the changing research on student learning. Taking risks and trying something new is common for the instructional leader (Kearney, Kelsey, & Herrington, 2013). With student learning at the centre of any school, all effective leaders think that more can be done to improve outcomes (Meador, 2014b). Spending time on best practice and keeping current with research translate into improved student learning.

Monitoring Student Progress

If change and trying new things is a pillar of an instruction leader, another pillar is the need to monitor student progress. Instructional leaders need to be specialists in assessment and

tracking progress (Morrison, 2013). Top principals track the progress of all students in relation to student goals and outcomes (Elfers & Stritikus, 2014). Principals may develop common assessment strategies with staff and note how students are progressing in their learning. These data are then analysed and charted to look at weakness or areas that need to be improved upon. Data can come from a variety of sources and address a variety of areas that range from academics to social/emotional well-being. Principals use data effectively and efficiently (Mendels & Mitgang, 2013). When data are used effectively, the principal will manage instruction through funding of budgets. Essentially, money will be put toward resources that will help a school to improve weaknesses or help staff and students to reach collective goals (Klar, & Brewer 2013). Tracking student progress and channelling monetary funds to address weaknesses are other indicators of an effective leader.

Investing funds to nurture improvement can mean many different things. For example, principals could plan professional development activities for staff, fund resources to implement professional development, or develop teacher capacity (Grissom & Loeb, 2011). Effective educational leaders know that investing in professional development is good for achievement and staff development (Mendels & Mitgang, 2013). Investing in staff development connects with the notion of letting teachers be informed with current educational research and best practice. Principals invest in staff development and ensure that leaders keep current.

Managing Time and Working with People

The tasks that an instructional leader has to accomplish can be overwhelming and daunting: establishing goals, coaching staff, developing assessments, tracking student progress, and channeling funds. Unfortunately, during the day of an instructional leader, it was found that only 12.7% of their time was actually devoted to instructional activates (Grissom, et al., 2013, Table 1). Knowing that focusing on instruction activities helps to improve student learning, principals are learning to free up more of their time. Leaders are bogged down in everyday administration tasks that do not relate to curriculum and student learning. Effective leaders develop a strategy to delegate some of these tasks to others so that principals can focus on instructional tasks that matters to students (Mendels & Mitgang). Principals have a clear understanding of where their priorities are and free up their time to focus on instruction.

Dealing with instruction involves human resources and working with people: teaching staff, students, and the community. Every effective principal must have strong interpersonal skills (Morrison, 2013). These leaders know that significant learning requires a relationship (Hall & Simeral, 2008). To be the instructional coach, the leader must have a relationship with the staff. Ideally, caring and supportive relationships foster growth. All principals need to work effectively with others to reach common goals and to ensure that all staff are working toward collective goals while being available and having an "open door" policy (Spiro, 2013; Whitaker, 2012). Exceptional leaders build trust and encourage communication (Kearney et al., 2013). With such a high importance placed on communication, the principal is an outstanding listener, taking the time to hear the thoughts and ideas of others (Meador, 2014a). Staff meetings are vehicles that teachers look forward to because the effective principal has made them worthwhile (Whitaker, 2012). When the effective principal actually listens to the teachers, the best teachers feel that they have a voice. If the principal is not an empathic listener, teachers will not share ideas and strategies during meetings (Freeman & Randolph, 2013). Through the process of active listening, the principal is aware of issues that arise and uses effective communication skills to deal with these problems. The effective leader spends time counselling staff during times of conflict (Grissom & Loeb, 2011). Additionally, time might be spent to advocate for the employees and teachers working in the school (Freeman & Randolph, 2013). Effective principals focus on people, listening, communicating, and developing relationships.

Communication

Communication is important when issues arise; however, it is equally important to mention the good that happens in schools. Everyone likes to hear about the good things that they do, and everyone loves a pat on the back for a job well done. When given appropriately, praise is very powerful (Whitaker, 2012). Everyone has his/her own unique blend of strengths and weaknesses, but when the contributions of an individual are notable, the effective leader notices it and acknowledges the person for a job well done. Collectively, when authentic praise is given, it will make the staff of a school feel good and improve the morale within the building. Improving the morale of staff is helpful when working with people and developing a positive school climate.

Listening and communicating are two key ingredients to helping the effective leader encourage collaboration. Strong principals share decisions with others (Mendels & Mitgang, 2013). Often, the principal knows that he/she does not have all of the answers to every situation that occurs within the school. Bringing up challenges during staff meetings is a useful tool to use (Spiro, 2013). Collaboration and staff input translate into a democratic way to solve problems. When tough decisions have to be made, effective leaders base the decision on the best teachers in the building (Whitaker, 2012), which translates into developing the leadership skills in others. When a principal shares leadership, he/she capitalizes on the knowledge and wisdom of the collective staff (Spiro, 2013). Encouraging collaboration within the school can be difficult, especially in small schools; however, principals find a way to make it work. Principals establish professional learning communities (PLCs) to support cooperation (Hall & Simeral, 2008). Creatively, principals visit other schools and learn from other leaders about effective decisions and solutions to problems (Lin, 2012). Encouraging collaboration, sharing decision making, and developing the leadership potential of others are strategies that effective school leaders use.

Professionalism

Working in a school and with diverse people and opinions demands professionalism from the leader. Being professional can mean different things to different people, but in terms of effective leaders, being professional means treating everyone with respect (Whitaker, 2012). Every move that a leader makes is subject to scrutiny. The above-average leader models respect in his/her day-to day interactions and leads by example. Leading by example ensures that the principal is well-respected (Meador, 2014b). When the principal acts respectfully and professionally, staff and major stakeholders will be advocates for the principal (Whitaker, 2012). When respect for the leader is lost, little can be done to make other people work efficiently under his/her leadership and staff members will question the authority of the leader.

Being professional and treating everyone with respect go hand in hand; another aspect of professionalism is having good values. Effective leaders have a good internal conscience and solid moral compass (Morrison, 2013). They know the difference between right and wrong and base their decisions on what is right, not on what is easy. Courage, conviction, and principles are engrained in the psyche of effective leaders (Day, 2014).

Basing difficult decisions on what is right, and permitting teachers to do the same, make principals effective. Knowing that teachers make the biggest difference in student achievement, principals provide teacher autonomy (Lin, 2012). Instructional coaching and planning will help teachers to become increasingly effective; however, some professional courtesy must be extended from the leader to the teachers. Proficient teachers are reflective and want to improve. Encouraging staff to develop according to self-identified needs is beneficial (Whitaker, 2012). Good leaders expect professionalism and self-reflection from the teaching staff.

Self-Reflection

Principals should not live to a double standard; expecting self-reflection of teaching staff should be met with principal self-reflection. Exceptional principals learn from themselves and engage in regular reflection (Kearney et al., 2013). Not every decision a principal makes will be the best one; that is a fact of life. There will be triumphs and pit-falls, but effective leaders analyse the good and bad decisions and ask "Why did this happen?" and "How could I have handled the situation more appropriately?" When reflecting, leaders set high expectations of themselves (Whitaker, 2012). Being reflective and learning from the past is the principal's first step in holding him/herself accountable. A good school leader opens him/herself up for criticism (Whitaker, 2012). This act makes the principal vulnerable to staff and other stakeholders; however, the effective leader recognizes that he/she is human and does not have all of the answers. The first people from whom the principal should solicit feedback are the teachers (Radinger, 2014). In reality, appraisals and criticisms will occur, whether in an open transparent format or in secret behind the leader's back.

Principals hold themselves accountable by opening themselves up to criticism; principals must hold others accountable as well. Good leaders do not settle for average: they hold their staff accountable for the learning that takes places in classroom (Meador, 2014a). A climate of self-reflection and reflection on data is well established to help staff focus on student needs (Lin, 2012). The leader establishes clear expectations and follows them through (Whitaker, 2012). Tough love occurs when a member of the collaborative team does not meet expectations.

Establishing a Culture

Creating a culture of respect, collaboration, and progress within a school is important to the effective principal. The culture, or "feel," of a school is a safe one that is orderly, supportive, and welcoming to learning (Spiro, 2013, p. 29). A safe place is what students need in order to develop their potential. Additionally, positive relationships are nurtured and encouraged within the school (Lin, 2012). Principals know that learning cannot occur without a relationship, and they make sure that attention is paid to the teacher-student relationship (Hall & Simeral, 2008; Lin, 2012). The teacher-student relationship is just as important as the teacher-principal relationship. Within a school, teachers will feel safe and valued under the wing of an effective principal (Spiro, 2013). The culture, or the way that a school acts collectively, is safe and based on positive relationships wherein people feel valued.

Creativity, although difficult to define, is found with the effective principal. Similarly to instruction, principals are always trying something new. Principals adapt well to constant change (Whitaker, 2012). Good principals try to redesign the organization through building relations with families and connecting the school to the community (Klar & Brewer, 2013). Building relationships with the community in a meaningful way demands a certain amount of creativity. Networking, using local media, and developing relationships have proven to be effective at engaging the community (Lin, 2012). Winning the support of the community requires communication that is done in a creative way.

Conclusion

Much research has been completed on what makes an effective educational leader. These leaders are unique and have their own strengths and weaknesses. What is clear is that effective school leaders focus on instruction and people. Through their day-to-day actions, they act in a professional manner and engage in regular self-reflection. They hold themselves and others accountable for student learning and create a safe, welcoming culture within their schools.

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Classroom-Based and Peer-Facilitated Social Skills Intervention

Carla Bonar

Abstract

The school context provides the ideal setting and partners for facilitating social skills development in students with social skills challenges related to neurological and emotional delays. Most often, social skills delays remain unrecognized in early school years, although these skills provide a foundation for language development and academic success. In fact, curricular outcomes assume that students possess basic neurological and emotional readiness for group learning, but many students do not, and the number of students entering school with neurological and emotional diagnoses with concurrent social skills delays is on the rise. Although clinical treatments that provide pull out small-group instruction have shown success for improving social skills, the generalization of learned skills to the classroom remains a challenge. Yet, the classroom offers a constant, natural context to promote social skills development, when communicative partners – peers – receive appropriate training to provide supportive feedback.

Social skills training is most effective when intervention is delivered by communicative partners within the social context. Social skills typically develop contextually from infancy throughout childhood, preparing students to develop continued social and academic skills. Unfortunately, by kindergarten entry, many children are not ready socially or emotionally for learning within the classroom context. The number of children diagnosed with neurological and social-emotional delays is increasing, and many of these diagnoses are associated with delays in social development. Curricular objectives for academic success assume that students possess the basic cognitive and behavioural processes necessary for learning. Students and teachers, who are the primary communicative partners, are unprepared for responding and supporting students with social delays. Fortunately, children can be taught social skills, as evidenced by parent training programs in early intervention and small-group instruction in elementary and middle school. Peers, as primary communicative partners within the classroom, play an important role in facilitating social development for students with social delays, therefore necessitating a peer-based approach to effective social skills intervention.

Social skills are brain-based abilities that not only enable people to successfully begin, maintain, and end interactions, but are the precursory skills necessary for continued social and academic learning within the school context. The human brain is designed to promote social interaction because neurochemicals present from birth reinforce and motivate children to seek continued social development (Kohls, Chevallier, Troiani, & Schultz, 2012). Parents, as primary communication partners, shape this social development, facilitating the emergence of attention, regulation, and emotional skills necessary for continued cognitive and social development (Bernier, Carlson, & Whipple, 2010; Kochanska, Philibert, & Barry, 2009; Meins, 2013). Repeated social interactions reinforce continued social development in context (Fawcett & Gredeback, 2013), from which toddlers develop the precursory cognitive-social skills in order to understand perspective, and prepare them to learn cooperative play. Play is the means by which children learn cognitive processes to regulate impulses and emotions, to plan and predict actions, and to understand that others' thoughts and motivations differ from their own (Miller, 2012). These processes are all necessary skills for engaging in social interactions that require initiating ideas, attending and following a conversational topic, and monitoring and clarifying what is said. The continual evolution of social skills happens effortlessly and inconspicuously (Winner, 2013), but is essential for continued social and academic development in school. However, not all children possess the same neurological make-up, nor do they experience opportunities necessary to develop social skills and promote academic readiness.

A wide body of literature supports the coexistence of social delays in children with neurological diagnoses, including autism (Kennedy & Adolphs, 2012; Peterson & Slaughter, 2009), attention-deficit hyperactivity disorder (ADHD) (Demurie, Corel, & Roeyers, 2011; Uekermann et al., 2010), hearing impairment (Ludlow, Heaton, Rosset, Hills, & Deruelle, 2014), and specific language impairment (Brinton, Spackman, Fujiki, & Ricks, 2007). Students with neurological diagnoses and co-occurring social delays do not develop the cognitive or emotional perspective taking and regulation skills needed for school readiness. A wealth of research supports the concomitant existence of social and academic delays in students with neurological diagnoses (Denham, Bassett, et al., 2012; Denham, Warren-Khot, Bassett, Wyatt, & Perna, 2012; Rhoades, Warren, Domitrovich, & Greenberg, 2011). Furthermore, in the United States, the prevalence of autism and ADHD continues to rise (Baio, 2014; Centers for Disease Control, 2013). Consistent with the increased prevalence of neurological diagnoses, the number of children not ready for school in Manitoba has also increased in comparison to the national average for at least three of five developmental domains (Healthy Child Manitoba, 2010-2011). Increased delays in overall social competence have also been reported (Healthy Child Manitoba, 2010-2011). Social delays are not, however, exclusive to students with neurological diagnoses, with the most recent data for Manitoba reflecting an increased number of kindergarten students who show weak emotional development (Healthy Child Manitoba, 2010-11), and who require classroom-based intervention.

In contrast to neuro-based social delays, social-emotional delays result from little opportunity to experience positive interactions with caring adults. There is a significant link between the effects of parenting styles, relationship development, and social-emotional development in children (Brooker et al., 2013; Brumariu & Kerns, 2010). Even when students present with average cognitive abilities, delays in social-emotional growth result in a limited ability to develop empathy or use language beyond meeting basic needs (Music, 2009, 2011). Empathy is the ability to understand and respond to another person's emotions (Gordon, 2007). Students with emotional delays – similarly to students with neuro-based delays – lack empathy. Whether the reason for delay in social skills development is the result of a neurological or emotional impairment, the consequence is continued social and academic deficits that affect school participation and performance.

In addition to presenting with neuro-based or social-emotional challenges, the curriculum itself is a significant barrier to social and academic learning by students who have social delays, because of the assumption that all students possess the precursory social skills that students with neurological and emotional delays lack (Winner, 2013). Classroom skills include the ability to attend, wait, listen, read and understand nonverbal signals from teachers and peers, and reflect on learning and mental states of self and others. Classroom participation requires flexible thinking, problem solving, and perspective-taking skills (Bowers, Huisingh, & LoGiudice, 2008; Robinson & Westby, 2009), which compel students to understand and take perspective in order to follow character development, make inferences and predictions, and create their own stories (Robinson & Westby, 2009). Students with social delays struggle with narrative writing due to a weakness in their ability to infer, predict, and organize language (Ketelaars, Jansonius, Cuperus, & Verhoeven, 2012; Rumpf, Kamp-Becker, Becker, & Kauschke, 2012; Winner, 2013). Even the mechanics of learning to read relate directly to the cognitive processes that develop concurrently with social skills (Farrar & Ashwell, 2012). The Manitoba English language curriculum document measures academic development through children's reflection of their learning experience (Manitoba Education, n.d.), with which students with attention and regulation challenges struggle. Comprehension of any lesson cannot occur without the attention and self-regulation that evolves from social development; however, successful curricular instruction requires that teachers address social language within the classroom context.

Regardless of neuro-based or social-emotional causes for social delays, the result is an increased number of students with diversified needs entering school without the social skills required to communicate successfully and learn from teachers and peers within the classroom.

Consequently, communication partners in the school setting – teachers and peers – are not prepared to respond to or assist students with social delays, especially students with social delays in absence of cognitive impairment. Recent findings from the Centers for Disease Control have shown an increased prevalence in autism spectrum disorder among students with average and above-average intelligence (Baio, 2014). The disparity in social skills may not be readily identified due to the obtuse nature of typical social skills development, and also because teachers and peers do not often recognize that social skills and intelligence are exclusive abilities (Winner, 2013). This disparity often leads to an expectation that the student should know better, but in reality if the student were able to learn and extrapolate from experience, he/she would have learned the skills and would not have a social delay. Unfortunately, students with social delays cannot easily generalize across contexts and need the support of communication partners to assist them to learn within the social context. Intervention that targets teacher and peer training is essential, as teachers and peers replace parents as the primary partners across social contexts in the school environment.

Students who are transitioning from early to middle years shift from receiving instruction from one classroom teacher to instruction from multiple teachers across environments. Socially, students are influenced less by teachers and more by peers who become increasingly consistent partners in classroom contexts. The school context and peer influence necessitate a curricular-based model that encompasses all potential communication partners as primary facilitators for social skills development in students with social delays. Peers are the most readily available support; however, they may be less tolerant when peers with social delays do not understand social rules. Students with social delays are at significant risk for victimization (Fisher, Moskowitz, & Hodapp, 2012; White, Wu, Borelli, Mayes, & Crowley, 2013), and this risk for victimization increases with students of average intelligence who appear as though they should know better, but who have missed critical learning opportunities in early development (Winner, 2012). These students requiring support are less likely to qualify for assistance, and fall through the cracks both socially and academically as a consequence of not receiving the needed support. Peers are available, but need to be educated on understanding and using strategies to support socially weak peers within classroom context. In contrast to teachers who offer limited structured interactions, peers offer students with language delays repeated consistent interactions to learn social development in context.

Indeed, studies have shown that peers can influence student attitudes toward academic goals and success (Erath, Flanagan, Bierman, & Kelly, 2010; Terry, 2008). Typical students have the cognitive and emotional processes that provide good models for socially delayed peers, and positive peer support has been shown to improve academic success in students with poor social skills (Tu, Erath, & Flanagan, 2012). Research supports treatment efficacy for social and communication development through caregiver training (Ingersoll & Wainer, 2011; Kaiser & Roberts, 2014; Vivian, Hutchins, & Prelock, 2012). There is also evidence to suggest that social training is effective in small-group instruction (Winner, 2013); however, the carry-over and generalization of skills to a naturalistic context is often slow. Students with social language delays do not easily generalize concepts from clinical to naturalistic settings, and they need assistance with extrapolating learned strategies to apply in context (Winner, 2013). The next step to effective training is to bridge the use of strategies from the clinical setting to the classroom, that is, to provide explicit instruction about what is often assumed to have been learned implicitly. Peers have the skills, the influence, and the availability to become effective facilitative partners for socially delayed students. Curricular-based social skills programming in the classroom context, which targets peers as facilitators of strategies, is a practical and effective choice when considering social skills instruction for students with social delays.

Social skills are an underappreciated but necessary precursor to ongoing social and academic learning within the school setting. Typically, social skills develop naturally through experiential learning in ongoing interactions with adults and children prior to school entry. However, differences in neurological and emotional development can affect a student's school

readiness, resulting in significant delays in social skills, and the number of students affected with these social delays appears to be on the rise. Within the classroom context, curricular expectations and assumptions of pre-requisite skills in students at school entry pose further social and academic challenges to students with social delays. Peers and teachers may not readily recognize why social delays occur, especially when students present with no delays in cognitive skills. Although students with social delays can be taught strategies, they are not likely to transfer social skills learned from a clinical session to a naturalistic context without ongoing support. As students transition from early years to middle school, peers play an influential role in supporting students with social delays, because they are the primary communicative partners to facilitate social skills strategies in the classroom context.

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Indigenous Perspectives on Formal Schooling

Alana White

Abstract

The Indigenous people of Canada have endured great hardships and injustices in the past that have greatly affected them as a people and as individuals. For about a century, the young and innocent were taken from their homes and communities and placed in residential schools. The formal educational system of the past failed many students, harmed many others, and attempted to destroy families and Indigenous language and culture. Today, formal education can be the catalyst for healing, if changes are made to curricula to infuse and include Indigenous perspectives.

The Indigenous people of Canada have suffered many assaults at the hands of government and educational leaders, with intergenerational effects that are still evident today. Possibly, the most purposely detrimental experience that the young had to endure was the residential school experience. Residential school violations to the structure of family, and of the mind, the body, and the soul were life changing and life threatening (Fontaine, 2010, p. 138). When the residential schools began to close in the 1960s, a new way to separate the young from their families reared its ugly head. The taking away of the children and placing them in foster care during the Sixties Scoop is another attack that the Indigenous people have experienced at the hands of the Canadian Government (Gray, 2013, p. 66). Because of the loss of their identity, the impacts of these acts still exist in the form of poverty and homelessness. Additionally, Canada's first people still experience many forms of racism. The current educational system and curricula may, to some extent, continue to perpetuate the disconnect between Indigenous perspectives and formal schooling.

Residential Schools

One of the darkest marks on Canadian history is the institutionalization of young Indigenous children in residential schools. The mandatory incarceration of these students into the government-sanctioned, Church-run facilities was unfair and unjust. It stunted the growth of the child as an Indigenous person by taking away the child's language, culture, and family connections. Education had always been integral to the Indigenous peoples' culture. As a child grew older, more people of the family and community would become influential in the child's learning. This learning occurred in the context of regular daily life, in the natural environment using nature, stories, song, tradition, ceremony and the seven teachings as the foundation for the child's growth and balance spiritually, emotionally, mentally and physically (Raven & Bjarnadottir, 2013). However, this epistemology was not valued by the white settlers as "education," and this differing opinion became an acceptable excuse to remove the children from their homes and communities under the guise of education, when in fact ulterior motives existed.

There did not seem to be just one purpose for the residential school system. Christensen (2013) described aggressive cultural assimilation as a key objective, and pointed out that "a parallel objective was to facilitate the displacement of Indigenous people from their land" (p. 811). She described the education that the children received at the residential schools as inadequate. A part of the teachings was to undermine the family and community by coercing the children to be ashamed of their languages and cultures. These children were also often victims of all forms of abuse and were frequently separated from their siblings and extended family by miles, which ensured that little to no communication of the atrocities could take place. The conditions and the actions endured by the Indigenous children at the schools had long-term

effects not only on those children who survived the experience, but also on future families and their relationships. It is difficult to learn how to love and communicate when the opportunity to experience them has been denied.

It is important to remember that the weapons used to assimilate the Indigenous people were used against the youngest, weakest, and least able or prepared to fight back – the children. These children had learned to trust and respect their families, community members, and Elders. They therefore placed the same trust in those who they thought would take care of them, their teachers, and instead were abused by them. The residential school experience for many children included shame, hunger, malnutrition, loneliness, fear, and hurt (Fontaine, 2010). The long-term impacts of the abusive treatment of the Indigenous children are a result of the effort "to kill the Indian in the child," as identified by Prime Minister Stephen Harper in the official apology given June 11, 2008 (as cited in The University of British Columbia, 2014, "Residential," para. 1). Unfortunately for the Indigenous people, residential schooling was not the end of the assaults on their culture or children.

The Sixties Scoop and Child and Family Services

In the 1960s, thousands of Indigenous children were once again taken from their homes and communities. This time, however, they were taken away not to be educated in a residential school, but to be given to non-Indigenous families in foster homes, supposedly for the children's own protection (Gray, 2013). This period of time in Canadian history is known as the Sixties Scoop. The child welfare system became the new instrument of assimilation for the government (Christensen, 2013). By this time, the families had endured many years of separation from their children, generation after generation, through the residential school system. Many parents had little understanding of how to be parents, because they themselves had not had their own role models to follow. The number of children apprehended, some under questionable circumstances, was staggering, and continues to be disproportionate to non-Indigenous removals today (Sinclair, 2007).

Many of the children placed in these foster or adoptive homes were once again faced with neglect, abuse or prejudice, as was the experience of the children in the residential school system. This time, however, the children had no hope of returning to their own homes, as they had when in the residential school system. The communities were once again faced with the devastation of having their young torn away from them with little to no hope of ever seeing their children again (Gray, 2013). The ulterior motive for the Indigenous transracial adoptions once again was for the assimilation of the young. The non-Indigenous adoptive parents often displayed discrimination and prejudice toward Indigenous people and therefore could not, and maybe would not, help the children to attain a sense of ethnic identity (Sinclair, 2007). Parenting is a difficult job due to the variety of skills and patience required to do it successfully. It is also a learning that is acquired over time, as children watch their parents and learn from all of the modelling that they receive over their childhood. The lack of an example of how to love, care, nurture, and teach would make the skills of parenting very difficult to attain. The children endured many forms of abuse when they were taken away from their homes and communities.

Proficiency in any skill or attitude requires learning through experience and exposure. Many Indigenous children had very little time to be with their own families while growing up, because the Indigenous people were first forcibly removed from their own homes and communities through residential schools from the late 1800s to the late 1900s, and then later in the 1960s during the Sixties Scoop. In both series of events, the children of the community were removed from their homes at a young age with little time, if any, to return to their families. This separation of child from family robbed the members of loving and learning with and from each other (Fontaine, 2010). This division would have detrimental effects on many of the young who grew up to become parents. Many survivors of the residential schools and the Sixties Scoop

found themselves not only unable to feel or be competent at raising a family, but many also had difficulty maintaining a place to call home.

Homelessness, Identity, and Poverty

Today, the Indigenous homeless have very complex stories and reasons for living in poverty and having no place to call their own, a home. Many of these stories include personal or family histories of traumatic events that caused the families to cease contact from each other and their community of origin (Christensen, 2013). Many of the Indigenous youth who were removed from their homes at an early age had difficulty finding their true identities, because their language and traditions were stolen from them. This lack of cultural identity was an assault on the individual's identity as well. Without knowing whom one is and where one comes from, it is difficult to know who and where one wants to be. Once again, the long-term impact of the removal of the young from their Indigenous families, communities, culture, language and way of life rears its ugly head. A home is not simply a building but all of the loving, sharing, and special moments and routines that are experienced within its walls, with all of the family members and culture that are integral to the sense of home (Christensen, 2013).

The children who were confined to the residential schools and subjected to the lessons taught by the nuns and priests came to believe that they were inferior to non-Indigenous people, and that they would never have the important jobs of leaders (Fontaine, 2010). This realization had tremendous negative effects on the children's confidence levels, which later created an obstacle to attaining and keeping jobs. The murder of the identity of the Indigenous young (in the residential schools) has had many effects on the education and poverty levels of the Indigenous people today (The University of British Columbia, 2014). Poverty is a cycle that is somewhat dependent on the level of education that a person has. Unfortunately, there can be many obstacles in the way of going to school when living in poverty. The need to make money is often cited as a reason for missing school, as are needing to care for siblings and conflicts with parents (Kanu, 2007). These disruptions in education make it difficult for the learners to continue participating in the educational system, and they frequently drop out. This decision will later affect the ability to earn a larger wage, and so continues the cycle of poverty. When one is told from a very young age that one has little value, it is difficult to overcome the effects of this internalized oppression.

The loss of cultural and individual identity has lifelong consequences. This loss of self invades other important aspects of a life. Taking a risk to attain a job and trying to perform well at it are difficult without a sense of self-efficacy. Without the ability to earn a decent wage, it is impossible to have a home and provide the necessities of life. Therefore, homelessness is linked to both the loss of identity and poverty in a cycle that, once in, is difficult to break. Society often is not kind to those who find themselves in this cycle of homelessness and helplessness. One of the highest poverty rates in Canada is found among Indigenous children (Kanu, 2007). Identity is important to the development of self-confidence, and when it is not developed it is difficult to move forward and work for what one wants.

Racism and Discrimination

Racism can be defined as the "poor treatment of or violence against people because of their race" ("Racism," 2014, para. 1), which may stem from "the belief that some races of people are better than others" ("Racism," 2014, para. 1). The Indigenous people of Canada have long been victims of overt and covert racism by European colonizers and other immigrants. This treatment began deep in history and continues today in many of the same ways (Neeganagwedgin, 2013). The destruction of the ways of life of the Indigenous people by the government, systems, and citizens of Canada makes it difficult for many Indigenous people to know who they are, let alone take pride in their own identities. This legacy of losing culture and

identity, in turn, results in the inability to believe in and respect oneself. This then becomes an excuse for others not to appreciate the individual or group, and often develops into an opinion of superiority endorsed by school curricula and government policies.

As the Europeans became established and learned from the Indigenous people how to live in the new land and survive the elements, the relationship began to change. These newcomers began to create a Canada that would be similar to their own country of origin, and to make these changes, new (to this land) ways of organizing needed to occur. The Indigenous people found that the land for which they had such deep reverence was beginning to be taken away in Treaty agreements that have only recently come under dispute. The spaces that individuals and groups occupy in many ways are a part of identity. When the Indigenous people were moved to Indian reserves, they lost their connection to their individual and collective history, and were forced to change (Schick, 2014). Their languages and education did not meet European standards. To change this educational issue, the *Indian Act* removed the children to residential schools, where they were taught not to speak in their mother tongue and to learn in a way not natural to them. These displaced people were given Indian reserve spaces to be (away from the growing cities), but were made homeless by the denial of all other factors that make a home a home. A relationship between different cultures that began with friendship and collaboration, changed once the newcomers became comfortable with their new surroundings.

The devastation endured by the Indigenous people from the destruction of cultural and individual identity in the past has unfortunately had detrimental impact on how these people are treated and viewed today. Many Indigenous people continue to experience discrimination due to their race. The Indigenous children continue to have issues with schooling for a variety of reasons, one still being "enduring racism by non-Indigenous students as well as some teachers" (Hare & Pidgeon, 2011, p. 94). Many Indigenous students are identified as low achievers, with poor motivation by teachers and society, as they often continue to have difficulty with the Eurocentric educational system (Neeganagwedgin, 2013). Today's educational system does not infuse Indigenous perspectives, cultures, or languages for Indigenous students to connect to. Not only would the Indigenous students benefit from this integration, but also all students would, because this is a part of Canada's history and the knowledge of the past may have the power to change opinion and understanding in the future. This omission may also be just another example of discrimination against Canada's Indigenous people, because the bilingual programs are often offered in schools that are more European in nature and "do not threaten white settler domination" (Schick, 2014, p. 93). The children must be given a chance to learn and experience success in our schools. This transformation and inclusion of Indigenous teachings may change how they view the world, how they view themselves, and how others view them.

Education Today

As the Indigenous people have experienced racism in the past, this experience continues in today's society because they are often being marginalized as they enter the educational system that includes very little of their histories, cultures, and heritages in curricula and practice (Neeganagwedgin, 2013). The teachings that were, and are, important to the Indigenous people and the way of learning that has been their way for hundreds of years are not a part of the modern classroom, and have not been since the residential school system began. As the learning needs and infusion of the Indigenous culture are not being met, neither are the students' basic needs. Many of these children live in poverty, which brings with it a slew of other issues, including hunger and absenteeism (Kanu, 2007). For schools to meet the needs of the Indigenous learner, changes in curricula, programming, policies, and funding need to occur. The school system also needs to begin to repair the damaged relationship that exists with many of the parents of these children. The time has come again for the village to raise the child. This healing can happen only if all stakeholders work together in a respectful and collaborative way.

The educational system would better serve the Indigenous students by including their culture in the school experience and decreasing the disenfranchisement that they experience today.

In many learning experiences, educators look for students to connect to the teaching in some way. The lack of infusion of Indigenous topics and practice in all subject areas makes it difficult for those learners to connect, or even want to connect, to the information (Godlewska, Moore, & Bednasek, 2010). A part of the Indigenous culture is to learn important life lessons from the Elders as well as parents and the community (Rasmussen, 2011). In the past, the land was also an important teacher for the Indigenous people. In today's schools, the learning and imparting of knowledge comes from a Western-trained teacher or, worse yet, a technological device. The system must ensure that the children feel safe and not judged when they are present at school. It must try to meet the needs of the whole child: basic, academic, and cultural (Neeganagwedgin, 2013). Many of the parents of Indigenous students are either survivors of the residential schools or suffer their intergenerational effects, and they therefore have very little trust in the school system and possibly unpleasant memories of their own childhood school experiences. Schools need to be transparent with these parents and demonstrate a true desire to serve the child and the family.

Canadian schools and curriculum developers must infuse Indigenous practice, culture, and information into the lessons, because all Canadians should understand the history of Canada and its First People. The educational system must become more sensitive and aware of the strife that many Indigenous families living in poverty experience every day. Through this sensitivity, new ideas may arise that may better suit the needs of these learners. The lack of trust in the educational system, instilled in the survivors of the residential schools by their captors, is evident in the relationships and attitudes that they have today with the system and their own children. A relationship between home and school must begin to take shape. The stakeholders must begin to understand that the Indigenous way is a different way, but it may benefit us all to learn from Indigenous teachings as well. Education is key in knowing and understanding the complexities of life. This learning does not simply happen within the four walls of a classroom, but in experiencing life itself.

Conclusion

At one time, North America, once known as Turtle Island, was the home to only Indigenous people, who had their own culture, traditions, stories, and ceremonies, which were all a part of a complex educational system (Neegan, 2005). A few hundred years ago, the demographic of the land changed and people from Europe came to inhabit this land. For a while, these people from varied origins shared the space and benefitted from the knowledge and wisdom of the Indigenous people. Then attitudes began to change toward the Indigenous people and their way of life. Eventually, these attitudes and Eurocentric ways became the common and accepted model of living and Colonization began. Residential schools and the Sixties Scoop drastically changed the educational and family practices of the Indigenous people, eventually leading to the homelessness and poverty experienced today. Racism and discrimination have changed life as the Indigenous people knew it to be, but maybe not forever. Curricula can be changed and infused with Indigenous perspectives, leading to an inclusive educational system for the future.

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Meeting the Challenges of an Inclusive Classroom

Andrew J. Collins

Abstract

The population of Manitoba classrooms has expanded to include a wide range of diverse learners. While this diversity brings with it opportunities for educators, it can also pose significant challenges. Several key components of professional practice enable teachers to promote and implement a fully inclusive classroom environment. An educator's capacities to use differentiated instruction, support emotional needs, and provide professional supports within a larger framework, are necessary for inclusion. The underlying structure in which these components exist may differ, whether labelled under Response to Intervention or Universal Design for Learning, but their commonalities define best practice.

Educators find themselves increasingly challenged by the inclusion of diverse learning populations. All students entering Manitoba classrooms bring components of diversity that go beyond ethnic, racial, linguistic, or cognitive profiles (Katz, 2012). In recent decades, a fully inclusive learning environment has placed new demands upon educators. This is occurring at a time when resources are being continuously limited and public scrutiny is increasingly prominent. In order to meet the challenges of an inclusive classroom, educators require the capacity to differentiate instruction, support emotional competency, and provide professionally competent supports.

Differentiated Instruction

Differentiated instruction can support inclusion and achieve positive outcomes in a number of ways, but there are certain common components of best practice. Regardless of the implementation methodology, key facets within the classroom environment include the use of assessment and the incorporation into a larger Response to Intervention (RTI) framework. Whether the teaching philosophy of the educator is predicated upon brain-based learning or a respect for multiple intelligences, certain elements should be found within a differentiated classroom (Sprenger, 2008). The physical layout of a classroom should incorporate elements of creativity, comfort, and safety (Sprenger, 2008). The social make-up of a classroom should support collaborative learning while ensuring that students develop independence (Heacoux, 2009). Academically, the ideal differentiated classroom incorporates effective assessment and meaningful feedback. These facets of teaching, when brought together to support inclusion, enable students to achieve positive results regardless of how the teacher interprets the need for differentiation (Levin, 2012).

Learning within the differentiated classroom should not occur in isolation, but rather within a larger RTI framework. Within the first tier of RTI, differentiated instruction accommodates a universality of programming to meet the needs of nearly all learners (Katz, 2013). This does not mean a lowering of standards, but rather an alteration in the classroom that makes learning easier for students (Sprenger, 2008). Differentiation further means an alteration in the way that teachers use supports. Resource support should not exist as a separate entity from classroom instruction, but rather should provide supports in assessing learning difficulties and delivering special programming within the classroom (Katz, 2013). Collaborative teaching practices such as co-teaching further enhance this practice. Fostering differentiated instruction requires a whole-school embracement of an inclusive environment, effective assessment, and RTI in order to be successful.

Differentiated instruction thus occurs within a larger cycle that includes teaching, learning, and assessment (Heacoux, 2009). Each element in the cycle is not isolated from the others.

The ability to base teaching on pre-assessments is a valuable component of the whole (Heacoux, 2009). Classroom profiles and data-driven decision making both have roles to play within effective differentiated instruction. This cycle within the classroom then forms a portion of the larger system, thereby supporting an inclusive classroom.

Emotional Supports

Fostering an emotionally supportive classroom requires recognizing emotional needs, building relationships, and overcoming perceived limitations of students. An inclusive environment meets the emotional needs of its learners and moves beyond the curriculum outcomes. The emotional component does not trump academics, but is a significant factor in overall student success rates (Tough, 2012). An environment that embraces diversity recognizes the inherent need for human beings to belong to a larger community and acknowledges inclusive education as a fundamental human right (Gordon, 2013). Learning does not occur in isolation from the students and their lives (Katz, 2012). A variety of factors, such as a family's socioeconomic status, predict future achievement levels before a student enters the school system (American Psychological Association, 2014). Educators are responsible for fostering an environment that supports students both academically and emotionally. The need for teachers to build a supportive and emotionally caring environment does not mean that classrooms should be free of stress or challenge. Indeed, mild competition can be a positive stressor if it serves to challenge and motivate learners (Sprenger, 2008). What is crucial within the inclusive classroom is a positive learning environment that responds to the needs of its learners beyond the academic.

Strong personal connections are the paramount factor in an environment that supports emotional health (Levin, 2012). There are direct correlations among student attendance, behaviour, success, and staff-student connections (Levin, 2012). Upon the establishment of relationships, educators can begin to influence positive traits such as learned optimism and resiliency (Tough, 2012). In a safe learning environment, student voice can begin to take shape in both a classroom and divisional capacity (Gallagher, Samtrock, Woloshyn, Di Petta, & Zopito, 2007). Building hospitable classrooms for students with emotional disabilities may be a considerable professional challenge, but one that is crucial for their success (Naraian, Ferguson, & Thompson, 2012). Educators will likewise benefit as they form connections between recognizing emotions and their professional practice (Timostsuk & Ugaste, 2012). One of the most inherently challenging and yet vital emotional components is the fostering of motivation. Without motivation, self-control and success are unlikely to develop at age appropriate levels (Tough, 2012). None of these emotional variables are possible without strong personal connections to individuals within the school setting.

Providing emotional supports and differentiated instruction while maintaining high academic standards can be overwhelming for teachers who are already stretched too thin in terms of time and resources (Thompkins & Deloney, 1995). Some educators put forward that uncertainty, caused by insufficient professional development, is a key element that is hindering inclusion practices (Van De Putte & De Schauwer, 2013). Others view inclusion as merely another fad within the educational system and are wary of simple solutions that ignore classroom challenges (Levin, 2012). For some educators, different professional development opportunities have been conflicting or have failed to meet their specific needs (Leko & Brownell, 2009). Inclusion presents challenges that can seem insurmountable, but there is a need to respond to the challenge.

Professional Capacity

Building professional capacity to support inclusive learning can occur through professional development in terms of RTI supports, data-driven decision-making, or the Three-Block Model.

Professional capacity may require all three elements. Teachers bring with them a whole host of varying experiences and teaching methodologies. Some individuals naturally lean toward a specific teaching style, while others instinctively differentiate the classroom experience (Heacoux, 2009). For a minority of educators, the sharing of open educational resources may lay the foundation for self-directed professional development (Hockings, Brett, & Terentjevs, 2012). Many will require a re-structuring of school systems, in order to create professional learning communities that base their actions on data from research (Earl & Katz, 2006). Educators require the professional capacity to analyse and use data in an informed way.

The RTI pyramid of interventions found within many professional learning communities provides a systematic "best practices" response to students. Educators can no longer rely solely upon tacit knowledge or personal preferences in deciding their professional practice (Earl & Katz, 2006). Professional growth should occur within a collaborative framework for using different supports simultaneously. Using different staff members' skill-sets requires the opening of classrooms and knowledge of systemic supports. A RTI framework that brings together these components of professional development is required to support inclusive professional practice.

Katz's (2012) Three-Block Model of Universal Design for Learning (UDL) brings together the various elements needed to address the needs of an inclusive classroom. While many of the elements of universal design exist within other frameworks, the Three-Block Model merges the components of emotional support and professional competency. The first block incorporates social-emotional supports. It introduces multiple intelligences to students and makes them aware of their learning strengths. The second block incorporates elements of differentiated instruction into other facets such as co-teaching, work centres, and thematic units. These elements occur within the first tier of an RTI framework. The third block includes changes to systemic elements of the educational system. It is within this block that responsibility for building capacity and professional development occurs. The Three-Block Model of UDL offers one potential answer to how teachers can address the needs of the inclusive classroom. Regardless of whether UDL or some other framework is used, professional capacity must develop on a system-wide scale.

Conclusion

The requirements of inclusion and a diverse student population have created a significant challenge for educators. The world has changed to a far greater degree than the classroom setting (Levin, 2012). Differentiated instruction, while hardly a new concept, is more crucial than ever in ensuring that a diverse population of students meets high academic standards. In improving daily teaching practice, educators can make the necessary changes to improve graduation rates and other measurements. Successful instruction is possible only in a safe environment that nurtures students' emotional needs because students bring a whole host of experiences, expectations, and challenges that can hinder their learning. If the classroom is to meet the needs of all students, then it requires a well-trained professional comfortable in providing an inclusive education. Teachers need the capacity to deliver programming within the constraints of the time and resources provided. Each component of differentiation, emotional support, and professional development is required in order to provide the type of education that students need.

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Providing Effective Formative Feedback

Brandi Graham

Abstract

Formative feedback is considered by many to be an effective technique for improving student performance on a variety of academic tasks. While formative feedback can be a useful teaching tool, there are specific requirements that must be met in order for it to be used effectively by students. In order to provide effective feedback, educators need to understand the characteristics of effective feedback. In addition, teachers must also understand the obstacles to providing feedback and possible solutions that can be used to enhance student learning.

Educators are constantly searching for ways to improve student performance related to course objectives or outcomes. One of the ways that teachers can help students progress in their learning is through the use of formative assessment. While there are a variety of definitions, formative assessment can be viewed as "ungraded testing used before or during instruction to aid in planning and diagnosis" (Woolfolk, Winne, & Perry, 2006, p. 538). This simple definition belies the complex nature of formative assessment and its many applications in a classroom. While there are many methods of providing formative feedback to students, educators must be cognizant of the fact that simply providing feedback is not enough to improve learning; formative feedback must meet several requirements in order to be considered effective. In order to provide effective formative feedback, educators must understand the characteristics of high-quality feedback, identify issues that prevent feedback from being used, and find ways to provide feedback that will engage students in their learning.

Characteristics of Effective Feedback

While there are varying opinions on the characteristics of effective feedback, several traits are mentioned repeatedly in research: the best formative feedback will meet the needs of each individual student, motivate the student to do well, be usable by the student, relate clearly to outcomes or criteria, and be delivered in a timely fashion (Hatziapostolou & Paraskakis, 2010; Poulos & Mahoney, 2008). In order to be effective, feedback must be tailored to the needs of each student. When individual differences are valued and students are encouraged to express their ideas, they will gain confidence and help each other learn (Clark, 2011). Acknowledging differences is important in classrooms today, where teachers encounter students with diverse backgrounds and a variety of life experiences. Effective feedback must also motivate students to improve their work. Educators must carefully consider the feelings and self-perceptions of each student before providing feedback, as these factors can have a significant effect on how feedback is perceived and used (Eva et al., 2012). Formative feedback is not helpful if a student has negative feelings related to being assessed, and students will sometimes become defensive when errors in their work are pointed out. Instructors need to provide feedback in a way that will be received positively by students. Providing personalized feedback and ensuring that feedback will motivate students to do better are closely related, since they both require educators to know students on an individual basis.

In addition to considering the needs of individual students, teachers must also provide feedback that is usable, related to outcomes, and timely (Hatziapostolou & Paraskakis, 2010; Poulos & Mahoney, 2008). Effective feedback must be usable by the learner, and enable the learner to make progress toward a desired outcome. Teachers must provide feedback that clearly explains to students how to improve their work in order to meet the criteria (Davies, 2011). Providing specific feedback to students gives them information that they can act on to improve their work and meet the identified outcomes. Additionally, effective feedback should be

clearly tied to criteria or outcomes. Students themselves will state that feedback needs to be directly related to the criteria that will be assessed for a particular assignment (Poulos & Mahony, 2008). Providing students with the criteria enables the learners to understand exactly what they need to do in order to perform well on the assigned task. Finally, feedback must be delivered in a timely manner, in order to have a significant impact on learning. If feedback is not given in time, students cannot use it effectively (Huxham, 2007). The sooner students receive feedback, the sooner they can identify errors in their learning and take steps to correct them. As a result, students can learn more efficiently. Teachers must address each characteristic of formative feedback if the feedback is to be effective and enhance student learning.

Issues and Possible Solutions

Several obstacles can prevent students from using formative feedback and learning from it: lack of personalization, lack of motivation, inability to understand the feedback, vagueness, and feedback that is provided too late. One issue that prevents students from using feedback is a lack of personalization. The best feedback is constantly changing in order to meet the needs of each learner (Clark, 2011). Each student comes to class with a unique personal experience, and these personal differences need to be acknowledged by the teacher: a "one-size-fits-all" approach to formative assessment will not be effective. In discussing the role of teachers and students, Schartel (2012) used the analogy of a coach and an athlete: in order to perform at the optimum level, the athlete needs to receive feedback from the coach and then use it to meet a desired outcome (p. 86). Approaching the student/teacher relationship in this manner is helpful because the relationship between a coach and athlete is a personal one: the coach knows the athlete's specific strengths and weaknesses, while the athlete trusts the coach to give reliable feedback that will enhance performance. In a classroom, the students will see that teachers are aware of their deficiencies and that steps can be taken to correct them by using an individualized approach. Educators must acknowledge the individual experiences and skills of their students in order to provide personalized feedback that will optimize student learning.

Another issue related to formative feedback is the fact that in some situations, students are not motivated to use feedback. When a student is given a grade and feedback on an assignment, there are instances when the student is satisfied with the mark that was given, and does not make an effort to improve the assignment (Weimer, 2014). Lack of motivation is an issue that educators deal with regularly: students will receive suggestions on how to meet the criteria for an assignment, but they do not use the comments since they feel that the mark they received is "good enough." One possible solution to this issue is to provide only comments on assignments, with no numerical grade (Denton, Madden, Roberts, & Rowe, 2008; Hepplestone, Holden, Irwin, Parkin, & Thorpe, 2011). If a grade is not provided, students are more likely to engage with the feedback provided to make the necessary changes to their work. Specific feedback is a helpful strategy when students can be given suggestions regarding how to improve individual outcomes related to a larger assignment, instead of an overall score. As students improve on the individual outcomes, the overall quality of the assignment improves. Separating feedback from grades is one effective way for educators to motivate students to use formative feedback.

While not providing grades may help students to improve their work, another problem still exists: certain types of feedback can actually de-motivate students. Some students view criticism of their work as a personal criticism, which can affect their feelings; therefore, educators must ensure that feedback is worded in a way that does not reduce student motivation (Hatziapostolou & Paraskakis, 2010). It is also important to note that students have a "psychological immune system," which means that they will protect their self-concepts by avoiding or ignoring feedback that will generate negative emotions (Eva et al., 2012). Students will sometimes take criticism of their work personally, especially in the writing assignments that are typical of an ELA classroom. As a result, teachers must be aware of the type of feedback

being provided and how the feedback might be construed by the students. The feedback must be constructive and phrased in a way that does not reduce student motivation. Understanding how students perceive feedback and their feelings about it are key factors to consider when providing commentary on how to improve assignments. Motivating students to use feedback requires educators to know their students on a personal level and provide them with criticism that will be used to improve specific assignments.

Even when teachers provide feedback that meets the needs of the students as individuals, students must use the feedback that was provided to improve their work. There are times when students are not able to use feedback because they do not understand it and therefore cannot apply it to their assignments (Sadler, 2010). Educators often make assumptions about how much background knowledge students have, and it is expected that students will understand the comments or criticism that is provided to them; however, this is often not the case. Even after providing written feedback on an assignment, it is sometimes necessary to explain the feedback in more detail to some students. An effective way to enhance student understanding of formative feedback is to provide explicit instruction on feedback practices, such as showing students exemplars and teaching students key vocabulary related to assessment (Sadler, 2010). If students are expected to write an essay, it is helpful to have a sample essay that they can refer to. It is also important that students understand the different parts of essay and the vocabulary associated with that type of writing. When students have background knowledge related to assessment and can understand the language of assessment, they are more likely to use feedback in order to improve their work.

Another advantage related to teaching students about formative assessment is that students can start to assess their own work and that of their peers. Once students understand what a high-quality assignment looks like, they can peer-assess the work of their classmates and self-assess their own work, using strategies such as reflection and checking for evidence of criteria being met (Davies, 2011; Gregory, Cameron, & Davies, 2011). When students assess their own work or that of their peers, they become more engaged in their learning since they are thinking about the work and checking it against criteria. Specifically teaching students about feedback and how to interpret it is vital to enhancing their understanding of feedback and their ability to use it in an effective manner. It also motivates students to think critically about their own work and that of their peers. Getting students involved in the assessment process encourages them to engage in a meaningful way with the feedback provided, and their understanding of feedback will improve as a result.

Ensuring that feedback is clearly related to criteria or outcomes is another critical characteristic of effective formative feedback. Developing clear criteria for assignments and providing comments related to those criteria enable an educator to provide specific instructions to students about how to improve their work. Students themselves have indicated that specific feedback is of more value to them than general comments or a high score (Liu & Lee, 2013). Students are willing to use feedback if it is specific enough to act on and they can see how changes in their work will enhance the final product. For example, if a student is developing a response to a novel and is told that a response is too vague, that individual may not understand how to improve the response. However, if a student is told to include evidence from the novel to support his/her ideas in several specific areas because one criterion of the assignment is using outside information to support an opinion, that student has a better understanding of how to improve the response. Showing students the criteria that will be assessed, and giving specific instructions about how to meet those criteria, are key steps in getting students to use feedback in order to meet specific outcomes.

Another way to show students how to meet criteria is through the use of exemplars. Model answers are one way to show students what the expectations are for a particular assignment; these answers should be developed by the teacher and demonstrate what "ideal responses" look like (Huxham, 2007, p. 603). Exemplars are suitable for assignments such as responses or other short pieces of writing. Students can model their own work after the exemplars, since the

exemplars demonstrate a high-level response. Examples of work that would receive a lower grade could also be used. Students can then look at these examples and suggest ways to improve the response so that it will meet the criteria that were established. Giving examples of work that meets specific criteria will help students to appraise their own work and think about how to improve it in order to meet the standards that have been established.

While feedback must be personalized, motivational, usable, and connected to criteria, all of these characteristics are negated if the last requirement of effective feedback is not met: feedback must be delivered in a timely manner. If students have already completed an assignment by the time formative feedback is given, they have lost the opportunity to use the feedback and make improvements to their work. One way to overcome this problem is the use of technology: when technology is used to provide feedback, the time that it takes to provide feedback can be reduced when compared to written comments on assignments (Denton et al., 2008). In an ELA classroom, there can be a significant number of assignments to evaluate in a short period of time, so any method that enables teachers to become more efficient is helpful. Technology may increase efficiency because teachers can develop feedback reports from comment banks (Denton et al., 2008). Since teachers need only to select a comment for a particular student instead of transcribing it onto assignments, the time required to provide each individual comment will be reduced. The use of technology has the potential increase the speed at which teachers can provide feedback to their students.

Conclusion

Providing effective formative feedback is a process that requires a considerable amount of work on the part of educators. Therefore, it is vital to understand the characteristics of effective feedback so that the effort put forth by instructors is worthwhile and helpful for students. While there are a number of obstacles to providing effective feedback, educators can use a variety of techniques to ensure that students are engaging with the feedback provided and using it to progress in their learning. Formatively assessing student work in an effective manner requires teachers to understand both their students and the nature of the feedback itself. Teachers must know and understand their students in terms of their skills, abilities, and emotions. Additionally, educators must recognize the characteristics of the feedback itself that makes it useful: the feedback must be understandable, related to outcomes, and delivered as promptly as possible. When all of these requirements are met, educators are able to provide students with the tools that they need to meet the outcomes for their assignments and become successful learners.

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The Significance of High-Fidelity Simulation in Nursing Education

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Abstract

High-fidelity nursing simulation is an innovative technology that has changed the delivery of post-secondary nursing education. Overwhelming research supports the use of high-fidelity simulation in nursing to demonstrate enhanced critical thinking, caring behaviours, and collaboration. Furthermore, high-fidelity simulation provides the learner with the opportunity to practise professional behaviours that are ethical, legal, and evidence-based. Therefore, high-fidelity nursing simulation is an educational initiative that supports the future best practice of health-care professionals.

High-fidelity simulation (HFS), although initially introduced in the 1930s for aviation education, has demonstrated significant efficacy in nursing education over the past decade (Bryce et al., 2009). In HFS, technology, namely realistic mannequins and computer software, create a simulated clinical experience that requires student interventions such as medication administration, oxygen therapy, and intravenous infusions. HFS has shifted educational, behavioural, and inter-professional learning strategies in nursing education. Simulation in nursing education has used innovative technology that supports critical analysis, confidence building, and collaborative practice (Jeffries, Hovanscsek, & Clochesy, 2006). Currently, more than 80% of nursing schools use HFS equipment that blends technology with nursing curricula (Knudson, 2013, p. 5). HFS provides a safe learning environment that presents an opportunity to apply theory to practice, master skills, and experience collaboration, leading to positive patient outcomes, therapeutic interventions, and effective teamwork (Kaddoura, 2010). In addition, simulation enhances caring behaviours that underpin professional nursing practice, such as attentive listening, positive connectedness, and respectful behaviours (Blum, Hickman, Parcells, & Locsin, 2010). Nursing, as a profession, embraces the use of technology that supports professional practice, client-centred practice, professional relationships, and ethical practice (College of Registered Nurses of Manitoba, 2013). Accordingly, preparing nurses for professional practice requires an investment in HFS that signifies educational, behavioural, and inter-professional strategies to reach excellence in academia, care, and collaboration.

Educational Strategies

Education in nursing endeavours to apply knowledge to practice. As such, simulation is recognized as an educational technology in nursing that supports critical thinking, decision-making, and skill mastery (Brydges, Carnahan, Rose, & Dubrowski, 2010). Jeffries et al. (2006) found that students using HFS as a blended method of learning scored significantly higher than their non-simulation counterparts. The rationale for the findings was that simulation complements learning styles, critical analysis, and behavioural components. Therefore, simulation is a modern technology that supplements curricula, and provides faculty with an innovative method to impart knowledge, skill, and expertise in practice.

Critical thinking has been deemed a vital nursing characteristic that relates to ethical, evidence-based, and knowledgeable practice (Kaddoura, 2010). Simulation provides an educational opportunity to facilitate higher level analysis of disease process, interventions, and potential outcomes. HFS elicits critical thinking because the mannequin replicates anatomy, disease symptoms, and responses based on nursing interventions (Cant & Cooper, 2010). For instance, the mannequin may report difficulty breathing and present with symptoms associated

with pulmonary embolism or pulmonary edema, therefore requiring the nurse to analyse the data critically. HFS also demonstrates positive outcomes for both participant and observer, suggesting that critical analysis occurs despite active participation (Kaplan, Abraham, & Gary, 2012). Consequently, using HFS in nursing education provides profound feedback, both observed and participative, that influences critical thinking and results in effective decision-making strategies.

Effective decision-making in nursing is a process that becomes more proficient and expert over time. Skilled nurses make decisions based on years of experience, training, and mentorship (Purling & King, 2012). Unlike their expert colleagues, novice nurses enter the profession lacking the necessary exposure to clinical situations and decision-making, presenting a major patient safety concern. In this case, educational programs that use simulation for decision-making scenarios build from simple to complex, in order to develop proficiencies and strategies that save lives. The benefit of simulation in educational programs is the ability to practise in a safe environment without compromising patient safety. Thus, gaining valuable feedback during simulation influences best practice and decision making (Cook et al., 2013).

Skill mastery may be identified as a main benefit of HFS. Experiential learning using simulation provides students with an opportunity to practise from a kinaesthetic perspective, using simulation as a way to develop hands-on experience (Bultas, Hassler, Ercole, & Rea, 2014). Determining competence, or skill mastery, is largely identified by the amount of purposeful practice (Jeffries et al., 2006). For instance, using simulation to develop skill mastery provides an opportunity to practise nursing skills, with immediate feedback from faculty, mannequins, and related simulation equipment (Cant & Cooper, 2010). This type of immediate feedback is essential in developing skill mastery because simulation technology has the ability to measure risk, harm, and potential outcomes. In this way, correct practice leads to skill mastery (Sherwin, 2012). Lastly, in a simulation scenario, the student nurse moves from a position of passive learner to active participant, while demonstrating skill mastery in a safe environment (Brydges et al., 2010).

Behavioural Strategies

Although HFS has commonly been used to enhance educational goals related to critical thinking, decision-making, and skill mastery, nursing simulation also offers an overwhelming opportunity to teach behavioural objectives such as caring, confidence, and effective nurse-patient relationships. Caring is the fundamental underpinning of the professional nurse, yet mounting nurse shortages, cost-containment, and patient acuity render the philosophy of caring vulnerable to being forgotten (Blum et al., 2010). For this reason, nursing simulation is a paramount initiative that can facilitate nursing behaviours required for future practice.

Caring behaviours represent the human element in nursing. Touch, listening, and advocacy are caring behaviours that are valued in educational programs, but are typically facilitated in clinical experiences generated between the nurse and the nursed (Blum et al., 2010). Nevertheless, HFS has shown statistically significant results in teaching caring behaviours to students (Blum et al., 2010). For instance, educators can create simulation scenarios that require students to respond to clients by using caring behaviours that demonstrate empathy, compassion, and collaboration. As a result, students have an opportunity to practise psychomotor skills and nursing knowledge in a safe environment that supports self-reflection, confidence in caring practices, and expressions of the art of nursing. Among the top caring behaviours identified through HFS, touch, attentive listening, and positive connectedness are paramount. Although nursing reflects science, the art of caring is a behavioural educational initiative that produces a humanistic response, created through technology.

Next, confidence in professional practice has also been greatly enhanced by HFS. In the past, new nursing graduates were reported to lack confidence in practice, which resulted in delayed patient care (Purling & King, 2012). In addition, anxiety and fear of reprimand presented

barriers for competent nursing practice in the novice nurse. Research has suggested that anxiety in clinical situations also reduces the synthesis of learning, as students disengaged due to fear of incompetence (Sinclair & Ferguson, 2009). Currently, HFS is used to improve confidence and self-efficacy in nursing students by engaging students in clinical scenarios that elicit confidence and critical analysis, in an attempt to overcome noted barriers (Mould, White, & Gallagher, 2011). Students value HFS experiences and appreciate the opportunity to practise critical scenarios in a safe environment. Therefore, guiding students to reach their potential includes building confidence in using HFS in academic programming.

Nurse-patient relationships may be affected by emotionally charged situations. In this case, HFS offers students an opportunity to experience a range of potential nurse-patient situations that include end-of- life care. High-stress clinical situations, including end-of-life care elicit emotional responses that may be overlooked in traditional teaching modalities (Leavy, Vanderhoff, & Ravert, 2011). As such, in simulation exercises the students experience emotionally distressing situations in a safe environment, enabling them to cope with fears, gain feedback, and process the situation (Leavy et al., 2011). Thus, HFS has shown great benefit for students to reflect on their own emotional tendencies in high-stress situations that may affect nurse-patient relationships (Moreland, Lemieux, & Myers, 2012).

Inter-Professional Collaboration

Inter-professional collaboration in nursing demonstrates client-centred care while considering the expertise of other disciplines. Simulation provides a teaching environment that facilitates inter-professional collaboration by viewing the perspectives of alternate disciplines that result in positive patient outcomes, enhanced communication, and health professional education (Reese, Jeffries, & Engum, 2010). In addition, simulation recognizes the unique attributes of each discipline that may reduce professional biases and beliefs through role-playing (Fagan, Lackie, Banfield, & Pendergast, 2010). Fagan et al. (2010) suggested that learning occurs together, thus improving understanding and complementing the professional abilities that each team member brings to client-centred care. As such, HFS facilitates inter-professional collaboration through scenario-based simulation that provides nursing with an alternate perspective, encouraging respect for other professional's knowledge, expertise, and skill base, resulting in enhanced collaborative practice.

Next, simulation facilitates inter-professional collaboration by creating a safe environment to practise communication strategies. Students have reported that simulation creates a learning environment that enhances leadership and communication skills with other disciplines (Kaddoura, 2010). Additionally, cross-training with other disciplines assists in the development of effective team work and collaboration. Alternately, simulation can be used to test inter-professional collaboration and teamwork to evaluate the methods that teams use to foster patient-centred care (Sherwin, 2012). Accordingly, HFS in nursing education encourages communication, shared decision-making, and a respectful workplace (Purling & King, 2012).

Lastly, simulation has the potential to influence industry beyond education to create partnerships that encourage community programs and services. For instance, HFS in post-secondary education can be used by hospitals, fire and rescue personnel, and community service workers. Simulation creates real-world scenarios that are applicable to health providers at large, which improves patient safety, quality of care, and efficiency in service (Howard, 2014). As such, the investment in HFS may be supported by community organizations and professional stakeholders to support continuing education in health-related fields.

Conclusion

HFS in nursing education promotes best practice. Simulation in nursing programs goes beyond current curricula in order to build the potential of future nurses, and empower the use of

technology to support critical thinking, decision-making, and skill mastery. Further, HFS supports the development of caring behaviours that influence self-efficacy, nurse-patient relationships, and competence. The art of nursing is clearly developed through simulation while recognizing that nursing blends science with humanistic perspectives. Lastly, simulation builds teams that promote client-centred care, resulting in a more efficient, collaborative, and respectful health-care environment. Therefore, HFS surpasses current teaching and learning methods, by incorporating technology to reach best practice.

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Social Skills Instruction for Students
with Emotional and Behavioural Disorders

Raisa Vallis

Abstract

Estimates suggest that nearly 475,000 children and youth attending schools in the US are diagnosed with emotional and behaviour disorders (EBDs) such as childhood depression, dysthymia, conduct disorders, oppositional defiant disorder, attention deficit/hyperactivity disorder, selective mutism, and autism. Estimates of prevalence in Canada are assumed to be equally as high, ranging from >1% to 12%, although a lack of consensus and stability in the definition of EBD across the country makes it very difficult to provide valid estimates. These deficits affect performance in fundamental areas of functioning including behaviour, social interactions, social skill fluency, and academic achievement. Remediation in social skills training (SST) is required to help students with EBD develop in their areas of weakness.

One of the major concerns in schools today is the increase in behaviour disorders. Statistics show that nearly 475,000 children and youth attending schools in the US in 2009 were diagnosed with emotional and behavioural disorders (EBDs) (Wilhite & Bullock, 2012, p. 175). Unlike the United States, Canada has no federal department of education, and no federal responsibility of education, which leaves each jurisdiction, province or territory the responsibility of developing their own individual policies and practices for students with EBD. This leads to a lack of consensus and stability in definitions for EBD across Canada and difficulty providing valid estimates or prevalence (Dworet & Maich, 2007, p. 33.) Estimated prevalence of students with EBD varies from province to province, within a large range from a "low of <1% in Ontario to a high of 12% in New Brunswick" (Dworet & Maich, 2007, p. 33). Due to such improbability, the American statistic may be presumed comparable to what one would find in Canada.

Behavioural disorders include, but are not limited to, childhood depression, dysthymia, conduct disorders, oppositional defiant disorder, attention deficit/hyperactivity disorder, selective mutism, and autism (Gresham, Cook, Crews, & Kern, 2004, p. 32). These deficits affect their performance in fundamental areas of functioning including behaviour, social interactions, social skill fluency, and academic achievement (Simpson, Peterson, & Smith, 2011, p. 230). Based on the rapid increase of behaviour disorders in our schools, the negative consequences that it has on our students, and the challenges that EBDs pose to our teachers, we need to consider the cause of this disorder, and what can be done to treat it. Effective programming requires committed and qualified professionals in order to assess the needs of students with EBD, find ways to solve their problems by helping them to develop social skills, and further enhance their academic success and overall well-being.

Causes and Effects of Emotional and Behavioural Disorders

Children with EBD often come from economically and socially disadvantaged families. Therefore, people are quick to "point the finger" and blame parents for their children's problems (Farrell, 1995, p. 3). However, there is not one single cause of emotional and behavioural difficulties. Instead, it is suggested that these problem behaviours are a result of multifaceted interactions between "contextual factors" and "aspects" brought to the situation by the individual (Farrell, 1995, p. 3). Particular emphasis is placed on the home and school environments, which have a significant influence on the social and emotional adjustment of children. If the home and school environments are both very supportive, and an EBD still exists, a third factor to consider is the "child's own genetic predisposition," that is, the possibility that the cause is largely "within

the child" (Farrell, 1995, p. 5). Pinpointing the single cause of EBD is virtually impossible, as quite often it is a result of interacting influences. Regardless of the issue surrounding what causes EBD, we must be sensitive to all factors influencing children's behaviours, and find ways to meet their needs and help them to develop more appropriate behaviours.

Current research indicates that children's future academic success, social adjustment, and overall well-being are dependent on the development of social-emotional competence (Ashdown & Bernard, 2012, p. 397; Manitoba Education, 2011, p. 35). In addition, there are well-founded beliefs suggesting that "social-emotional competence has a direct positive relationship to academic functioning" (Elliott, Malecki, & Demaray, 2001, p. 21), and some evidence suggesting that "prosocial behavior enables academic success" (Snider & Battalio, 2011, p. 10). In contrast, there is a large body of research suggesting that students with EBD lack appropriate social skills including prosocial behaviours (e.g., sharing, helping, cooperating), the "development and maintenance of satisfactory relationships" (Gresham et al., 2004, p. 32), appropriate behaviour patterns, and self-management strategies (Casey, 2012, p. 44; Gresham et al., 2004, p. 32). Students with these disorders are renowned for their difficult, demanding, and erratic behaviours (Simpson & Mundschenk, 2012, p. 2; Simpson et al., 2011, p. 230), and are often described as "rude, disruptive and obnoxious" (Snider & Battalio, 2011, p. 10). Students experiencing EBD have a higher probability of "poor interactions with teachers and peers, diminished academic performance, an increased number of disciplinary infractions," and ultimately a very high expected school dropout rate of 51% (Wilhite & Bullock, 2012, p. 176). Thus the problem arises, what can be done to help students with EBD to develop behaviours that exhibit social-emotional competence in order to achieve academic success, social adjustment, and overall well-being?

Effective Educational Programming for Students with EBD

Effective educational programming is a successful route to the "prevention and amelioration of EBD" (Simpson et al., 2011, p. 231). Learners with EBD require individualized programming based on successful strategies implemented by trained and knowledgeable professionals. However, there seems to be much debate surrounding effective methods for students with EBD. Simpson et al. (2011) reviewed many existing models that outline services and programs for learners with EBD, and from their review developed a model of their own (pp. 233-238). This model classified fundamental program components identifiable in all classrooms and individual programs for students with EBD. The fundamental program component is qualified and committed professionals. Environmental supports, behaviour management systems, social skill and social interpretation training/social interaction programs, learning and academic support methods, parent and family involvement programs, and community supports are other important components. Thus, many of the effective educational programs for students with EBD focus primarily on the social skill training component in order to develop social-emotional competence, which directly correlates with improved academic functioning.

Social Skills Instruction

Students with EBD tend to exhibit behaviours that require social skills instruction. Some people argue that children will acquire their social skills "unconsciously" and in a "non-systematic way" simply by playing together, modelling, and observing their families, siblings, peers and other adults (Avcioglu, 2012, p. 346; Dewar, 2013, para. 1), but children need more than "free time and pretense" to develop social skills (Dewar, 2013, para. 4). It is necessary for children to have exposure to typical social skills; however, simply placing children who lack social interaction skills in a setting with peers and expecting them to develop positive social skills is not feasible (Wu, Hursh, Walls, Stack, & Lin, 2012, p. 372). Even in a rich social environment, such as a safe and caring classroom wherein students can interact comfortably

with their peers, students still need direct assistance to identify and learn social skills or they will remain isolated (Manitoba Education, 2011, p. 35; Wu et al., 2012, p. 372). All high school, middle year, and elementary students, including those who possess appropriate social skills, benefit from direct instruction in social skills and positive reinforcement for their performance of appropriate social skills. Students with EBD, or at risk of developing EBD, are particularly in need of specific social skills instruction and continual coaching to help them to socially adjust, make connections with teachers and peers, and feel as though they "belong to the school and classroom community" (Manitoba Education, 2011, p. 35). If not provided with social skills instruction, students who have or are at risk of developing EBD can suffer from both long- and short-term complications in various areas of functioning including educational, psychosocial, and vocational domains (Gresham et al., 2004, p. 32).

There are various effective ways to teach social skills to learning disabled students, including those with EBD (Dagseven Emecen, 2011, p. 1414). Such effective strategies include direct instruction, problem solving, collaborative teaching, and peer tutoring. It is difficult to differentiate between strategies and recommend one approach to instruction, because most social skills programs include multiple strategies (e.g., modelling, coaching, role playing, and feedback) (Casey, 2012, p. 46). Nevertheless, for decades the direct instructional approach most recommended and used by professionals is based on a behavioural or social learning framework, primarily consisting of behavioural or emotional interventions (Casey, 2012, p. 46; Dagseven Emecen, 2011, p. 1418; van der Worp-van der Kamp, Pijl, Bijstra, & van den Bosch, 2014, p. 30). One such behavioural-social learning framework that receives a lot of attention, and which is often used by teachers as an instructional approach for their students with EBD, is social skills training (SST).

The recommendation of SST must begin with a definition of social skills. Defined through a behavioural construct, social skills are a set of competencies that enable individuals to initiate and maintain positive interactions with others, adjust to the expectations at home and in school, and manage the demands of the social environment (Avcioglu, 2012, p. 345; Casey, 2012, p. 44). Based on this definition, the evidence-based SST is highly recommended as a practice for developing social skill competencies. It can be used to increase the emotional, behavioural, social, and academic success of EBD students (Wilhite & Bullock, 2012, p. 175). Its purpose is to "develop specific skills in an individual's repertoires" and to increase effective social interactions, enabling children to interact in natural social settings (Wu et al., 2012, p. 373). The definition of social skills and SST is important to its recommendation, but equally important are the steps for implementation.

The implementation of SST follows three steps: determining the skill performance, choosing social interventions, and spending time and effort to practise the newly acquired skills. SST begins with determining the individual's skill performances and priorities (Avcioglu, 2012, p. 346). Students with EBD typically manifest social skill acquisition deficits (lack knowledge or inability to execute a social skill or determine its appropriateness), social performance deficits (failure to perform social skills in required situations even though they are capable), and fluency deficits (discomfort and inability to perform a learned skill at appropriate times) (Simpson et al., 2011, p. 237). Once the social competence deficits are identified, social interventions are carefully crafted to match the desired social outcomes, taking into consideration the severity and complexity of the behaviours being targeted for change. Common procedures used in SST to establish social-interaction skills for children include educational programs in natural settings such as playgrounds and schools, models and scaffolds such as verbal or physical prompts to engage in specific social skills, and positive reinforcement for demonstration of particular skills. The final step in the recommended SST intervention involves devoting time and effort to social skills training, and providing many opportunities for students to practise their newly acquired skills in their natural settings (Simpson et al., 2011, pp. 236-237).

There is vast research on social skills instruction for students with EBD, including a large number of meta-analyses that examine whether SST is effective for youth with EBD (Casey,

2012, p. 45). These meta-analyses reveal that SST has positive effects for children and youth with EBD or who are at risk for EBD (Casey, 2012, p. 45; Gresham et al., 2004, p. 40). In the last decade, many studies have also investigated the academic characteristics of students with EBD and instructional approaches that improved their academics (Hagaman, 2012, p. 24; van der Worp-van der Kamp et al., 2014, p. 30). These investigations argued that traditional behavioural approaches toward EBD have not always had the desired effect on academic outcomes. Therefore, recent research also recommends that instead of always focusing on behaviour prior to learning development, teachers could replace this idea with "learning instruction as the basis of the prevention, improvement and treatment of behavioral problems" (van der Worp-van der Kamp et al., 2014, p. 31). However, because the research on teaching academic subjects to students with EBD as a means to improve education results while decreasing problem behaviour is still in its infancy, there is still a strong recommendation for SST as an effective intervention for students with EBD, and a suggestion for academic intervention as an alternative method.

Conclusion

In conclusion, there currently is an ever-growing population of students with EBD in the regular classroom. These students are often rude, disruptive, obnoxious, and pose extreme difficulties to the teachers attempting to instruct them. Many students with EBD have social skill deficits severe enough to be rejected by their peers, and therefore require remediation in social skills training. It is not always easy to identify the cause of the EBD; however, professional educators have the responsibility to assess these children's needs and provide them with appropriate educational programming to help them develop in their areas of weakness. One highly recommended method for training students with EBD in social competence is SST. If this method is not effective, another suggested method to remediate social skill competencies is teaching academic subjects to students with EBD as a means to improve educational results while decreasing problem behaviours. Regardless of the method chosen, it is very important that teachers dedicate themselves to the intervention and pursue any training or knowledge necessary, and provide models for their students, opportunities for students to practise new skills, and feedback or positive reinforcement for successful use of appropriate social skills. If professional educators do their part to remediate the lack of social skills in students with EBD, perhaps in the next decade there will be a decrease, as opposed to an increase, in this challenging disorder.

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The Unique Needs of Students from Military Families

Lori Neil

Abstract

Students from military families have unique challenges. They face frequent mobility, parental deployment, and parental separation. As a result, military students confront some educational roadblocks. They may experience education gaps, and they may struggle to sustain friendships and to adapt to a new school environment. Schools and teachers have important roles in helping military students cope with these stressors. However, many military families feel that schools and teachers do not understand the unique aspects of military life. Schools can assist the children from these families to cope with their stressors by creating a positive school climate and by providing resources and programs to help military students succeed in school.

The military community, particularly children of military members, have unique challenges. Unlike their civilian counterparts, military families must face frequent mobility, deployment, and parental separation (Daigle, 2013). These areas add stress to military life, and adversely affect military children's education (De Pedro et al., 2011; Esqueda, Astoro, & De Pedro, 2012). Various studies have indicated that supportive schools can be proactive settings that help military students handle their stresses (Berg, 2008; Bradshaw, Sudhinaraset, Mmari, & Blum, 2010; Cole, 2012). Unfortunately, not all teachers are cognizant of the different needs and stresses of military students (Aronson & Perkins, 2013). Schools and teachers that partner with the military community, by encouraging school connectedness and by offering resources and specific programs, can assist students from military families to face their unique challenges.

The Challenges

Military families encounter exceptional challenges. Three of the most common are mobility, deployment, and parental separation. Military families relocate "three times as frequently as civilian families" (Daigle, 2013, "Key Findings," para.1). Military relocations are also associated with school transitions. Military children attend from six to nine schools during their K-12 school years (Berg, 2008, p. 41). In fact, these are the most stressful transitions for military children and their families. In addition, most military members will be deployed at least once during their careers. These deployments can last from six months to one year, during which families spend no time together (Daigle, 2013, "Key Findings," para. 3). Chandra, Martin, Hawkins, and Richardson (2010) concluded that the longer a parent is deployed, the stress of sustaining a healthy home life increases). Military families also experience duty-related separations. One third of military families reported that on average a military member is absent for a total of 17 weeks throughout the year due to course work or other military-related exercises (Drummet, Coleman, & Cable, 2003, p. 281). The challenges of mobility, deployment, and parental separation can be barriers to military children's academic success.

Because of the unique stressors placed on military families, military children are a vulnerable group (Aronson & Perkins, 2013). For example, frequent moves can disrupt education, and military children may experience "education gaps" (Clever & Segal, 2013, p. 28). Since school curriculum across Canada varies from province to province, military students may miss lessons or receive repetitive lessons as they move from one school to the next. Iserhagen and Bulkin (2011) examined the effects of student mobility on student achievement and teacher practice in the state of Nebraska, and they concluded that highly mobile students are at a high risk for academic failure. Frequent school transitions are also difficult for military children because they require making many adjustments. Starting and sustaining close friendships, missed opportunities for extracurricular activities, and adapting to a new school environment are

among some of the adjustments that military students make when they transition to a new school (Bradshaw et al., 2010). Thus, repeated mobility is a common stressor for military families, and it can leave some families susceptible to academic challenges.

Furthermore, parents of children with special needs find relocating to a new school an especially daunting task. School records may lag behind the move and students may not have access to the resources that they need. Some military families who live in remote locations report that it is difficult to receive the services that their special needs children require (Aronson & Perkins, 2013). One parent described her struggle with the testing process after relocation as follows: "I have a child with a learning disability and it took me two years to get him services because we moved from school to school. Everyone wanted to test him, everyone had a different theory, everyone had different ideas" (as cited in Bradshaw et al., 2010, p. 93). On the other hand, some military children are incorrectly labeled as special education students because of military-related problems, although they do not require special education accommodations (Astor, Jacobson, & Benbenishty, 2012). Military families with children requiring special education services find transitioning into a new school a challenging exercise.

Deployment is an additional stressor for students from military families. Studies have found that children do more poorly in school during parental deployments (Aronson & Perkins, 2013; Chandra et al., 2010; Cole, 2012). Children who experience parental deployment have tested substantially lower than non-military students in a range of subjects (Daigle, 2013). In addition, Daigle (2013) commented that deployment can cause children to have "behavioural, emotional and disciplinary problems" that did not emerge before deployment ("Finding Five," para. 1). For example, there are increased conflicts in peer relationships when military students' parents are deployed (Lester & Flake, 2013). Students who are coping with deployed parents may become sad and angry, which disrupts their classroom activities. Deployment also places strain on the nondeployed parents. Many nondeployed parents experience depression may therefore not be involved in their children's activities, or may not ensure that their children are completing homework (Chandra et al., 2010). Deployment is a significant stressor in military families.

Similarly, parental separation due to military members' training exercises or taskings places strain on military families. These separations are different from deployment because the military member receives less advanced notice, and the family has little time to prepare. For example, Canadian Forces members have been called to help with the Manitoba floods and the Haiti earthquakes in recent years. Time away from the family can last from a week to three months at a time. The military calls this aspect of military life the "regular irregularity" (Daigle, 2013, "Family Context," para. 8) whereby significant time away from the family is an expected requirement of military life. De Pedro et al. (2011) found that children reported the most stress during these family separations because of the uncertainty involved and the pressure placed on the other parent during these separations. Certainly, deployment and parental separation place strain on military families and present academic challenges for their children.

The Solutions

Schools can be a safe place for children, and they can help children cope with the stressors in their lives (De Pedro et al., 2011). Numerous studies have identified the importance of how a positive school climate can positively impact a student emotionally and academically (Berkowitz, De Pedro, Couture, & Benbenishty, 2014; Drummet, Coleman, & Cable, 2003; Mmari, Bradshaw, Sudhinaraset, & Blum, 2010). Mmari et al. (2010) noted that "social connectedness" or the sense of belonging with one's peers is paramount to a child's psychological health (p. 4). They also noted that schools are a strong factor related to this social connectedness. However, different studies have indicated that military families feel that their schools do not understand the military experience or the stressors unique to their families (Chandra et al., 2010; De Pedro et al., 2011). For example, only 43% of 19,861 military members gave their civilian public schools positive ratings in areas of support and academic help (De Pedro et al., 2011, p. 606).

Recent research has also indicated that teachers in civilian public schools are not sufficiently equipped to handle issues such as parental deployment and multiple school transitions (Esqueda et al., 2012). Furthermore, in a survey to parents on their children's school climate, military parents "had consistently and significantly lower assessments" (Berkowitz et al., 2014, p. 6) than non-military parents. Schools and teachers need to see their role in supporting military students to handle the stressors in their lives.

Schools can help students from military families to cope with school transitions, parental deployment, and separation, by promoting a positive school climate. In the last five years, there has been research on how schools can effectively teach and welcome military students in their schools. For instance, the Department of Education in Hawaii has implemented a model of practice called Invitational Education (IE) (Berg, 2008). IE is described as the "school's hospitality" (Berg, 2008, p. 46), whereby the teachers intentionally focus on many aspects of school life to make the schools more welcoming places. For example, a buddy program connects a new military student to another student in the school. The school has a lunch club for new students, which has been an effective strategy to transition new students into schools, since who to sit with during lunch can be a stressful situation. The Hawaiian schools also have a parent who volunteers in each school to welcome new families, and answer any questions they might have about school activities (Astor et al., 2012). Schools can provide peer tutoring to help military students if they are performing below grade level because of educational gaps. School counsellors can assist students and their families with the challenges of parental deployment. A positive school climate supports these students with school transitions, deployment, and separation, and it gives them a sense of belonging to their new school.

Resources and programs can also be approved at the federal level to help military students succeed in schools. The United States has endorsed military liaison officers who partner with military families and their schools. They educate local schools on the needs of military children, help the children transition in and out of schools, and provide parents with the resources that they need to help their children to succeed academically (National Military Family, 2014). Canada currently does not employ military liaison officers, although the success of these programs has been documented (Aronson, Caldwell & Perkins, 2011). In addition, the United States Department of Defense created the educational partnership program in 2008. This program provides public school teachers with professional development workshops to educate them on military culture and military students. They have also provided some school districts with financial support to establish new programs to assist military students (Aronson & Perkins, 2013). Certainly in Canada, the federal government should put policies and programs in place to assist military families cope with educational challenges and be successful in school.

Conclusion

Military families share unique qualities and therefore have unique needs. Military families move frequently, and they have little control over where or when they are posted, and for how long. They also deal with deployment and parental separations, which are added stressors. As a result of mobility, deployment, and parental separations, some students from military families have diverse academic setbacks. They struggle to fit in with their new peer groups, and they may feel disconnected from their new schools. Their stressors may also cause students to fall behind in some academic subjects. Teachers and schools need to be aware of the exceptional circumstances of military students, and assist them in making transitions between schools. Schools should be accommodating and welcoming places for military students.

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Video Modelling:
An Intervention for Autism

Jennifer Wahoski

Abstract

Video modelling (VM) is an effective intervention used to teach target skills to students with autism. This type of intervention involves videotaping a target skill, which is modelled by self, peer, or adult in an environment similar to the environment in which the target skills is required. Video-self modelling, point-of-view modelling, and video prompting are three types of VM strategies currently being used as educational tools. Numerous research studies outline several benefits and advantages to using VM as an intervention within an educational setting.

Video Modelling (VM) is an evidence-based intervention that promotes the development of target skills – modelled by either self, peer, or an adult – presented through a video medium; this strategy is often implemented to assist students with autism in acquiring new skills. VM is used to target skills comprised of the following four domains: language, social behaviours, play-skills, and functional adaptive skills (Acar & Diken, 2012; Corbett & Abdullah, 2005; Marcus & Wilder, 2009). Three types of VM strategies include video-self modelling, point-of-view modelling, and video prompting. There are a number of benefits and advantages to using VM as an educational tool, more specifically the advantage of using a video model in place of an in-vivo (live) model. When implementing a VM intervention, it is important to identify each student's strengths before designing the VM intervention. Overall, VM is an effective strategy to facilitate students with autism in acquiring new skills.

Background

The idea of modelling as an intervention strategy was first introduced by Albert Bandura 40 years ago (Schmidt & Bonds-Raacke, 2013). Modelling is defined as an individual observing another person engaging in a target behaviour, which is subsequently imitated by the observer (Charlop-Christy, Le, & Freeman, 2000). Observational learning is learning that takes place by watching a model complete a task. Modelling has a tremendous effect on children because they will often imitate behaviours without reinforcement and they will then generalize these behaviours within different settings (Schmidt & Bonds-Raacke, 2013). The behaviour that is being modelled can be introduced in-vivo or by means of a video (Corbett & Abdullah, 2005).

Autism and Video Modelling Intervention

Of the many characteristics that describe autism, the following four are the most common characteristics that require educational support: language, social interaction, play skills, and functional skills (Brook, 2009; Corbett & Abdullah, 2005). Research supports the use of VM as an intervention strategy to facilitate the development of language, social interaction, play skills, and functional skills in children with autism. For example, three children with autism were successful in developing sociodramatic play skills by means of the VM intervention used in Ozen, Batu & Birkan's (2012) study. Individuals with autism process information better when it is presented in a visual format rather than an auditory format (Smith, Ayres, Mechling, & Smith, 2013). Visual representations do not impose social attention such as face-to-face interactions (Corbett, 2003; Corbett & Adbullah, 2005). Therefore, the presence of visually cued information makes VM an ideal medium for students with autism to learn new skills. Echolalia and excellent memory are both traits of a typical autistic student; VM is an excellent intervention because these characteristics promote exact replication of instruction (Brook, 2009). Thus, the presence

of visual stimuli in VM promotes students with autism to acquire skills in communication, social interaction, play skills, and functional skills.

VM is only one facet of the overall modelling paradigm; it is simply a technological extension of in-vivo modelling, wherein the model no longer needs to be in the same physical space as the observer. Both VM and in-vivo modelling are effective in acquiring new skills (Charlop-Christy et al., 2000). However, in-vivo modelling requires the model to be present during each intervention session (Lee, Anderson, & Moore, 2014). In fact, the cost for an in-vivo modelling intervention is greater than the cost of video modelling, because of the extra time and resources needed for the in-vivo modelling condition (Charlop-Christy et al., 2000). Additionally, VM is more effective because skills modelled in VM are formatted and presented in a standardized way, whereas with in-vivo the model might not present the target skill in the same way each time (Marcus & Wilder, 2009). Students with autism acquire and generalize skills quicker with VM than with in-vivo modelling (Charlop-Christy et al., 2000). Therefore, video modelling is superior to in-vivo modelling as an intervention for students with autism.

VM is an effective method for teaching various target skills to students with autism. VM involves a student watching a video recording of a model highlighting a target behaviour in a clear and concise manner (Lee et al., 2014). This method of intervention enables students to recognize both the target skill and the steps need to imitate this skill. Implementing a VM intervention involves the following 6 steps: (1) define the target behaviour, (2) construct a task analysis of the target behaviour, (3) determine the ideal location of the camera to ensure that the target behaviour is captured, (4) demonstrate the target behaviour with the videotaping model at a slow place, (5) monitor the student's reaction to VM, and (6) plan ahead (Brook, 2009; Wilson, 2013). Target skills can be presented to students through the use of TVs, video games, computer programs, and hand-held devices such as iPads (Mechling & Gustafson, 2009; Smith et al., 2013). The use of iPads within the classroom is perceived a leisure activity, therefore motivating students to participate more readily within the classroom. VM is an effective intervention that promotes students to use technology to acquire new target skills. Technologies are rapidly changing and becoming more pervasive within the educational system, enabling educators to use mobile devices to produce VM opportunities for students with autism.

Types of Video Modelling

Three types of VM strategies include video-self modelling, point-of-view modelling, and video prompting. Video-self modelling (VSM) involves filming the target skill being modelled by the target individual (Corbett & Abdullah, 2005); whereas VM involves a peer or adult modelling the target skill. During filming for VSM, the individual is provided prompts to assist in completing the target skill. Later, the segments that contain the prompts are removed to display the student performing the skill at a mastery level (Gelbar, Anderson, McCarthy, & Buggy, 2012). The main advantage of using VSM is that the individual enjoys seeing him/herself successfully perform a skill that he/she would normally do not perform, which motivates and encourages him/her to practise the target skills (Brook, 2009). Research studies have compared the effectiveness of using self-modelling to either peer or adult modelling, resulting in each method being equally effective (Cihak & Schrader, 2009). However, in one study children requested the use of VSM over VM because they enjoyed seeing themselves on the screen (Marcus & Wilder, 2009). Therefore, it is important to ascertain each individual's preferences before determining which type of VM intervention to implement.

Point-of-view modelling (POVM) involves focusing on the target skill from the perspective of the target individual. More specifically, the video presents the target skill as if the observer were completing the skill him/herself (Shrestha, Anderson, & Moore, 2013). The video for POVM can be filmed with either the model or the target individual performing the task. A blend of VSM with POVM shows promise; one research study reported students displaying independence while completing the target skill (Gelbar et al., 2012). POVM

Video prompting (VP) is a type of VM that involves videotaping a multistep target skill, with each distinct step recorded separately. During intervention, the video is paused after each step, giving the observer the chance to attempt one step at a time (Shrestha et al., 2013). One disadvantage to using VP as an intervention is that students can become dependent on the prompts presented; they may be unable to generalize the skills learned into new environments. It is important to fade the prompts during a VP intervention, in order to avoid prompt dependence. VSM, POVM, and VP are popular types of VM, with each one taking advantage of using video as a medium to model target skills to children with autism.

Advantages and Disadvantages of Using Video Modelling

The delivery of visual supports through the use of technology creates advantageous educational opportunities for students with disabilities (Acar & Diken, 2012). The following are advantages of using VM within an educational setting: it is both a time-efficient and cost-effective intervention, potential for systematic repetition, presence of a variety of examples, use of models in more than one intervention, and flexibility of video editing (Corbett, 2003; Mechling & Gustafson, 2009). The development of videos used in VM is both cost and time effective because models need to be present only once during the filming of the target skill. Once videos are created, they can be presented countless times to a specific student until he/she establishes the target skill. Videos can also be reused in different interventions, provided the target skills presented within the video are the desired skills to be established in each intervention. Also, a model can film more than one example during a videotaping session to promote generalization of the target skill. Zoom features of video cameras allow the recorder to zoom in on key aspects of the model, which removes any distracting visual stimuli. Similarity, editing features within video programs enable the creator to accentuate certain features and remove any distracting features, which prevents stimulus over selectivity (LeBlanc et al., 2003). These advantages are reasons for technologies becoming a popular method for educators to use as an intervention strategy within their classrooms.

In addition, VM offers numerous benefits when it is used as an intervention strategy. First, VM provides the opportunity for students to watch the desired target skill being performed in the exact setting in which they are required to imitate the skill (Ayres & Langone, 2008). Modelling the target skill in the same setting increases the likelihood that students will be successful in attaining the target skill. Second, using VM increases the motivation of students and acts as a naturally reinforcing method of skill acquisition (Acar & Diken, 2012). Since motivation increases the desire to practise a skill, target behaviours are often rapidly achieved compared to other interventions. Third, VM offers the opportunity for educators to slowly remove the presence of the videos to promote independence in maintaining the desired target skill. Students only acquire and maintain target skills, but they learn to generalize these skills within other environments (Akmanoglu, Yanaradag, & Batu, 2014). By means of VM, students observe targets skills in required environments, gain motivations through the use of an appealing method of delivery, and gain independence by fading the presence of the video.

In contrast, there are potential problems in using VM as an intervention strategy for children with autism. More specifically, students with autism depend greatly on a structured learning environment, which promotes observational learning; however, providing frequent predictable demands can lead to rote responses or a lack of spontaneity in new situations (Corbett, 2003). Similarly, studies analysing role-playing skills suggest that these skills are difficult to maintain because situations are often unpredictable (Akmanoglu et al., 2014). VM is unsuitable for teaching sensitive target skills, such as personal self-care skills, because certain aspects of the target behaviour cannot be modelled (Lee, et al., 2014). Therefore, VM might not always be the most appropriate intervention to teach particular skills to students with autism. However, the advantages and benefits of using VM outweigh its disadvantages as an intervention to help students with autism acquire new target skills.

Video Modelling in Practice

VSM, POVM, and VP are three types of VM interventions that have been highlighted within recent research. VSM has been used to teach students with autism functional academic skills within the classroom. For example, four children with autism were successful in developing functional math skills by means of the VSM intervention used in Burton, Anderson, Prater, and Dyche's (2013) study. Similarly, two children with autism were successful in developing on-task behaviour within the classroom by means of the VSM intervention used in Schmidt and Bonds-Raacke's (2013) study. Results of these studies provide convincing evidence that VSM can be an effective method used to deliver educational content to students with disabilities.

POVM involves video taping the target skills from the perspective of the target individual. The following two research studies are examples of how POVM was used as an intervention: a four-year old boy with autism was taught how to prepare and eat an afternoon snack independently by means of the POVM intervention used in Shrestha, Anderson, and Moore's (2013) study; and two children with autism were taught toy-play skills through POVM in Hine and Wolery's (2006) study. Further research is needed, in order to expand the empirical evidence of the effectiveness of using POVM within a variety of educational settings.

The success using VP to teach multistep target skills has been demonstrated in several studies. For example, six students with autism were successful in developing cooking-related tasks by means of the VP intervention used in Mechling and Gustafson's (2009) study. Likewise, six students with autism were successful in developing skills associated with setting a table by means of the VP intervention used in Cannella-Malone et al.'s (2006) study. Therefore, VP is an excellent intervention for teaching students multistep self-help skills. VSM, POVM, and VP are examples of VM interventions used to teach target skills to students with autism.

Conclusion

As an evidence-based intervention, VM is effective in assisting students with autism in acquiring target skills in one of the four following domains: language, social behaviours, play-skills, and functional adaptive skills. VM interventions include VSM, POVM, and VP, each of which is a natural extension of in-vivo modelling. The efficacy of the discussed VM methods is evidenced by numerous research studies. As technology advances, modelling will expand into novel territories just as in-vivo modelling has expanded to include a wide variety of video-based techniques.

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About the Author

Jennifer Wahoski is currently enrolled in the Master of Education program in special education at Brandon University. She has a passion for employing new technologies into her special education classroom. She is an avid traveler and has experience teaching in Ghana and Thailand.

CELEBRATION OF SCHOLARSHIP

We are honoured to recognize the following students who defended M.Ed. theses in 2014.

Anu Lounatyuori   May 7, 2014   Thesis Adviser: Dr. Cam Symons

A Comparative Analysis of the 12-Step Program and Yoga in the Treatment of Addictions

The 12-step program developed by Alcoholics Anonymous (AA) has been widely adopted and used within addiction treatment services in the United States. Patients are referred to Alcoholics Anonymous by their physicians, and people are required by the courts to attend AA meetings. This study critically examined elements of the 12-step program model such as the disease concept of addiction, the notion of addict powerlessness, the emphasis upon spirituality as a necessary part of healing, the proscription on the use of medication in treatment, and the validity of research into the effectiveness of 12-step programs. This study will explored other treatment options and the potential efficacy of a yoga-based model as an alternative approach to the treatment of addictions. Although research on yoga in relation to addiction treatment is very limited, there have been supportive findings for yoga in the treatment of various psychiatric disorders that often co-occur with substance use disorders. Yoga's beneficial effects on mood regulation, stress reduction, inhibition dysfunction, and cognitive control also suggest that further investigation of yoga as an alternative approach to the treatment of addictions is warranted.

Jennifer Flight   October 3, 2014   Thesis Adviser: Dr. Irene Huggins

Supporting English as an Additional Language Learners in Reading Recovery

Research suggests there are challenges when supporting English as additional language (EAL) learners. However, little research is available on effective strategies for teaching young children to speak, read, and write while also learning English in Reading Recovery. This study collected and examined five Reading Recovery Teacher Leaders' reflections on effective strategies for developing oral language, reading, and writing with EAL children in the Reading Recovery setting. The research questions were as follows: (1) What specific strategies do Reading Recovery Teacher Leaders find effective within the lessons to develop oral language with EAL learners? (2) What specific strategies do Reading Recovery Teacher Leaders find to be effective for literacy development (reading and writing) with EAL learners? Through analysis, recommendations for teachers were compiled: monitor the child's oral language, monitor your own use of language, value the child's first language, consider home/school connections, develop oral language, celebrate written stories, and emphasize the importance of meaning.