

BU Journal of Graduate Studies in Education

Volume 4, Issue 1, 2012



Brandon University, circa 1925

Title: Students lying in grass

Date: pre-1945

Item No.: V.I.15

Collection: Brandon University photograph collection



**BRANDON
UNIVERSITY**

Founded 1899

CENTRE FOR



ABORIGINAL AND RURAL EDUCATION STUDIES



BU Journal of Graduate Studies in Education

Volume 4, Issue 1, 2012

(also available online from www.brandonu.ca)

Editor

Dr. Marion Terry
Professor, Faculty of Education, Brandon University

Editorial Committee

Dr. Amjad Malik
Assistant Professor, Faculty of Education, Brandon University
Ms Sherry Peden
Assistant Professor, Faculty of Education, Brandon University
Dr. Karen Rempel
BU CARES Coordinator, Faculty of Education, Brandon University
Dr. Lynn Whidden
Professor, Faculty of Education, Brandon University

Reviewers

Mr. Chris Brown
Assistant Professor, Faculty of Education, Brandon University
Dr. Glenn Cockerline
Assistant Professor, Faculty of Education, Brandon University
Dr. Jacqueline Kirk
Assistant Professor, Faculty of Education, Brandon University
Dr. Amjad Malik
Assistant Professor, faculty of Education, Brandon University
Dr. Arnold Novak
Chair, Department of Graduate Studies and Field Research,
Faculty of Education, Brandon University
Dr. Alexa Okrainec
Associate Professor, Faculty of Education, Brandon University
Dr. Sherry Peden
Assistant Professor, Faculty of Education, Brandon University
Dr. Karen Rempel
BU CARES Coordinator, Faculty of Education, Brandon University
Dr. Lynn Whidden
Professor, Faculty of Education, Brandon University

Cover Photograph

Photo courtesy of the S.J. McKee Archives (Brandon University)
Brandon, Manitoba

The *BU Journal of Graduate Studies in Education* is a publication of Brandon University's Centre for Aboriginal and Rural Education Studies (BU CARES).

INTRODUCTION BY THE EDITOR

Marion Terry, Ph.D.

Welcome to the seventh issue of the *BU Journal of Graduate Studies in Education*, devoted to rural, northern, and Aboriginal education. Our authors for volume 4, 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 exemplify best practices in education.

- Maryanne Manning's research report summarizes the recommendations that arose from her study of bullying prevention in two rural Manitoba schools.
- Jocelyn Kehler's refereed article recommends nonverbal action-based expressive therapies as a means to help maltreated children from all cultures.
- Crystal Barber's refereed article recommends music therapy as a preferred tool for offering group counselling in schools.
- Nicole Lehmann's refereed article offers suggestions for working with deaf and hard-of-hearing students in an inclusive classroom setting.
- Jan Jebsen's refereed article expresses concern for self-harming as a problem that continues to be underestimated despite evidence of its escalation.
- Lilianne Colter's refereed article discusses strength-based programming and instructional strategies to assist students with autism spectrum disorder.
- Jennifer Flight's refereed article recommends Reading Recovery to facilitate accelerated language acquisition by ELL students in multicultural settings.
- David Schroeder's refereed article explores the use of graphic calculators as an essential tool to infuse technology into mathematics instruction.
- Ann Barbour-Stevenson's refereed article compares English and math standardized test results for Manitoban, Canadian, and international students.
- Erin Cummings' refereed article identifies the strategic leadership principles that should define the Manitoba Emergency Services College's change process.
- Clark Gawletz's opinion paper explores the relative advantages of using the Ning social network as an alternative to the Moodle learning management system.

New to this issue of the journal is our "Celebration of Scholarship," to honour graduate students who have completed their M.Ed. degrees with projects and theses.

TABLE OF CONTENTS

	page
Research Report	
Examining Bullying in Rural Manitoba Schools that Implement Positive Behaviour Support Maryanne Manning	4
Refereed Articles	
Expressive Therapy: Best Therapeutic Method for Counselling Maltreated Children Jocelyn Kehler	7
Guidance Programs in Schools: A Shift to Group Music Therapy Crystal Barber	16
The Inclusion of Deaf and Hard-of-Hearing Students Nicole Lehmann	20
Literacy Rates in Manitoba Ann Barbour-Stevenson	25
Self-Harm: The Lack of Understanding Jan Jebesen	31
Strength-based Programming and Strategies for Autism Lilianne Colter	35
Supporting English Language Learners with Reading Recovery Jennifer Flight	41
Technology in Mathematics David Schroeder	45
The Way Forward: Strategic Leadership for the Manitoba Emergency Services College Instructor Network Erin Cummings	49
Opinion Paper	
Using a Ning Social Network Site as an Alternative to Moodle: Thinking Outside the Learning Management System Clark Gawletz	53
Celebration of Scholarship	56
Call for Papers	60

RESEARCH REPORT

Examining Bullying in Rural Manitoba Schools that Implement Positive Behaviour Support

Maryanne Manning

In response to her rural Manitoba community's desire for positive change in its 7-12 and K-6 schools, the researcher initiated this mixed methods, action research study in the fall of 2008. Research in the two school sites extended over three years, in order to answer the following research questions:

1. Can the School-Wide Positive Behavior Support model be implemented with fidelity in two rural Manitoba schools, one of which is a secondary school?
2. When evaluated, will the adapted version of the Focus on Bullying (British Columbia Ministry of Education, 1998) prevention program, implemented as a primary intervention in the School-Wide Positive Behavior Support model, prove to be effective in reducing the number of students involved in bullying incidents in two rural Manitoba schools?
3. How will five students, each identified as being involved in school bullying, be affected when the schools adopt an adapted version of the Focus on Bullying (British Columbia Ministry of Education, 1998) prevention program as one of the primary interventions in the School-Wide Positive Behavior Support model?

Quantitative SET scores and questionnaires answered the first two questions. Both schools increased the degree of fidelity with which they implemented SW-PBS in the second year as compared to the first. As well, the number of sample students who self-identified as having been involved in bullying incidents decreased in the second year of the bullying prevention program as compared to the first year.

Qualitative interviews, expressive artwork, and parent comments answered the third question. While some students appeared to exhibit more empathy toward the plight of their fellow students, this was not true of all of the participants. There was a wide range of ideas regarding the students' and parents' views with regard to the social responsibility of bystanders. Finally, the students offered insight into some of the more puzzling quantitative results.

Based on her findings, and from her perspective as the SW-PBS coach and facilitator for the two school sites, the researcher made the following recommendations for schools that are considering implementing SW-PBS and/or bullying prevention programs.

Recommendations Pertaining to SW-PBS

- Obtain an 80% buy-in from staff members (as has been suggested by most researchers) prior to implementation.
- Possible outcomes such as fewer suspensions, higher attendance rates, and better academic achievement can be presented as incentives for adopting SW-PBS. Therefore, a streamlined method for recording, comparing, and presenting these data should be in place.

- At high school levels, some groundwork may be required to assist staff members in shifting paradigms in the way they think about discipline. To some individuals, a system that relies on a continuum of supports, based on restitution practices rather than punitive strategies, may seem to be a novel approach.
- Discussion should be initiated early on, between staff members and students, particularly in high school sites, with regard to an appropriate system for rewarding students' compliance with behavioural expectations.
- Remember to include support staff members in the training process.
- If possible, locate a facilitator or send a staff member for training so that the school can subscribe to the SWIS system for a year prior to SW-PBS; this would ensure that accurate baseline data could be collected.
- Do not underestimate the importance of establishing a strong school leadership team as prescribed by proponents of SW-PBS.
- Use ODR data as one method of identifying externalizing students for secondary and tertiary interventions.
- Determine methods other than ODR data for identifying internalizing students for secondary and tertiary interventions.
- Use the BAT to self-assess the implementation status of secondary and tertiary interventions.

Recommendations Pertaining to Bullying Prevention Programs

- Seek out and encourage parental involvement and input at every level of the process. Develop methods to communicate openly and frequently with families who are not directly involved in the planning and practices.
- Fashion effective and efficient techniques for measuring treatment integrity of the program chosen or designed.
- Diligently record ODRs that specifically relate to bullying behaviour. Include the frequencies of these ODRs as one of the sources of data used in order to measure the success of the prevention program.
- Instructional strategies should include (a) well-supervised peer teaching, (b) classroom dialogue that exposes the shallow nature of social hierarchies within the school, (c) open conversation about ways to change these social structures, and (d) specific systems for supporting students who demonstrate courage by making efforts toward enacting such changes.
- All staff members need to be cognizant about how rapidly group processes can shift in a classroom.
- Counsellors should consider long-term memory retrieval processes when designing interventions for students who have been involved in any bullying role.

- In order to ensure that appropriate interventions are put in place, schools need to choose programs that are based upon Olweus' definition of school bullying.
- Certain aspects of the Bullying Prevention in Positive Behavior Support (BP-PBS) programs (Ross, Horner, & Stiller, n.d.a; Ross, Horner, & Stiller, n.d.b), such as the idea of using signaling, could be incorporated into a bullying prevention program such as the Focus on Bullying (British Columbia Ministry of Education, 1998) that is founded on Olweus' definition.
- Prior to implementing any bullying prevention program, school teams need to determine its social validity. This can be accomplished through using the Primary Intervention Rating Scale developed by Lane et al. (2009).
- Dosage plays a role in the effectiveness of bullying prevention programs. School teams should consider duration (the number of days over which programs will extend) and intensity (the number of hours that will be contributed toward training students and staff members) in their planning processes.

Concluding Remarks

The researcher's motivation for embarking on this study originated with her desire to endorse her rural Manitoba school community members' commitment toward enacting positive climatic changes in their two schools. It is her hope that other groups will reap benefits from her research as well. She invites Canadian educators, especially those in rural areas and in high school settings, to investigate the potential benefits for adopting the SW-PBS model. Bullying prevention programs are sorely needed and will become, the researcher anticipates, increasingly common in our schools. She trusts that her schools' experiences can guide other learning communities in their efforts.

About the Author

Maryanne Manning, M.Ed., 2012 BU graduate, has been privileged to serve Manitou Elementary and Nellie McClung Collegiate students as their guidance counsellor for 13 years. Upon retirement, she and her husband will operate a Bed & Breakfast and she will provide private counselling from the family cottage at Pelican Lake, MB.

REFEREED ARTICLES

Expressive Therapy: Best Therapeutic Method for Counselling Maltreated Children

Jocelyn Kehler

Abstract

Child maltreatment leads to a variety of negative consequences that greatly affect its victims. In turn, these consequences interfere with these children's ability to function and learn at school. When working with maltreated children, counsellors must use effective and developmentally appropriate strategies. The nonverbal action-based counselling techniques employed by expressive therapies afford counsellors with the best therapeutic methods for treating maltreated children. Expressive therapies use developmentally appropriate, non-threatening creative/action-oriented methods that foster nonverbal emotional exploration and expression. These methods can be integrated with traditional theoretical approaches and are respectful of the ethnic, cultural, and social class diversity of maltreated children.

It is a sad and troubling reality that within every teacher's classroom, there are children who are victims of maltreatment. Child maltreatment, also more commonly referred to as child abuse, manifests as physical abuse, sexual abuse, verbal abuse, emotional abuse, and neglect. The trauma suffered from child maltreatment leads to negative physical, psychological, cognitive, behavioural, emotional, and social consequences. These negative consequences can also interfere greatly with maltreated children's abilities to function and learn at school, because they contribute to behaviours that lead to poor academic performance, lower grades, and having to repeat grades (Currie & Spatz Widom, 2010; Gamache Martin, DeMarni Cromer, & Freyd, 2010). Teachers are often the first people to identify and seek help for these children; often, these children are referred for counselling, in order to help them cope and deal with the traumatic effects and negative outcomes. Therefore, it is imperative that counsellors who work with maltreated children employ effective and developmentally appropriate techniques.

When working with maltreated children, counsellors draw from a variety of theoretical approaches. These approaches can range from traditional to more contemporary therapies; however, most of these therapies are predominantly talk-based. Neuroscientific evidence now suggests that these talk-based therapies may not be as effective as the nonverbal action-based counselling techniques known as expressive therapies.

Expressive therapies refer to the spectrum of therapeutic action-based therapies that use creative and artistic methods, as mediums for exploration and expression of thoughts and emotions (Kahn, 1999; Tobin, 2007). The nonverbal action-based mediums of expression that are used in expressive therapy makes this counselling approach much less threatening than traditional approaches that rely solely on verbal disclosure. Expressive therapies also provide developmentally appropriate methods, which can help maltreated children to achieve developmental tasks that were delayed as a result of abuse (Kahn, 1999). In addition, expressive therapies are adaptable for use with several different theoretical approaches including cognitive-behavioural therapies, cognitive therapies, behavioural therapies, client-centered therapies, and solution-focused therapies (Kahn, 1999; Tobin, 2007). The techniques used in expressive therapies can also be used with children from a diversity of ethnic, cultural, and social class backgrounds.

Expressive therapies thus offer the best therapeutic methods for counselling maltreated children, because they rely on developmentally appropriate, non-threatening creative/action-oriented methods that encourage nonverbal emotional exploration and expression. In addition to

these factors, expressive therapies can be integrated with many traditional theoretical counselling approaches and have applications that respect the ethnic, cultural, and social class diversity of these children.

Consequences of Maltreatment

The negative consequences of maltreatment are numerous and affect every area of a child's life. According to the Department of Justice (2009), "Abuse is behaviour used to intimidate, isolate, dominate, or control another person. It may be a pattern of behaviour or it may be a single incident. Abusive behaviour might involve acts or words or even neglect" (p. 1). Child maltreatment can take the form of physical abuse, sexual abuse, psychological abuse, financial abuse, verbal abuse, emotional abuse, emotional neglect, and even bullying at school.

The extent to which maltreatment produces milder or more serious consequences depends on the age of the child, the frequency of the abuse, whether there were multiple abuses, and over how long a period of time the abuse occurred (Barnett, Miller, & Perrin, 2005; Cozolino, 2002). The negative effects of child maltreatment are wide ranging and include physical injuries, poor mental health, psychiatric disorders, behavioural problems, interpersonal problems, and dysfunctional attachment (Currie & Spatz Widom, 2010). Maltreated children can appear withdrawn and depressed, and can also suffer from low self-esteem, anxiety, dissociative disorders, eating disorders, impatience, impulsivity, overactivity, and self-harming behaviours (Ford, 2005; Gamache Martin et al., 2010).

Children who have been maltreated not only suffer from the immediate physical injuries, emotional stresses, and psychological trauma of the abuse, but are also at higher risk of long term effects (Barnett et al., 2005; Jones, 2002). These long term effects include post-traumatic stress disorder (PTSD), psychological problems, physical health problems and diseases, behavioural, emotional and interpersonal problems, financial difficulties, as well as an increased risk of addictions and suicide (Draper, Pfaff, Pirkis, Snowdon, Lautenschlager, Wilson, & Almeida, 2008). As one can see, a child's life is deeply affected by the negative consequences of maltreatment.

Academically, maltreatment can greatly interfere with children's ability to function and learn at school (Currie & Spatz Widom, 2010). Negative consequences that have been associated with child maltreatment and that interfere with the child's academic performance include poor concentration, Attention Deficit Disorder, Attention Deficit Hyperactivity Disorder, disruptive classroom behaviours, aggression, violence, criminal behaviour, and anti-social behaviour (Creeden, 2009; Eckenrode, Laird, & Doris, 1993; Gamache Martin et al., 2010). In addition, maltreated children experience an "increased risk of lower levels of educational achievement and intellectual performance as well as higher rates of truancy, school expulsion, and grade retention and repetition" (Currie & Spatz Widom, 2010). Another important academic consequence that maltreated children have displayed is deficiencies in their language development (Eckenrode et al., 1993). This particular deficiency is important to note, because most traditional theoretical approaches that counsellors employ rely on verbal communication. These language deficiencies must be taken into consideration, when planning counselling strategies to be implemented with maltreated children. Thus, the traumatic effects of maltreatment create negative implications for the educational achievement of these maltreated children, which in turn can have long term effects into adulthood.

Through brain imaging studies, researchers have become increasingly aware of the damaging effects that maltreatment has on the developing brain and the ways in which trauma memories are stored in the brain (Klorer, 2005; Perry & Szalavitz, 2006). Therefore, in order to understand why expressive therapies are the best therapeutic method for counselling maltreated children, it is important to understand how the right and left hemispheres of the brain work and how they are affected by the trauma of maltreatment. Each brain hemisphere has its own unique characteristics and is responsible for particular functions (Creeden, 2009). The

functions of the right brain hemisphere are dominant in early childhood, especially between birth and three years; they are responsible for processing visual spatial information, imagery, and nonverbal emotional communication (Creeden, 2009; Klorer, 2005). For this reason, the right side of the brain has been described as the preverbal or nonverbal hemisphere (Klorer, 2005, p. 216). The functions of the left hemisphere are usually dominant in later adolescent years and into adulthood; these functions are concerned with language, analytical thinking, and sequential thinking. The left hemisphere is responsible for processing words, verbal communication, and numbers (Creeden, 2009). The right brain hemisphere is where negative and pessimistic emotions are processed, whereas the left brain hemisphere processes positive emotions. In developmentally healthy brains, the left and right hemispheres work cooperatively to process and integrate the experiences of every day life.

Neural imaging studies comparing the brains of abused children with non-abused children have revealed adverse brain development in maltreated children, which researchers believe is attributable to the stress of their traumatic experiences (Creeden, 2009; Klorer, 2005). In children who had not experienced repeated early childhood maltreatment, the left hemispheric cortex showed greater development than the right. There was also evidence of hemispheric differentiation and good neural integration between both brain hemispheres (Creeden, 2009). In contrast, neural images of maltreated children's brains revealed greater development of the right brain hemisphere, as well as underdevelopment of the left brain hemisphere: The left brain hemisphere also lacked differentiation. In addition, there was less than normal integration between the right and left brain hemispheres. The neural deficiencies in maltreated children's brains suggest that they would have

greater difficulties in analyzing and understanding both their own and others' behaviour; decreased verbal skills; greater risk for pathological responses involving anger, fear, avoidance, withdrawal and depression; and a decrease in available coping responses. (Creeden, 2009, p. 265)

Other research studies of brain function and neural development have demonstrated that traumatic memories and memories of early attachment experiences may be stored mainly in the right hemisphere of the brain (Klorer, 2005). One study in particular, a Positron Emission Tomography (PET) imaging study of adult patients suffering with PTSD, revealed an increase in the activity of the right hemisphere of the brain, including the right visual cortex, during recollection of traumatic memories. At the same time, these patients showed suppression of activity in Broca's area, the left hemisphere area concerned with processing language (Rauch et al., 1996). Regarding the results of this PET imaging study, Rauch et al. asserted that "The observed deactivation in Broca's area is consistent with the notion that patients with PTSD have difficulty cognitively structuring their traumatic experiences" (Rauch et al., 1996, p. 386). These findings have important implications for the types of therapies that counsellors should use when treating children with a history of maltreatment trauma.

Traumatic memories are stored in various areas of the brain, and can be both implicit and explicit in their content (Cozolino, 2002). Implicit memories, also called procedural memories, are those that are unconsciously learned. This type of memory is highly functional during our early preverbal years. Explicit memories, otherwise known as declarative memories, are developed after the age of three years and reflect conscious learning. Explicit memories are sensory-based and connected to language. Children, who have experienced maltreatment very young in life, especially during the time when their right hemispheric functions are dominant, tend to develop mainly implicit memories of their trauma experiences. Due to the immaturity of their neural and cognitive development, the children's memories of their maltreatment experiences are not yet connected to language. As a result, verbal declaration of maltreatment memories and experiences would be very difficult for them (Klorer, 2005). Consequently, traditional counselling methods that rely on talk therapy alone are not able to access trauma-

related emotions and unconscious memories, because they are stored mainly as implicit (nonverbal) memories in the right hemisphere of the brain. Thus, it is not surprising that neuroscientific researchers studying the effects of maltreatment on brain function and memory storage have proposed that further attention be given to the nonverbal methods used in expressive therapies, for the treatment of abused children. These researchers recognize that expressive therapies provide neurologically superior methods for accessing, processing, and integrating maltreated children's traumatic memories and experiences.

Teachers spend so much time with their students that they are often the first persons to identify potential victims of maltreatment (Gamache Martin et al., 2010). Even though some of these children may be referred for professional help, school counsellors are in a prime position for working with children who have suffered maltreatment. In addition to the emotional, academic and behavioural consequences of maltreatment that counsellors must address, they are also keenly aware of the importance of addressing the developmental needs of the maltreated child. Child maltreatment has been identified as a factor that can hinder and even block the achievement of developmental needs such as trust, security, self-esteem, self-control, ability to form healthy attachment relationships, the development of a sense of autonomy and differentiation from others (Jones, 2002). Counsellors also need therapeutic techniques that can be used with students from diverse ethnic, cultural, and social class backgrounds. Therefore, it is imperative that school counsellors employ effective tools and techniques that can meet and respect all of the needs and issues that surround the therapy of maltreated children.

Expressive Therapies Defined

Expressive therapies are therapeutic counselling methods that use creative and artistic techniques, for enhancing the exploration and expression of thoughts and emotions (Kahn, 1999; Tobin, 2007). Expressive therapy is a comprehensive term for a variety of creative arts therapies that use action-oriented therapeutic techniques. The term action-oriented refers to the fact that expressive therapies use a hands-on approach, rather than just a verbal approach to therapy (Tobin, 2007, p. 13). Included within this field of therapies are art therapy, clay therapy, dance therapy, music therapy, movement therapy, photo therapy, play therapy, and creative writing. Expressive therapies provide counsellors with skills, tools, and techniques that facilitate disclosure, as well as the integration of the child's traumatic experiences and memories, in ways that include both the mind and the body (Axline, 1982; Dulicai, & Schelly Hill, 2007; Lefevre, 2004).

Expressive therapies combine non-threatening, nonverbal methods of expression along with verbal communication, for producing healing and growth in the child. As such, they are especially useful with children who have difficulty expressing themselves fully and adequately through words, have developmental delays, are shy and withdrawn, or have learning disabilities and special needs. The artistic and creative mediums employed by the various expressive therapies foster exploration and self-expression through the use of metaphors, which are representative of the child's inner world and perceptions (Carmichael, 1994). Expressive therapies lead to the development of insights and help maltreated children with problem-solving (Tobin, 2007). In light of all these factors, expressive therapies offer school counsellors many effective methods and benefits for working with maltreated children.

Some counsellors would argue against the use of expressive therapies, because compared to the older and more traditional theoretical approaches to psychotherapy, expressive therapies have little empirical support in the form of controlled studies (Kazdin, 2000). In addition, they may argue that other expressive therapies such as Claytherapy (White, 2007) are still relatively young in their practice. However, there have been recent research studies on group play therapy (Jones, 2002), and group sandtray therapy (Shen & Herr, 2003; Wang Flahive & Ray, 2007) conducted with maltreated children in school settings, which have reported positive behavioural outcomes. Carmichael (1991) and Landreth (1987) investigated the use of sand

play and non-directed play therapy in elementary school settings, and found that students' emotional and behavioural problems were addressed: these expressive approaches resulted in improving the students' concentration, ability to read, and self-esteem. Expressive therapies are also gaining the attention of neurobiologists and researchers, who have also investigated the scientific basis for their use, and found them to be valuable for the treatment of maltreated children (Creeden, 2010; Klorer, 2005). Thus, expressive therapies are gaining wider acceptance by researchers and school counsellors as effective therapeutic techniques to be used in the counselling of children.

Benefits of Expressive Therapies

Expressive therapies offer several benefits that make them especially suitable for use with maltreated children. First, they provide non-threatening methods for self-expression, by using appealing materials that most children are familiar with and use every day. For example, play therapy employs the use of toys, play dough, games, puppets, dress-up clothes, and make believe; sand therapy allows the child to represent their world using a sand-filled tray and small toys; art therapy uses crayons, paints, pastels, coloured paper, and craft materials; music therapy involves the use of musical instruments or recorded music; creative writing can involve poetry, journaling, and making up stories; and, movement therapy can involve physical activities that include stretching, running, jumping, and games. These materials and activities are typically available in every school environment. Play has also been identified as "the natural medium of self-expression," (Griffith, 1997, para. 1) because it is a typical and usual means by which children communicate. Children's communication and self-expression at home and school often include play, art, storytelling, pretending, and other creative activities (Jones, 2002; Wang Flahive & Ray, 2007).

Expressive therapies such as sand tray therapy or play dough therapy provide an external medium on which the maltreated child can symbolically project their inner thoughts and feelings (Carmichael, 1994). The creations produced in the sand, or in whatever expressive medium is used, represent metaphorically the inner world of the maltreated child. Metaphors provide a stronger, clearer, and more powerful way of describing and representing the child's inner self (Tobin, 2007). These creations help the counsellor and the child to gain insights into the child's emotions and perceptions (Lefevre, 2004). The appealing materials and commonplace activities are what contribute to children's comfortable and non-threatening perceptions of expressive therapies.

Second, expressive therapies do not require that the maltreated child express themselves verbally. As was described earlier, children who experience maltreatment may have deficiencies in their language, cognitive, and neurological development (Creeden, 2009); they may be struggling with feelings of fear, anxiety, insecurity, anger, confusion and depression; and, they may be bound by family rules and promises of secrecy regarding the abuse (Tobin, 2007). Expressive therapies provide maltreated children with visual and hands-on methods for communicating thoughts and feelings, for which their verbal voice is not capable (Tobin, 2007, p. 15). The traumatic memories of maltreatment are so very overwhelming and emotionally inhibiting that these children often self-impose barriers to verbal communication, due to perceptions of threat and lack of safety. Expressive therapies rely on nonverbal methods of self-expression that can often work around those barriers to access the deeper issues that the child may resist disclosing verbally. Expressive therapies activate the nonverbal right hemisphere of the brain, where neuroscientists "speculate that traumatic memories are preferentially stored" (Schiffer, Teicher, & Papanicolaou, 1995, as cited in Klorer, 2005, p. 216). In addition, expressive therapies do not depend on the language processing functions of the left hemisphere for verbal disclosure (Klorer, 2005). Thus, expressive therapies are supported by neuroscientific research evidence as being sound interventions for use with maltreated children

Third, expressive therapies provide a safe and tangible cathartic outlet for the child's emotional pain. Children who have experienced maltreatment often have symptoms such as ADD, ADHD, disruptive classroom behaviours, overactivity, impulsivity, and a variety of negative emotions. Expressive techniques require the child to physically and emotionally engage with the arts and crafts supplies, to use large muscle groups for movement and dance therapies, or perform rhythmic movements in music therapies. These activities cause a lot of emotional and physical energy to be expended (Kahn, 1999). The expressive mediums give the child a target onto which they can focus and project their thoughts, negative and destructive energies, and painful emotions. By projecting their painful emotions onto a piece of art work, a story, or a puppet for example, some children have even experienced spontaneous recovery from trauma (Lefevre, 2004); however, this outcome may be more the exception than the rule. Expressive therapies can help relieve feelings of guilt and shame, which are commonly felt by maltreated children. Thus, cathartic expression helps to provide a safe outlet for and relief from the emotional pain that maltreated children carry within them.

Fourth, expressive therapies use developmentally appropriate therapeutic techniques that promote healthy growth and development, as well as healing. Expressive therapies have been delivered as individual therapy, group therapy, and family therapy (Jones, 2002; Shen & Herr, 2003; Wang Flahive & Ray, 2007). In the individual therapy setting, the relationship between the counsellor and the child helps to foster feelings of safety and trust, nurturing a developmental need that was not met in early childhood (Jones, 2002). The group therapy and family therapy delivery methods present opportunities for maltreated children to achieve several developmental tasks including individuation and separation, socialization, communication, forming healthy interpersonal relationships, and symbolic elaboration (Lu, Petersen, Lacroix, & Rousseau, 2010; Wang Flahive & Ray, 2007). Kahn (1999) also supported this claim:

Art therapy aids adolescents in accomplishing the developmental tasks of individuation and separation from the family via: (a) providing students control over their expressions, (b) stimulating creativity through the process, (c) providing a pleasurable experience, and (d) using media which depict personal and age/group symbols and metaphors.
(p. 3)

As such, expressive therapies provide school counsellors with strategies that promote the achievement of developmental milestones, for which maltreated children may be delayed.

Fifth, school counsellors are most often guided by the use of one or more traditional theoretical perspectives. These theoretical perspectives may include methods derived from the psychodynamic, client-centered, cognitive-behavioural, systems theory, as well as several other perspectives. Each of these approaches to counselling most often rely on verbal communication as the sole means of expression (Lefevre, 2004; Tobin, 2007). Rather than offering a different theoretical approach to counselling, expressive therapies offer creative and artistic tools that can be used alone or in conjunction with traditional theoretical perspectives, in order to complement and enhance the effectiveness of these therapeutic approaches.

Expressive therapies have been found to adapt very well with many different theoretical perspectives (Kahn, 1999; Tobin, 2007). For example, when speaking about art therapy that she used with adolescents, Beverly Kahn (1999) asserted that client-centered art therapy encouraged self-actualization in these students (p. 3). She also proposed that behavioural art therapy could be used to help adolescents establish goals and consider more suitable behaviours; cognitive art therapy could be used to help adolescents express and challenge their irrational thoughts through cartoon drawings; and, solution-focused art therapy could help adolescents to recognize and enhance their strengths, through drawings of times when their strengths had served them well (Kahn, 1999).

Another example of the adaptability of expressive therapies is described by Michelle Lefevre, a social worker who has used both directed and non-directed music therapy with

children and families. Lefevre used a psychoanalytic perspective, in which music represented “aspects of the personality and psychological processes” (Lefevre, 2004, p. 336). She also used a humanistic approach to build rapport and as a way to “support, encourage, and reflect the client’s improvisation both verbally and musically” (Lefevre, 2004, p. 337). Thus, expressive therapies are adaptable to the different traditional theoretical perspectives that most counsellors are trained in.

Finally, expressive therapies can be used with a diversity of ethnic and social classes. An example of this can be seen in Filial Therapy, a program that combines play therapy with family therapy (Ryan, 2007). This particular program has been used with a variety of ethnic populations including Native American, Chinese, Korean, and Australian families. In addition, Filial Therapy has been used with “deprived inner city families in the USA” (Ryan, 2007, p. 645). Bruce Tobin, a counsellor and art therapist, also promotes the cross-cultural applications of expressive therapies. He supports and encourages the use of art, music, and movement therapies for Canadian practitioners, by stating that “creative arts activity is able to form a significant bridge across the barriers and boundaries created by culture and ethnicity” (Tobin, 2007, p. 17). He advocates for young people’s self-expression through the artistic traditions that are present within their own cultural heritage.

Another proponent of culturally sensitive expressive therapy is Patrick Morrissette, a professor in the First Nations and Aboriginal Counselling program at Brandon University (Morrissette, 2003). When preparing First Nations and Aboriginal students to work as counsellors, he states that often times the students’ traumatic memories surface and need to be addressed. The preferred, accepted, and culturally valued method that is used to facilitate exploration and expression of these students’ painful emotions is story telling through oral narratives. These oral narratives are traditional Aboriginal expressive methods that use metaphors and symbols, in order to underscore and express the deep emotional pain triggered during these students’ training. Thus, expressive therapies employ culturally sensitive techniques that make them suitable for diverse multicultural and social class applications.

Conclusion

Thus, several factors have been examined, which offer support for the argument that expressive therapies provide school counsellors with the best therapeutic methods for helping maltreated children address and process the many negative effects of their abuse. Through neural imaging research, neuroscientists have helped us to grow in our understanding of the ways in which maltreatment affects children’s brain function and memory storage. This information has helped us to comprehend how expressive therapies are able to access traumatic memories, as well as how they help to integrate the left and right hemispheres of the brain. Neural integration between the left and right brain hemispheres is paramount in bringing about healing and growth in the maltreated child (Creeden, 2009). Through their research, neuroscientists are gaining evidence that confirms that the nonverbal, action-based techniques used in expressive therapies are more effective at facilitating exploration and self-expression, when compared to traditional theoretical approaches that rely solely on verbal disclosure.

Expressive therapies have several positive attributes that establish them as the best methods that counsellors can use with maltreated children. These attributes include that expressive therapies employ a variety of age appropriate techniques and activities that support and promote the achievement of developmental tasks, which are often blocked in maltreated children (Jones, 2002). The assortment of appealing toys, materials, and activities that counsellors use for conducting expressive therapies are things that children are familiar with, because they normally use these both at home and at school. The creative and artistic techniques used in expressive therapies promote nonverbal exploration and self-expression, which can often get around the barriers that prevent maltreated children’s verbal disclosure (Tobin, 2007).

Expressive therapies are adaptable to many of the traditional theoretical counselling perspectives in which most counsellors are trained (Kahn, 1999). Finally, expressive therapies are well suited for addressing the diversity of maltreated children's ethnic, cultural, and social class backgrounds (Tobin, 2007). Therefore, the research evidence presented within these arguments supports the claim that expressive therapies provide counsellors with the best therapeutic techniques for counselling maltreated children.

References

- Axline, V. M. (1982). Entering the child's world via play experiences. In G. L. Landreth (Ed.), *Play therapy: Dynamics of the process of counseling with children*. Springfield, IL: Charles C. Thomas.
- Barnett, O., Miller, C. L., & Perrin, R. D. (2005). *Family violence across the lifespan: An introduction* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Carmichael, K. (1991). Play therapy: Role in reading improvement. *Reading Improvement*, 28, 273-276.
- Carmichael, K. D. (1994). Sand play as an elementary school strategy. *Elementary School Guidance & Counseling*, 28(4), 302-307.
- Cozolino, L. (2002). *The neuroscience of psychotherapy*. New York, NY: W. W. Norton & Company.
- Creeden, K. (2009). How trauma and attachment can impact neurodevelopment: Informing our understanding and treatment of sexual behaviour problems. *Journal of Sexual Aggression*, 15(3), 261-273. doi: 10.1080/13552600903335844
- Currie, J., & Spatz Widom, C. (2010). Long-term consequences of child abuse and neglect on adult economic well-being. *Child Maltreatment*, 15(2), 111-120. doi: 0.1177/1077559509355316
- Department of Justice (2009, October 27). *Abuse is wrong*. Retrieved April 28, 2010, from <http://www.justice.gc.ca/eng/pi/fv-vf/pub/abus/a iw-me i/p2.html#7>
- Draper, B., Pfaff, J. J., Pirkis, J., Snowdon, J., Lautenschlager, N. T., Wilson, I., & Almeida, O. P. (2008). Long-term effects of childhood abuse on the quality of life and health of older people: results from the depression and early prevention of suicide in general practice project. *Journal of the American Geriatrics Society*, 56(2), 262-271. doi: 10.1111/j.1532-5415.2007.01537.x
- Dulicai, D., & Schelly Hill, E. (2007). Expressive movement. In J. Leseho (Ed.), *04:774 Introduction to Expressive Therapies* (pp. 64-87). Brandon, MB: Brandon University.
- Eckenrode, J., Laird, M., & Doris, J. (1993). School performance and disciplinary problems among abused and neglected children. *Developmental Psychology*, 29(1), 53-62.
- Fisher, J. (2010, Jan.-Feb.). Brain to brain. *Psychotherapy Networker*, 35-39.
- Ford, J. D. (2005). Treatment implications of altered affect regulation and information processing following child maltreatment. *Psychiatric Annals*, 35(5), 410-419.
- Gamache Martin, C., DeMarni Cromer, L., & Freyd, J. J. (2010). Teachers' beliefs about maltreatment effects on student learning and classroom behavior. *Journal of Child & Adolescent Trauma*, 3(4), 245-254. doi: 10.1080/19361521.2010.523061
- Griffith, M. (1997). Empowering techniques of play therapy: A method for working with sexually abused children. *Journal of Mental Health Counseling*, 19(2), 130-142. Retrieved from <http://amhca.metapress.com/openurl.asp?genre=journal&i ssn=1040-2861>
- Jones, K. D. (2002). Group play therapy with sexually abused preschool children: Group behaviors and interventions. *The Journal for Specialists in Group Work*, 27(4), 377-389. doi: 10.1177/019339202237599
- Kahn, B. B. (1999). Art therapy with adolescents: Making it work for school counsellors. *Professional School Counseling*, 2(4), 291-298.

- Kazdin, A. (2000). *Psychotherapy for children and adolescents: Directions for research and practice*. New York, NY: Oxford University Press.
- Landreth, G. L. (1987). Play therapy: Facilitative use of child's play in elementary school counseling. *Elementary School Guidance and Counseling, 21*, 253-261.
- Lefevre, M. (2004). Playing with sound: The therapeutic use of music in direct work with children. *Child and Family Social Work, 9*(4), 333-345. doi: 10.1111/j.1365-2206.2004.00338.x
- Lu, L., Petersen, F., Lacroix, L., & Rousseau, C. (2010). Stimulating creative play in children with autism through sandplay. *The Arts in Psychotherapy, 37*(1), 56-64. doi: 10.1016/j.aip.2009.09.003
- Rauch, S. L., Van der Kolk, B. A., Ffsler, R. E., Alpert, N. M., Orr, S. P., Savage, C. R., ... Pitman, R. K. (1996). A symptom provocation study of posttraumatic stress disorder using positron emission tomography and script-driven imagery. *Archives of General Psychiatry, 53*(5), 380-387.
- Ryan, V. (2007). Filial Therapy: Helping children and new carers to form secure attachment relationships. *British Journal of Social Work, 37*(4), 643-657. doi: 10.1093/bjsw/bch331
- Tobin, B. (2007). *Expressive therapies now: Action-oriented creative arts strategies for healing and growth in children and youth*. Canada: Desktop Publishing.
- Wang Flahive, M., & Ray, D. (2007). Effect of group sandtray therapy with preadolescents. *The Journal for Specialists in Group Work, 32*(4), 362-382. doi: 10.1080/01933920701476706
- White, P. (2007). *CLAYtherapy: The clinical application of clay with children*. Retrieved March 22, 2011, from <http://www.playtherapyclay.com/research.php>

About the Author

Jocelyn Kehler is a Graduate Diploma student with plans to complete her M.Ed. in counselling. Previously, she was a practicing RN, with a focus on palliative care. Jocelyn volunteers for the Westman Hospice Association. She and her husband have raised four children in Brandon.

Guidance Programs in Schools: A Shift to Group Music Therapy

Crystal Barber

Abstract

Guidance programs in school may not be meeting the current needs of students. School counsellors are forced to make decisions about which students should receive services, because of budget cuts and increasing demands placed on counsellors. This article proposes that, in the face of budget cuts to counselling services, students' needs would be better met with the incorporation of group counselling sessions. Music therapy is proposed as a preferred means of group counselling. The universality of music, the high success rate of clinical music therapy, and the strong music-adolescent connection are convincing reasons to incorporate group music therapy in schools.

Current guidance counselling programs in schools may not be serving the needs of their students. Students' needs, including social, emotional, behavioural, and academic, appear to be increasing. Unfortunately, it has been this author's experience that this increase in student needs has been met with budget cuts to many school counselling services. These budget cuts do not match the mandate of schools to provide adequate guidance services to all students in need. In order to address the current counselling dilemma, there needs to be a change in the current delivery of counselling services. Providing more opportunities for group therapy would enable the guidance counsellor to meet the needs of more students without requiring schools to invest substantial budget dollars for their guidance programs. Music therapy provides a safe medium for communicating feelings because of the universality of music, and it has been used successfully with children and adolescents for a number of years in clinical settings. The addition of group music therapy sessions available in the public school setting would help to meet the increasing needs of more students than the current approach to school counselling.

Weaknesses in Current Guidance Programming

Current guidance programming in Manitoba schools may be inadequate to meet the increasing needs of students, which has led to a decrease in the accountability of schools to the communities in which they serve (Griffin, 2010, p. 248; Gysbers, 2004, p. 1; Hui, 2000, p. 70). Schools are mandated to provide adequate services for all students, yet they are not supporting this educational policy with their current fiscal policy (Griffin, 2010, p. 248). School administrators are demanding guidance counsellors to demonstrate that their work contributes to positive student development and success, yet ongoing budget cuts to counselling services have forced guidance counsellors to jeopardize their accountability by making decisions about which students are able to receive services (Gysbers, 2004, p. 1). In many cases, this type of decision-making means that only those students with the most critical needs will receive treatment, and many of those students will not receive an adequate number of counselling sessions (Hui, 2000, p. 71). Students who would benefit from guidance counselling, but who are not regarded by staff as high needs, simply go without therapy at school because the guidance counsellor does not have time to see these students.

In spite of school budget cuts, today's students have higher emotional, behavioural, and academic needs than in the past (Bauer, 2010, para. 3; Gold, Voracek, & Wigram, 2004, p. 1054; Sausser & Walker, 2006, p. 2). Students are facing new challenges at a younger age, such as coping with grief, drugs, alcohol, and bullying. Many of these students will not receive treatment because they cope well enough to maintain average grades and do not cause behavioural problems at school. Their need for counselling goes undetected because their difficulties are not known to the counsellor or teachers. Due to the lack of adequate guidance

services for these types of students, families often resort to seeking therapeutic services outside the school. However, in the face of the current economic crisis, many families can not afford to obtain counselling services outside of the school system (Griffin, 2010, p. 248). Students should be able to receive these services at the school level. Therefore, schools should endeavour to provide an alternative to the current delivery method of counselling services.

In most guidance programs, individual counselling sessions are the only method of therapy. These one-on-one sessions are not the most practical use of time for the guidance counsellor. An effective guidance program should “address the needs of all students and offer a balanced service to all” (Hui, 2000, p. 80). Many schools, despite having a student base of more than 200, employ only one guidance counsellor. In smaller schools, guidance counsellors are often also employed as part-time teachers, or work as the sole counsellor for several schools. In these situations, it is not reasonable to expect the guidance counsellor to provide services for all students. The reality is that the guidance counsellor’s time is monopolized by a select group of high needs students seen on a regular basis. In seeking a solution to the current lack of balanced guidance services, approaches other than individual counselling should be considered.

The Benefits of Group Therapy in Schools

Group therapy is a practical alternative to the current individual case-file method of counselling that is currently being used in most guidance programs. Group therapy in schools, in addition to individual therapy, can help to meet the needs of more of the student population. The inclusion of group therapy is a viable option for many schools because of its cost efficiency and its ability to increase accountability to the school community. School counsellors maintain the flexibility to meet with students requiring individual counselling, as well as have the ability to create focused therapy groups to help the needs of students dealing with similar issues. An example of a focused therapy group that could be created would be for children affected by divorce. This group would give these students a chance to express their feelings, gather support from peers, and receive meaningful feedback from the guidance counsellor. The counsellor is likely to be more effective in delivering services to a greater number of students with the addition of therapy groups. This means of therapy would increase accountability of counsellors to their students.

Group counselling promotes a whole-school approach to counselling. In group therapy programs, counsellors would be able to move from remediation to prevention. This holistic approach enables schools to become more proactive in their method of providing services to students. Counsellors work to help students develop healthy attitudes through group therapy, while maintaining individual curative therapy sessions with those in need. One of the goals of group therapy in schools would be to create communities of support for students to deal with issues such as grief, bullying, and abuse. Bringing these students together in a group therapy setting can create a school environment that promotes wellness through counselling. Students experience relief and bond with others who have shared similar experiences (Dalton & Krout, 2005, p. 131). Group therapy, in addition to the individual counselling sessions, improves accountability of counsellors by providing services to more students without requiring schools to dramatically increase their guidance budgets. It promotes the use of counselling services by students through increased awareness in the whole school.

The Benefits of Using Music Group Therapy in Schools

Music therapy is an effective mode of therapy to use in the school system. Music therapy can be seen as “the use of organised sounds within an evolving relationship between client and therapist to support and encourage physical, mental, social, and emotional well-being” (Bunt, 1994, p. 8). The therapist essentially uses music as a medium to develop a helping relationship

with a client in order to maximize optimal functioning (Wigram, Pedersen, & Bonde, 2002, pp. 31-33). Music therapy has been used extensively with many populations in clinical settings with dramatic positive results. It has been shown to be particularly effective in treating a number of emotional, behavioural, and social problems in children and adolescents (Accordino, Comer, & Heller, 2007, p. 102; Choi, Lee, & Lee, 2010, p. 213; Chong & Kim, 2010, p. 190).

Music therapy's effectiveness stems from the universality of music. For most people, music is a part of everyday life, and many people find that listening to or creating music is therapeutic. Music is "a non-invasive medium that enhances self-expression, self-esteem, motor skills, coordination, and socialization. It facilitates creativity, inventiveness, independence and success" (Sausser & Walker, 2006, p. 8). The use of music in group therapy provides a sense of safety to participants, because music is a familiar territory (Robarts, 2006, p. 249).

Adolescents seem to have a particular tie to music, which makes its use for therapy more effective and inviting than possibly other forms of group therapy. Music tends to play a significant role in the lives of teenagers. They often use music to identify themselves with a particular peer group, and express their feelings. The relationship between music and adolescents "serves as a platform for connectedness and emotional expression that is utilised within a therapeutic, support group format" (McFerran, Roberts, & O'Grady, 2010, p. 541). Studies have also suggested that young people use music for to discover meaning and purpose (Choi et al., 2010, p. 216; Chong & Kim, 2010, pp. 190-191; McFerran et al., 2010, p. 544). In this way, group music therapy sessions help students to develop self-esteem, self-worth, and self-confidence (Chong & Kim, 2010, p. 190). The role that music plays in the lives of students makes music a useful medium for group therapy.

Music therapy is a viable option for counsellors because of the flexibility of music therapy techniques. Sessions are structured by the guidance counsellor to meet the needs of particular groups of students, which are achieved through the type of music therapy used in each group setting. Counsellors can pull ideas and activities for each group from the two main types of music therapy: active and passive. Active music therapy includes a variety of activities such as singing, drumming, playing wind instruments, and body movement, while passive music therapy involves activities such as lyric analysis, composition, and active listening (Choi et al., 2010, pp. 213-214). The types of activities done in a group music therapy session also depend on the composition of the group. For example, a counsellor would structure music therapy activities differently for a group of bereaved children than for a group of highly aggressive adolescents. The flexibility of music therapy sessions lends itself to use in the school system in dealing with a variety of student issues.

Conclusion

The current state of guidance counselling programs in schools is inadequate in serving the mandate to provide services to all students. Budget cuts, met by increasing student needs, have decreased the level of accountability that counsellors are able to maintain with the students they serve. The addition of group therapy to the current method of individual counselling enables counsellors to address the needs of more students without requiring schools to increase their guidance budgets. Group therapy helps counsellors to move from dealing with strictly remediation of students to a more preventative approach to counselling. Music therapy has been used as an effective mode of group therapy to treat a number of social, emotional, and behavioural disturbances. The universal nature of music and its strong role in the lives of children and adolescents make music therapy a convincing form of group therapy to use in the school system.

References

- Accordino, R., Comer, R., & Heller, W. B. (2007). Searching for music's potential: A critical examination of research on music therapy with individuals with autism. *Research in Autism Spectrum Disorder, 1*(1), 101-115. doi:10.1016/j.rasd.2006.08.002
- Bauer, S. (2010). Music therapy and eating disorders – A single case study about the sound of human needs. *Voices, 10*(2). Retrieved November 6, 2010, from <http://normt.uib.no/index.php/voices/article/viewArticle/258/214>
- Bunt, L. (1994). *Music therapy: An art beyond words*. New York, NY: Routledge.
- Choi, A. N., Lee, M. S., & Lee, J. S. (2010). Group music intervention reduces aggression and improves self-esteem in children with highly aggressive behavior: A pilot controlled trial. *Evidence-based and Complimentary Alternative Medicine, 7*(2), 213-217. doi:10.1093/ecam/nem182
- Chong, H. J., & Kim, S. J. (2010). Education-oriented music therapy as an after-school program for students with emotional and behavioral problems. *The Arts in Psychotherapy, 37*(1), 190-196. doi:10.1016/j.aip.2010.03.004
- Dalton, T. A., & Krout, R. E. (2005). Development of the grief process scale through music therapy songwriting with bereaved adolescents. *The Arts in Psychotherapy, 32*(2), 131-143. doi:10.1016/j.aip.2005.02.002
- Gold, C., Voracek, M., & Wigram, T. (2004). Effects of music therapy for children and adolescents with psychopathology: A meta-analysis. *Journal of Child Psychology and Psychiatry, 45*(6), 1054-1063.
- Griffin, D. (2010). School counsellors and collaboration: Finding resources through community asset mapping. *Professional School Counseling, 13*(5), 248-256. doi:10.5330/PSC.n.2010-13.248
- Gysbers, N. C. (2004). Comprehensive guidance and counseling programs: The evolution of accountability. *Professional School Counseling, 8*(1), 1-13.
- Hui, E. K. (2000). Guidance as a whole school approach in Hong Kong: From remediation to student development. *International Journal for the Advancement of Counselling, 22*(3), 69-82.
- McFerran, K., Roberts, M., & O'Grady, L. (2010). Music therapy with bereaved teenagers: A mixed methods perspective. *Death Studies, 34*(6), 541-565. doi:10.1080/07481181003765428
- Roberts, J. (2006). Music therapy with sexually abused children. *Clinical Child Psychology and Psychiatry, 11*(2), 249-269. doi:10.1177/1359104506061418
- Sausser, S., & Walker, R. J. (2006). A model for music therapy with students with emotional and behavioural disorders. *The Arts in Psychotherapy, 33*(1), 1-10. doi:10.1016/j.aip.2005.05.003
- Wigram, T., Pedersen, I. N., & Bonde, L. O. (2002). *A comprehensive guide to music therapy: Theory, clinical practice, research and training*. Philadelphia, PA: Jessica Kingsley.

About the Author

Crystal Barber graduated from Brandon University in 2003 with a Bachelor of Music (Specialist), and in 2006 with a Bachelor of Education (AD). She has taught at Elton Collegiate in the Rolling River School Division for the past 6 years, and is currently working as the Guidance Counsellor in Rivers Elementary School and Rivers Collegiate Institute. She is pursuing her Graduate Diploma in Guidance & Counselling.

The Inclusion of Deaf and Hard-of-Hearing Students

Nicole Lehmann

Abstract

Students who are deaf or hard-of-hearing (DHH) have long been educated in segregated settings. The move toward inclusion now means that DHH students may choose to have their educational needs met within a non-segregated setting. Challenges face all stakeholders. Students who are DHH may experience significant needs in the areas of communication, social development and academics. Teachers and administrators must work together to model acceptance and provide a positive and successful educational experience.

For many years, children who are deaf or hard-of-hearing (DHH) have been educated in school settings separate from their hearing peers. Some governments and educators now believe that the concept of inclusion may provide the best education for DHH students. Mandated educational inclusion policies have translated into changes in elementary and secondary schools. There are many issues that must be addressed if school divisions are to be truly prepared to adopt the philosophy and practice of inclusion. Positive teacher attitudes toward hearing impairment translate into classroom experiences that develop positive attitudes for all students successful inclusion of DHH students at the classroom level requires genuine administrative commitment and support, with a focus on developing the students' skill in communication, social development, and academics. Successful inclusion models thus provide for the education of the whole child.

Inclusion is not simply a government policy; inclusion encompasses the attitudes and behaviours of hearing staff, DHH students, and their peers (Hung & Paul, 2006). It is the teachers' responsibility to address negative student attitudes through positive classroom experiences. Despite the obvious differences, DHH students share many similarities with their hearing peers (Marschark, Spencer, Adams, & Sapere, 2011). These similarities must be fostered by classroom teachers in order to increase the closeness between DHH and hearing students, which results in more positive attitudes (Hung & Paul, 2006). Teachers' attitudes have a direct influence on the success of an inclusive program (Eriks-Brophy et al., 2006). The attitudes and behaviours of the school stakeholders are crucial to developing positive attitudes of all students toward hearing impairment.

The attitude of the administration must be sincerely positive and supportive, not simply the rhetoric of acceptance. This difference between rhetoric and action is considered "oppressive niceness" (Slobodzian, 2009, p. 187). Administrative support of inclusive programming, training of staff, and embracing Deaf culture impacts the success of the inclusion model (Furlonger, Sharma, Moore, & Smyth King, 2010; Hung & Paul, 2006). Administrative support for inclusion is a requirement for success.

Developing the communication skills of DHH students is of paramount importance in their education. Hearing loss has a negative effect on the acquisition of speech and language skills (Eriks-Brophy et al., 2006; Thagard, Hilsmier, & Easterbrooks, 2011). Students with severe hearing loss do not hear speech at normal speaking levels and have delays in language acquisition. These students are difficult to understand when they speak (Manitoba Education, Citizenship and Youth [MECY], 2009). It is important to understand that speech and language are different: speech is making sounds with the voice, and language is putting words and sentences together to create meaning. The skills necessary for effective communication profoundly influence the language, social, and incidental learning experiences of DHH students (Bowen, 2008). Language, whether spoken or signed, is crucial because it is essential for interactions between people (Kelman & Branco, 2009). Relationships between people are built on communication (Wilkins & Hehir, 2008). For DHH students, this communication is a lifelong

challenge, affecting social relationships and academic success. Delays exist in the area of pragmatic communication skills for DHH students (Thagard et al., 2011). This skill set is crucial for DHH students in order to develop real and meaningful social relationships. Depending on the mode of communication used by DHH students, whether speech, American Sign Language (ASL), or a combination of the two, students may find themselves isolated if they do not use the same language as their hearing families and friends (Wilkins & Hehir, 2008).

Incidental learning (that is, learning that occurs by chance instead of by design) takes place in any classroom. Teachers must remember that DHH students do not have the same access to incidental learning as hearing students (MECY, 2009). The best way for DHH students to communicate is through their mode of choice, whether spoken or signed. This mode should be supported by the school in terms of providing an interpreter or a qualified teacher of the deaf (Eriks-Brophy et al., 2006). A qualified signing interpreter translates instruction from the teacher into ASL for signing DHH students; however, it is not possible to interpret all the incidental language being used by other people in the room (Slobodzian, 2009). A hearing student may be exposed to 30,000 words every day, but students who are DHH will not hear all those words (MECY, 2009). In a co-enrollment model of inclusion, hearing students are taught ASL as part of their curriculum. This instruction removes the communication barrier between DHH and hearing students (Bowen, 2008). Inclusion does not mean that DHH students should be expected to conform to the dominant language of the classroom (Slobodzian, 2009). To function effectively, DHH students must learn to use communication for language, social, and incidental purposes.

Social development is critical for personal growth and acceptance of DHH students in an inclusive setting. Developing friendships, increasing participation in school activities, and coping with bullying are all social concerns for DHH students in an inclusive setting (MECY, 2009; Thagard et al., 2011). Friendships between DHH students and their hearing peers improve social inclusion. These friendships are most effective when the hearing child has developed an awareness of Deaf culture and communication (Hadjikakou, Petridou, & Stylianou, 2008). If communication is not a barrier, then personality has a greater effect on friendship choices (Bowen, 2008). Friendships with hearing peers give DHH students more confidence in social situations and improve their self-esteem (Hung & Paul, 2006).

Participation in school activities and extracurricular events can be limited for DHH students because they may have low self-esteem, lack understanding of social nuances, and may not have access to interpreting services after school hours (Angelides & Aravi, 2007; Hung & Paul, 2006; Slobodzian, 2006). Teachers must actively recruit DHH students to participate in school activities through direct teaching of the social expectations surrounding the activity (Stewart & Kluwin, 2001; Wilkins & Hehir, 2008). It is crucial that teachers remember that simply being present during an activity, in or out of school hours, is not the same as participating (Slobodzian, 2006).

Students who have an easily identified disability, such as deafness, are twice as likely to be the victims of bullying as their non-disabled peers (Bauman & Pero, 2011). Technology allows DHH students to assume the role of either victim or bully because it is not apparent through a computer message whether the sender is hearing or not (Bauman & Pero, 2011). With the writing challenges experienced by most DHH students, texting is a viable alternative to more formal writing. Unfortunately, DHH students can be more impulsive, and often have lower moral reasoning skills than their hearing peers (Bauman & Pero, 2011). This underdeveloped ability to reason may explain why some DHH students choose to assume the role of bully. While hearing students learn social skills by observing and listening to other people, DHH students are not able to do this independently and must be taught directly through daily interactions with hearing peers and adults (Angelides & Aravi, 2007; MECY, 2009). Deliberate support is needed for the social experiences of DHH students, because these students must be directly taught the social skills needed to address the effects of bullying.

There are many challenges, for both teachers and students, in an inclusive academic setting. These challenges include appropriate programming, accommodations, and

assessments for DHH students. Teachers must implement supports that will address the specific learning needs of DHH students, and create frequent opportunities for meaningful communication and learning to take place (Hung & Paul, 2006). Effective teachers of DHH students use strategies that facilitate learning (Eriks-Brophy et al., 2006). These strategies include preferential seating, differentiating instruction, and flexible assessment (Eriks-Brophy et al., 2006). If DHH students use lip reading as a receptive communication strategy, then their teacher must face them when providing direct instruction (Berke, 2010; MECY, 2009). Preferential seating does not necessarily mean the front seat, closest to the teacher. A DHH student could be seated in a back corner to gain better visual access to a screen displaying a speech-to-text translation from the computerized note taker (Stewart & Kluwin, 2001; Stinson, Elliot, Kelly, & Liu, 2009). Teachers must address the appropriate programming needs of DHH students in an inclusive classroom.

Because DHH students have different abilities and skills, teachers must provide differentiated instruction and assessment to accommodate students (Angelides & Aravi, 2007). Teachers must directly connect new concepts to the students' background experiences (MECY, 2009; Stewart & Kluwin, 2001). This approach should reduce the need for DHH students to complete extra lessons at home (Angelides & Aravi, 2007). Making accommodations to assessment for DHH students is imperative for their success. Students may require pre-assessment assistance and support from the classroom teacher (Stewart & Kluwin, 2001). During the assessment, DHH students may require ongoing support from the classroom teacher or an educational assistant (Stewart & Kluwin, 2001). Other possible accommodations for assessment include re-writing questions to reflect the student's reading level, providing a scribe, and allowing time extensions for completion (Cawthon, 2011; Stewart & Kluwin, 2001). The demands on teachers of DHH students are substantial and varied, because of the need for differentiated instruction and assessment.

As with any educational concept, there are negative and positive factors associated with the inclusion of DHH students in regular school setting. Some potentially negative aspects are unqualified personnel and the distance from Deaf culture. The best inclusive setting has personnel who are qualified for the position. However, this setting is not always possible. Many teachers of DHH students are not adequately prepared for the students' learning needs, or do not fully understand the knowledge base of DHH students (Marschark et al., 2011; Slobodzian, 2009). This situation can lead to social exclusion and lower academic performance by DHH students (Angelides & Aravi, 2007). When asked to identify negative aspects of an inclusive setting, DHH students reported personnel who showed little understanding of Deaf culture (Angelides & Aravi, 2007). Schools that have DHH students in their population have a responsibility to provide opportunities for all students and staff to have exposure to Deaf culture (MECY, 2009). These shared experiences foster positive relationships and acceptance within the inclusive setting (Hadjikakou et al., 2008). Unfortunately, overall results indicate that academic success for DHH students, in relation to their hearing peers, has not shown a marked improvement over the past 30 years (Marschark et al., 2011).

Inclusive settings offer advantages to DHH students that they may not experience in a segregated setting. These benefits include exposure to higher level curriculum, opportunities for furthering academic or vocational goals, and experiences to communicate with the hearing world (Nowell & Innes, 1997). Students who are DHH, and educated in an inclusive setting, have exposure to higher level curriculum with higher academic goals and expectations (Angelides & Aravi, 2007). In terms of academic success, DHH students in inclusive education surpass their DHH peers from segregated settings (Eriks-Brophy et al., 2006). DHH students from inclusive environments are more likely than their segregated DHH peers to consider post-secondary or vocational programs paths (Thagard et al., 2011). Students experience the hearing world from a DHH perspective and identify that they require proficient communication skills to be successful (Eriks-Brophy et al., 2006). While segregated educational settings may be more suited to meet the social and cultural needs of DHH students, inclusive settings offer

better opportunities to increase academic skills and abilities (Silvestre, Ramspott, & Pareto, 2007). These skills enable DHH students to function successfully in post-secondary studies, and to communicate as part of the hearing world (Nowell & Innes, 1997). Students who are DHH, and educated in an inclusive setting, report an increased academic worth; however, they do not report the same positive feeling toward their social self-esteem (Silvestre et al., 2007). Although segregated settings offer some social benefits, inclusive classrooms provide enriched academic experiences for DHH students.

The legislation of inclusive education policies in recent years has given educators, administrators, and school divisions a new set of challenges to address in order to educate DHH students in a regular school setting. Educators, with the support of administrators, must now increase the positive attitudes of all people associated with the inclusive model, and focus on communication skills, social development, and academic opportunities for DHH students within an accepting and supportive environment. While it may be true that segregated settings can offer DHH students the social comfort of the Deaf community, the inclusive classroom offers the opportunity to function in both the hearing and deaf worlds. Providing the most appropriate education for each student, regardless of hearing ability, is the goal of the inclusive model.

References

- Angelides, P., & Aravi, C. (2007). A comparative perspective on the experiences of deaf and hard of hearing individuals as students at mainstream and special schools. *American Annals of the Deaf*, 151(5), 476-487. doi:10.1353/aad.2007.0001
- Bauman, S., & Pero, H. (2011). Bullying and cyberbullying among deaf students and their hearing peers: An exploratory study. *Journal of Deaf Studies and Deaf Education*, 16(2), 236-253. doi:10.1093/deafed/enq043
- Berke, J. (2010, July). *Education – Including deaf and hard of hearing children in the classroom*. Retrieved July 17, 2011 from <http://deafness.about.com/od/schooling/a/inclassroom.htm>
- Bowen, S. K. (2008). Co-enrollment for students who are deaf or hard of hearing: Friendship patterns and social interactions. *American Annals of the Deaf*, 153(3), 285-293. doi:10.1353/aad.0.0052
- Cawthon, S. W. (2011). Making decision about assessment practices for students who are deaf or hard of hearing. *Remedial and Special Education*, 32(1), 4-21. doi:10.1177/0741932509355950
- Eriks-Brophy, A., Durieux-Smith, A., Olds, J., Fitzpatrick, E., Duquette, C., & Whittingham, J. (2006). Facilitators and barriers to the inclusion of orally educated children and youth with hearing loss in schools: Promoting partnerships to support inclusion. *Volta Review*, 106(1), 53-88.
- Furlonger, B. E., Sharma, U., Moore, D. W., & Smyth King, B. (2010). A new approach to training teachers to meet the diverse learning needs of deaf and hard-of-hearing children within inclusive Australian schools. *International Journal of Inclusive Education*, 14(3), 289-308. doi:10.1080/13603110802504549
- Hadjikakou, K., Petridou, L., & Stylianou, C. (2008). The academic and social inclusion of oral deaf and hard-of-hearing children in Cyprus secondary general education: Investigating the perspectives of the stakeholders. *European Journal of Special Needs Education*, 23(1), 17-29. doi:10.1080/08856250701791211
- Hung, H., & Paul, P. V. (2006). Inclusion of students who are deaf or hard of hearing: Secondary school hearing students' perspectives. *Deafness and Education International*, 8(2), 62-74. doi:10.1002/dei.190
- Kelman, C. A., & Branco, A. U. (2009). (Meta)communication strategies in inclusive classes for deaf students. *American Annals of the Deaf*, 154(4), 371-381. doi:10.1353/aad.0.0112
- Manitoba Education, Citizenship and Youth. (2009). *Educators' resource guide: Supporting students who are deaf and/or hard of hearing*. Winnipeg, MB: Author.

- Marschark, M., Spencer, P. E., Adams, J., & Sapere, P. (2011). Evidence-based practice in educating deaf and hard-of-hearing children: Teaching to their cognitive strengths and needs. *European Journal of Special Needs Education, 26*(1), 3-16. doi:10.1080/08856257.2011.543540
- Nowell, R., & Innes, J. (1997, August). *Educating children who are deaf or hard of hearing: Inclusion*. Retrieved July 17, 2011, from <http://www.cec.sped.org/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=4168>
- Silvestre, N., Ramspott, A., & Pareto, I. D. (2007). Conversational skills in a semi-structured interview and self-concept in deaf students. *Journal of Deaf Studies and Deaf Education, 12*(1), 38-54. doi:10.1093/deafed/enl011
- Slobodzian, J. T. (2009). The devil is in the details: Issues of exclusion in an inclusive educational environment. *Ethnography and Education, 4*(2), 181-195. doi:10.1080/17457820902972804
- Stewart, D. A., & Kluwin, T. N. (2001). *Teaching deaf and hard of hearing students: Content, strategies, and curriculum*. Boston, MA: Allyn and Bacon.
- Stinson, M. S., Elliot, L. B., Kelly, R. R., & Liu, Y. (2009). Deaf and hard-of-hearing students' memory of lectures with speech-to-text and interpreting/note taking services. *Journal of Special Education, 43*(1), 52-64. doi:10.1177/0022466907313453
- Thagard, E. K., Hilsmier, A. S., & Easterbrooks, S. R. (2011). Pragmatic language in deaf and hard of hearing students: Correlation with success in general education. *American Annals of the Deaf, 155*(5), 526-534.
- Wilkins, C. P., & Hehir, T. P. (2008). Deaf education and bridging social capital: A theoretical approach. *American Annals of the Deaf, 153*(3), 275-284. doi:10.1353/aad.0.0050

About the Author

Nicole Lehmann is the resource and band teacher at William Morton Collegiate in Gladstone, MB. After 17 years of classroom teaching, she decided to take on the challenge of studying toward a Master of Education degree in special education at Brandon University. She is happily married to a fellow teacher, and is mom and stepmom to five boys, aged 5-18.

Self-Harm: The Lack of Understanding

Jan Jebsen

Abstract

Awareness of an increase in self-harming behaviours among adolescents, an internationally recognized phenomenon, has resulted in wide-scale efforts to understand the underlying rationale behind acts of self-harm. The array of professionals who encounter individuals who self-harm, the lack of adequate training, the absence of consensus on terminology, and what behaviours define self-harm hinder the development of appropriate strategies and interventions. Professionals and researchers agree that continued research is warranted.

Moderate self-harming behaviour, which excludes both extreme acts of mutilation exhibited in patients suffering from psychoses and stereotypic behaviours displayed in autistic individuals or those impaired by mental retardation, has been identified as a major problem affecting adolescents, youth, and young adults in many countries world wide. Terminology used to describe the phenomenon is diverse and has hindered assessing the full extent of the issue. A further impediment to the development of a more complete understanding of acts of self-harm is the range of potential underlying or contributing factors. The array of professionals who encounter individuals who self-harm impedes both an accurate compilation and an analysis of statistics. Additionally, for most professions, there is currently limited training to assist clients, patients, or students who injure themselves. Appropriate strategies and interventions continue to be studied, developed, and made more readily accessible; the need for continued research is universally recommended.

World-Wide Phenomenon

Although publication of articles and research studies appear to have been undertaken in the United Kingdom for some time, governmental departments, professions, and organizations that are concerned about or promoting health issues, world wide, have more recently begun to study the phenomenon of self-harming behaviour. In a literature review analyzing 126 articles to identify relevant studies, Rissanen, Kylma, and Laukkanen (2011) cited research conducted in Australia, Canada, United States, Netherlands, Ireland, Belgium, Germany, Norway, and Finland. Self-mutilation, which dates back to Biblical times, is a culturally defined phenomenon influenced by religion, and depicted as both a “normal” and a “maladaptive” behaviour (Clarke & Whittaker, 1998, as cited in Rissanen et al., 2011, “Self-Mutilation as a Phenomenon,” para. 2). While research accessed did not originate from all regions or continents, an assumption could be made that self-harming is a universal phenomenon.

Terminology

Whether self-injurious behaviours are included or excluded in the list of factors describing self-harm depends upon the source of the information. While there is agreement on a basic definition of a deliberate, self-inflicted attempt to harm oneself that includes cutting, burning, scalding, scratching, hitting oneself with or without an object, and pulling hair (Nixon, 2008-2011), Balcombe (2011) included self-poisoning or overdosing). Most studies refer to acts of self-harm as non-suicidal, self-injurious (NSSI) behaviours (Prinstein et al., 2010). Thackray (2009) also drew the distinction between acts of self-harm and suicide, although the exclusion is not universal; Rissanen et al. (2011) found an interrelationship between self-mutilation and suicide. While self-harm could be seen as avoidance to commit suicide, the act “offers the possibility to carry it out” (Rissanen et al., 2011, “Interrelation between Self-Mutilation and

Suicide”, para.1). Fox (2011) included parasuicide and attempted suicide as well as individual acts such as self-cutting. The Canadian Mental Health Association (CMHA) additionally postulated that smoking cigarettes, drug and alcohol addiction, food disorders, and remaining in an abusive relationship could be included as deliberate, self-harming behaviours (“Youth and Self Injury,” 2011).

In order to understand the scope and extent of self-harming behaviour, consensus needs to be reached on what self-harm entails or includes. Additionally, a universal term to encompass all self-harming behaviours needs to be adopted. Currently, non-suicidal self-harm (“Youth and Self Injury,” 2011), deliberate self-harm (Fox, 2011), self-injury (Bowman & Randall, 2005), and self-mutilation (“Teen Self-Injury,” 2009) are nomenclature used to describe the act of harming oneself. Consensus on behaviours included and agreement upon a universal term to identify injuring oneself are steps necessary to establish an accurate baseline for the study and understanding of self-harm.

Contributing Factors

Underlying or contributing factors attributed to those who self-harm are both diverse and difficult to ascertain. Prinstein et al. (2010) studied peer influence and found a correlation between the risky behaviour that friends exhibited in the promotion of involvement in similar behaviour, suggesting “that peer influence may account for at least some individuals’ engagement in self-injury” (p. 670). They also found that females may be more susceptible. Simm, Roen, and Daiches (2010) found different motivations for males and females; males self-harmed both alone and with peers “to communicate with or influence others, or out of boredom” (p. 679). Females self-harmed alone due to depression or loneliness, to punish themselves or out of feelings of self-hatred. Picard (2011) reported that 7 out of 10 patients treated in hospital after self-injuring suffered from “mental illness and/or addictions” (“Health & Fitness,” para. 15). Emotional disorders and problems and low self-esteem were reported by Rissanen et al. (2011). Thackray (2009) found an increased number of incidents and severity of the self-harming behaviour in marginalized groups and introduced the role of oppression and powerlessness. According to “Youth and Self Injury” (2011), there is “no pattern or profile for self-injurers” (“Why Do People Self Injure?” para. 3), although most come from middle-to-upper class families and have intelligence levels ranging from average to high. The necessity of the adoption of a cohesive baseline, or categories within the moderate designation of self-harming behaviours, to both study and analyze statistics in researching self-harm, is evident in the development of a better understanding of underlying or contributing factors.

Professionals Involved

A self-harming individual “may come into contact with professionals in a variety of settings” (Fox, 2011, p. 41), which obscures the compilation of accurate statistics and impacts the adoption of a unified approach. Varying levels of training and working under a different understanding of self-harm have the potential to influence the therapeutic outcome (Fox, 2011). Hospital emergency room personnel would be involved if the self-inflicted wound(s) warranted medical treatment or if mental instability were suspected. Self-harmers may work with psychiatric practitioners, including nurses, as either inpatients or outpatients (Rissanen et al., 2011). A self-harmer may be referred to or seek the assistance of a community-based mental health worker or psychologist, a behavioural therapist, a support group (“Youth and Self Injury,” 2011), or a group therapist (Moran, Pathak, & Sharma, 2009). Teachers and counsellors are more likely to become aware of self-harming behaviours and work with individuals in a school setting (Fox, 2011). The range of professionals with whom a self-harmer potentially interacts further skews accurate statistical analysis of the extent of self-harming behaviours and impedes the development of a unified approach.

Prevalence

Due to the secretive nature of acts of self-harm, exact determination of the extent of the behaviour is difficult to ascertain. According to "Youth and Self Injury" (2011), 13% of adolescents have engaged in self-harming behaviours (Introduction section, para. 2). Simm et al. (2010) found that medical records do not provide an accurate estimation of incidents in the community. Interdisciplinary National Self-Injury in Youth Network Canada (INSYNC) estimated that 14-17% of high school students have experienced self-harm (Nixon, 2008-2011, "How Common is Self-Injury in Youth?" para. 1). According to Hawthorn and Harris (2008), the average age of those who self-harm is 12-14 years old (as cited in Balcombe, 2011). Simm et al. (2010) found self-harming behaviours at an increasingly younger age in studies with adolescents, which typically begin at age 11. Research among primary school age school children is limited due to concern with the possibility of encouraging detrimental interest and producing negative results. Conversely, intentional self-poisoning or self-injury "has been identified as one of the key mental health problems affecting students" at Oxford University (Mahadevan, Hawton, & Casey, 2010, p. 211). An exact determination of the extent of the problem of self-harming behaviour is also influenced by the inclusion of individuals who experimented or were influenced by a peer as opposed to hurting themselves as a coping strategy.

Further, in the "absence of psychological problems," self-harm is an act to relieve temporary forms of stress used by adolescents and youth and the behaviour "would be more likely to subside" (Lundh, Wangby-Lundh, & Bjarehed, 2011, Introduction section, para. 3). The correlation between psychological problems and self-harm can not be ignored; however, psychological problems present a risk factor for self-harm, and self-harm is a risk factor for the development of psychological problems in females in particular (Lundh et al., 2011). Picard (2011) suggested a link between self-harm and a lack of access to community mental health care. Wider-scale research into self-harming behaviours has increased relatively recently; it may be that more conclusive data on the prevalence of self-harm and the age groups predominantly involved will be more evident over time. While the use of self-harming behaviours as a coping strategy is increasing, accurate and reliable statistics have not yet been accrued.

Professional Training

Appropriate training to address the basic understanding of self-harming behaviours, perceived as an unacceptable practice, can positively influence the attitudes and beliefs of professionals who encounter individuals who self-harm (Rissanen, et al., 2011). Unwritten norms and rules governing social behaviour considers self-harm in Western cultures unacceptable (Fox, 2011). Deiter and Pearlman (1998) found that "self-harm can be the most distressing behaviour encountered in clinical practice" (as cited in Simm et al., 2010, p. 680). Professionals struggle to "understand a perceived lack of value for life" (Anderson et al., 2003, as cited in Fox, 2011, p. 43) and have expressed feelings of frustration (Fox, 2011). Educators' reactions to self-harming students were traumatic, bringing feelings of "alarm, panic, anxiety, and shock" (Simm et al., 2010, p. 680). Others described their sentiments as being "repulsed, bewildered, frustrated, sorry and mystified" (Best, 2004, 2005, as cited in Simm et al., 2010, p. 680). The consensus is for training and support to manage negative emotional responses (Simm et al., 2010) that have the potential to reinforce the stigma felt by self-harmers (Fox, 2011), resulting in increased self-harming behaviours. Simm et al. (2010) reported a general attitude of feeling "insufficiently confident or competent" and fearful, professionally unprepared to meet the needs of the self-harming person (p. 680). Adequate training for professionals who may encounter individuals who self-harm would enable them to be better prepared and increase the likelihood of a positive, productive and conducive therapeutic outcome for the self-harmer.

Strategies for Treatment

The appropriate method of effectively treating a self-harming individual is dependent upon the underlying cause of the behaviour (Bowman & Randall, 2005) and the expertise, position or relationship to the self-harming individual. The increasing prevalence of self-harming behaviour, used as a coping strategy among adolescents and youth in particular, is of great concern and has resulted in the development and refinement of specific strategies and interventions. Rissanen et al. (2011) contended that self-harm is a disorder, not an illness, although the designation has not formally been recognized in the Diagnostic and Statistical Manual of Mental Disorders IV (Bowman & Randall, 2005). Traditional therapeutic methods including cognitive behavioural therapy, Rational Emotive Therapy (RET), and Dialectical Behavioral Therapy (DBT) have shown to be successful in treating individuals who self-harm (Bowman & Randall, 2005). Pocock (2010) outlined a renewed emphasis on emotion, as opposed to cognition, as a basis of the therapeutic relationship in traditional family counselling. Research on computerized behaviour therapy (cCBT) has shown the intervention to be effective in treatment of specific anxiety disorders in children and adolescents (Richardson, Stallard, & Velleman, 2010).

The anonymity provided by utilizing cCBT programming may appeal to self-harmers who might otherwise be unwilling to participate, although high drop-out rates were problematic (Richardson et al, 2010). Computer technology has also provided easy and convenient access to a variety of programs and websites geared to mental health issues. Many are age specific or designed to assist or appeal to a particular societal segment. The Crisis & Trauma Resource Institute Inc. (CTRI, 2010) offers workshops on a range of topics, including Self-Injury Behavior in Youth – Issues & Strategies. The institute also provides consulting services to assist with incidents of crisis, violence, conflict and suicide (CTRI, 2010). The Centre for Youth in Society (CYS) recently partnered with Interdisciplinary National Self-Injury in Youth Network Canada (INSYNC) to host their website, which “acts as a networking opportunity for researchers working in the field of self-injury” (Nixon, 2008-2011, para. 2). The site additionally provides information and resources for self-injuring youth and their families. The CMHA offers educational information that may be useful to professionals, individuals, and family members (“Youth and Self Injury,” 2011). TroubledTeens101 provides direction for a multitude of issues affecting teenagers and their care-givers, including agencies to contact for assistance (“Teen Self-Injury, Self-Mutilation and Cutting,” 2009). The Ontario Centre of Excellence for Children and Youth Mental Health offers information on effective treatment interventions in addition to an outline of support strategies (eMentalHealth Team, 2005-2011). While effective treatment of individuals who self-harm is dependent upon the underlying or contributing factors, recent increased awareness and concern has resulted in a plethora of avenues for those seeking assistance. Information, direction, and support are more readily available for professionals, family members, and those who self-harm.

Future Research

Researchers pointed out a number of issues warranting further study. There is a need for more basic information and the construction of guidelines to assist educators and counsellors (Rissanen et al., 2011). Cooke (1999) believed that self-harm is a cultural phenomenon and must be studied from a cultural perspective (as cited in Rissanen et al., 2011). The lack of longitudinal data on NSSI risk factors is of concern to Prinstein et al. (2010). Although there has been no systematic review on the use of cCBT with children and adolescents, Richardson et al. (2010) advocated greater availability of the program. “Little is known about why an individual selects NSSI as a behavioral strategy” (Prinstein et al., 2010, p. 679), and research into peer influence is warranted. Further research into the attachment-based approach in family therapy, for better understanding of the role of familial relationships, is recommended (Robinson et al.,

2010). All of the journal articles accessed suggested continued research in the development of a more thorough and complete understanding of self-harm.

Conclusion

Moderate self-harming behaviour has been identified as a world-wide problem affecting adolescents, youth, and young adults. Although greater awareness and wide-scale concern have resulted in an increase in research, a lack of consensus impedes the development of a greater understanding of self-harming behaviour. The diverse terminology, the scope of underlying or contributing factors, and the range of professionals who may work with a self-harming individual hinders an accurate compilation and statistical analysis of the prevalence of the behaviour. Limited training for professionals working with self-harmers has an influence on the implementation of appropriate strategies and interventions. While information, resources, and support are more readily available, there is a universal call for continued research to develop a more complete understanding of self-harming behaviours.

References

- Balcombe, L. (2011). Engagement with young people who self harm. *Mental Health Practice*, 15(2), 14-19.
- Bowman, S., & Randall, K. (2005). *See my pain! Creative strategies and activities for helping young people who self-injure*. Chapin, SC: YouthLight.
- Crisis & Trauma Resource Institute Inc. (CTRI). *On-site training*. (2010). Retrieved October 19, 2011 from <http://www.ctrinstitute.com/onsite.html>
- CYS partnering with national self-injury *Centre for Youth & Society*, (2008-2011). Retrieved November 11, 2011, from <http://www.youth.society.uvic.ca/news/201010/cys-partnering-national-self-injury-website>
- eMentalHealth Team, (2005-2011). Self-harm behaviors (children and youth). *ementalHealth.ca*. Retrieved November 10, 2011 from http://www.ementalhelath.ca/canada/fr/_SelfHarm_Behaviors_Children_and_You
- Fox, C. (2011). Working with clients who engage in self-harming behavior: Experiences of a group of counsellors. *British Journal of Guidance and Counselling*, 39, 41-51. doi:1080/03069885.2010.531383
- Interdisciplinary National Self-Injury in Youth Network Canada (INSYNC). *For professionals*. Retrieved November 11, 2011, from <http://insync-group.ca/professionals.php>
- Lundh, L., Wangby-Lundh, M., & Bjarehed, J. (2011). Deliberate self-harm and psychological problems in young adolescents: Evidence of a bidirectional relationship in girls. *Scandinavian Journal of Psychology*, 52(5), 476-483. Retrieved November 11, 2011, from <http://onlinelibrary.wiley.com/berlioz.brandonu.ca/doi/10.1111/j.1467-9450.2011.00894.x/full>
- Mahadevan, S., Hawton, K., & Casey, D. (2010). Deliberate self-harm in Oxford university students. *Social Psychiatry & Psychiatric Epidemiology*, 45(2), 211-219. doi:10.1007/s00127-009-0057-x
- Moran, H., Pathak, N., & Sharma, N. (2009). The mystery of the well-attended group. A model of personal construct therapy for adolescent self-harm and depression in a community CAMHS. *Counselling Psychology Quarterly*, 22(4), 347-359. doi:10.1080/09515070903334573
- Nixon, M. (2008-2011). Understanding self-injury in youth: Research goals of INSYNC. *Interdisciplinary National Self Injury in Youth Network Canada*. Retrieved November 11, 2011, from <http://www.insync-group.ca/professionals.php>
- Picard, A. (2011, June 8). 17,500 Canadians were hospitalized for self-injury last year, CIHI reports. *The Globe and Mail*. Retrieved November 10, 2011, from

<http://www.theglobeandmail.com/life/health/new-health/health-news/17500-canadians-were-hospitalized-for-self-injury-last-year>.

- Pocock, D. (2010). Emotions as ecosystemic adaptations. *Journal of Family Therapy*, 32(1), 362-378.
- Prinstein, M., Heilbron, N., Guerry, J., Franklin, J., Rancourt, D., Simon, V., & Spirito, A. (2010). Peer influence and nonsuicidal self injury: Longitudinal results in community and clinically referred adolescent samples. *Abnormal Child Psychology*, 38(1), 669-682. doi:10.1007/s10802-010-9423-0
- Richardson, T., Stallard, P., & Velleman, S. (2010). Computerized cognitive behavioral therapy for the prevention and treatment of depression and anxiety in children and adolescents: A systemic review. *Clinical Child and Family Review*, 13(1), 275-290. doi:10.1007/s10567-010-0069-9
- Rissanen, M., Kylma, J., & Laukkanen, E. (2011). A systematic literature review: Self-mutilation among adolescents as a phenomenon and help for it - what kind of knowledge is lacking? *Issues in Mental Health Nursing*, 32(9), 575-583. Retrieved November 11, 2011, from <http://informahealthcare.com.berlioz.brandonu.ca/doi/full/10.3109/01612840.2011.578785>
- Robinson, J., Hetrick, S., & Martin, C. (2011). Preventing suicide in young people: Systemic review. *Australian & New Zealand Journal of Psychiatry*, 45(1), 3-26. doi:10.3109/00048674.2010.511147
- Simm, R., Roen, K., & Daiches, A. (2010). Primary school children and self harm: The emotional impact upon educational professionals, and their understandings of why children self harm and how this is managed. *Oxford Review of Education*, 36(6), 677- 692.
- Teen self-injury, self-mutilation and cutting. (2009). *Troubled teen 101-Help for troubled teen issues*. Retrieved November 2, 2011, from <http://www.troubledteen101.com/articles48.html>.
- Thackray, D. (2009). Book review. [Review of the book *Beyond fear and control: Working with young people who self-harm*, ed. by H. Spandler & S. Warner]. *Community, Work & Family*, 12(4), 473-476. doi:10.1080/13668800903192119
- Youth and self injury. (2011, May 1-7). *Canadian Mental Health Association*. Retrieved November 11, 2011, from http://www.cmha.ca/bins/content_page.asp?cid+3-1036.

About the Author

Jan Jebesen currently teaches grade 9, in a transitional PACE program at Mary Duncan, an alternative school in The Pas, Manitoba. Her pursuit of a graduate diploma in guidance and counselling should be completed in summer 2012 with tentative plans to do a self-harm research project for a Master of Education degree.

Strength-based Programming and Strategies for Autism

Lilianne Colter

Abstract

Students with autism spectrum disorder (ASD) have a variety of learning disabilities: they have difficulties socializing, communicating with others, and behaving appropriately. These students also have specific learning characteristics that educators can build upon during instruction; for instance, their preferences for visual learning. Strength-based programming and instructional strategies such as pivotal response teaching (PRT), video-modelling, and the power card strategy, focus on students' strengths and are effective in meeting the needs of students with autism.

Students with autism spectrum disorder (ASD) are often described negatively, in accordance with their wide range of diagnosed learning deficits (Bianco, Carothers, & Smiley, 2009). These students may be characterized as being hypersensitive or obsessive and have difficulties communicating, interacting socially, and behaving as typical students (Ontario Ministry of Education, 2007). Students with ASD usually receive educational interventions that target only their negative characteristics or deficits (Bianco et al., 2009). These students also have positive characteristics, strengths, or interests. They are good visual and hands-on learners, have special interests, and are often knowledgeable about specific topics or themes. Programming and intervention strategies that consider students' strengths and interests in addition to their deficits, can effectively teach students with autism (Bellini & McConnell, 2010). Strength-based programming or strategies consider the learners' strengths and prevent students' deficits from becoming a barrier to learning (Bianco et al., 2009). These approaches integrate a student's "unique and individual qualities" and compensate for the autistic deficits they may have (Wilkinson, 2011). Students with ASD can receive effective instruction in a strength-based program and using strength-based strategies such as pivotal response teaching, video-modelling, and the power-card strategy.

Strength-based programming builds on students' strengths and addresses the deficits of students with ASD. Many students with ASD have obsessive and limited interests (Bianco et al., 2009). For example, a student may obsess and verbalize a lot about dinosaurs. Teachers can take advantage of students' interests to teach a variety of academic and social skills, and to expand on their students' current knowledge (Bianco et al., 2009). In a strength-based program, thematic units and lessons are developed around students' interests in all areas of the curriculum. This programming approach is also motivational for students, as they are actively engaged in hands-on learning experiences in areas of interest to them. All students with autism have some degree of difficulty in communication (Saskatchewan Education, 1999). Strength-based programming develops the communication skills of students with ASD: they collaborate and interact verbally and nonverbally with their peers and the teacher (Bianco et al., 2009). This program also incorporates mentors or experts to support the student in their areas of interest. Mentoring provides "many educational, social, and emotional benefits" for children with ASD (Bianco et al., 2009, p. 209); it broadens students' knowledge about a particular interest, promotes self-confidence, and provides students with possible career directions.

Strength-based programming assesses students' learning authentically, or in the context of the real-world (Bianco et al., 2009). Students can demonstrate their understanding of concepts through engagement in a variety of activities that are authentic or applicable to their world. For example, a student who is knowledgeable about spiders can conduct a survey to find out what other students know or want to know about spiders, or to find out who may fear spiders. Assessments of students' prior knowledge and skills are conducted prior to beginning instruction. From these assessments, adaptations are identified to meet a student's particular

needs. Students who have mastered specific skills or concepts receive enrichment learning or work on a different area of interest. A strength-based program capitalizes on the strengths and addresses the deficits of students with autism, and thus effectively meets their needs.

An effective strength-based strategy for students with autism spectrum disorder is pivotal response teaching (PRT) (Stahmer, Suhrheinrich, Reed, Bolduc, & Screibman, 2010). This strategy works well because it incorporates students' interests and can be used to target a variety of behavioural deficit common to students with ASD. Students with autism tend not to follow directions and routines, be attentive, or behave socially appropriate. PRT can successfully improve students' verbal interactions, joint attention, (e.g., following eye-contact and gestures) and play skills. It is an approach that is based on the principles of applied behaviour analysis (ABA) and involves making, using, and evaluating modifications and strategies to improve the behaviours of students with autism.

The teacher begins PRT by providing a cue in the form of a question, or by displaying an object of interest to the student (Stahmer et al., 2010). For example, a student likes to play with balls and the teacher asks the student what colour a ball is. The teacher attempts to elicit the word "blue" from the student. If the student answers correctly, he or she receives the blue ball. If the student does not respond, the teacher will prompt the student by saying the word, and wait or cue for the student to repeat the word. Students' learning is optimized because the object, topic, or theme is of high-interest to them. The cue also gains students' attention, is at their level, and appropriate for obtaining the desired behaviour. The interaction between the student and teacher involves a series of exchanges or turns to target the learning goal. This turn-taking promotes a verbal/nonverbal social interaction whereby the teacher can model desired behaviours and add more complexity to the learning task. To ensure success, motivate, and build on students' knowledge, previous learning tasks are combined with new and more complex tasks. Students are also motivated by being provided with positive and immediate feedback, or by receiving an object that they desire. Pivotal response teaching is a valuable strength-based teaching strategy; it incorporates students' interests and can effectively meet their behavioural needs.

Video modelling is a strength-based strategy that incorporates the visual preferences of students with autism. This approach promotes the independent actions of students and can help them develop their "behavioral, self-help, communication, and social" needs (Ganz, Earles-Vollrath, & Cook, 2011, p. 8). Specifically, video modelling can "increase appropriate social interactions," diminish behaviour difficulties, and improve conversational, daily living, and play skills (Ganz et al., 2011, p. 9). Using a video format, students are taught target skills by viewing themselves or others completing a target skill. Students with ASD are adept visual learners; they can learn to complete a specific or complex task by focussing their attention on a small area such as a computer screen (Ganz et al., 2011). These students are also easily distracted by too much stimuli. This strategy eliminates unnecessary exterior information and distractions, and encourages students to focus their attention on a particular aspect of a task.

Video-modelling "involves demonstrating desired behaviours and role-playing" while being filmed on video (Ogilvie, 2011, p. 20). The desired behaviours or learning tasks are based on the needs of the student and often outlined in their individual education plan (Ganz et al., 2011). Once learning tasks are determined, teachers should plan on making three to five videos of each targeted skill in a variety of places and with a variety of different models. Short length videos with clear and sequential steps have a greater impact on students and can help them to master target skills (Ogilvie, 2011). In addition to the videos, there should be three to five different scripts prepared for each skill. Scripts can be used to improve verbal communication skills (e.g., how to greet someone, how to ask to play with someone) and to learn complex tasks (e.g., how to tie one's shoelaces, reheating a microwave meal). Students with ASD can watch, learn, and practise from viewing themselves, peers, or adults, completing the targeted tasks (Ganz et al., 2011). The videos become a permanent resource for students; they can review tasks at any time, independently, or with peers and teachers. The repeated viewing of videos

can aid students to practise the targeted skills and transform them into independent skills. Video-modelling is a strength-based strategy that builds upon students' visual preferences for learning and can be used to target a variety of learning deficits that are common to students with ASD.

The Power card strategy is another strength-based intervention used for students with ASD. A superhero or another character of high interest to the student is used as motivation to complete a learning task (Campbell & Tincane, 2011). Students with autism have difficulties interacting socially and have limited interests (Hutchinson, 2010). The power-card strategy is effective in enhancing the social and behavioural skills of students with ASD (Campbell & Tincane, 2011). The power card strategy uses direct and explicit instruction to teach students skills to use in specific social situations. The student is motivated and engaged by the character and wants to act as the character is portrayed on the power card. The power cards are written in the first person and include a picture of the special interest character or hero. For example, if a child has difficulties cleaning up after recess, a power card can be used to teach "how to clean up and why it is necessary" to perform this task.

The power card strategy is comprised of a series of learning steps. To begin, teachers carry-out direct observations of a student to identify their particular interests and problem behavioural areas. Combinations of teacher/parent/student interviews are also conducted to aid in identifying the unique interests and particular needs of a student. Next, a functional behavioural assessment is used to determine the possible reasons for the students' behavioural and social deficits. Once the targeted skills are determined, the teacher can begin developing a specific power card strategy to use with the student, and begin instructing the student. The students read and review the power card with teachers and other adults, prior to attempting the targeted skills. For example, a student may have difficulties in saying "good morning" to his or her peers. A power card with the words "I say good morning to students when they arrive off the bus," combined with an image of a special interest character (e.g., Bob the Builder) completing the task, can be created to target this skill. The teacher can create a learning situation by instructing the student to greet other students upon their arrival by bus: the teacher cues the student, reviews the card, and the student performs the targeted skill. As its name implies, the power-card strategy is a powerful strength-based tool that builds upon students' interests and improves their likelihood of learning a behavioural task.

Students with autism spectrum disorder (ASD) often receive programming and interventions that target their negative characteristics or learning deficits. Negative behaviours such as over-sensitivity, preoccupation, and specific problems related to communication, behaviour, or socialisation are often used as the basis for intervention. Characteristics such as students' visual or tactile learning preferences and students' strengths or interests are usually not considered when planning programs and strategies for them. A focus on both the strengths and deficits of students can provide a more encompassing approach to teaching students with autism; students' strengths can be used as the building blocks for learning and to target deficit areas. Strength-based programming and strategies such as PRT, video-modelling, and the power-card strategy take into account both the strengths and deficits of students with ASD and thus effectively meet the needs of these students.

References

- Bellini, S., & McConnell, L. L. (2010). Strength-based educational programming for students with autism spectrum disorders: A case for video self-modeling. *Preventing School Failure, 54*(4), 220-227.
- Bianco, M., Carothers, D. E., & Smiley, L. R. (2009). Gifted students with Asperger syndrome: Strategies for strength-based programming. *Intervention in School & Clinic, 44*(4), 206-215.

- Campbell, A., & Tincane, M. (2011). The power card strategy: Strength-based intervention to increase direction following of children with autism spectrum disorder. *Journal of Positive Behavioural Interventions*, 13(4), 240-250.
- Ganz, J. B., Earles-Vollrathe, T. L., & Cook, K. E. (2011). Video modeling: A visually based intervention for children with autism spectrum disorder. *Council for Exceptional Children*, 43(6), 8-19.
- Hutchinson, N. L. (2010). *Inclusion of exceptional learners in Canadian schools: A practical handbook for teachers*. Toronto, ON: Pearson Canada.
- Ogilvie, C. (2011). Step by step: Social skills instruction for students with autism spectrum disorder using video models and peer mentors. *Council for Exceptional Children*, 43(6), 20-26.
- Ontario Ministry of Education. (2007). *Effective educational practices for students with autism spectrum disorders: A resource guide*. Retrieved November 3, 2011, from <http://www.edu.gov.on.ca/eng/general/elemsec/speced/asdfirst.pdf>
- Saskatchewan Education. (1999, October). *Teaching students with autism: A guide for educators*. Retrieved November 2, 2011, from http://www.sasked.gov.sk.ca/branches/curr/special_ed/docs/autism/Teaching%20Students%20with/special_ed/docs/autism/Teaching%20Students%20with%20Autism%20Document.pdf
- Stahmer, A. C., Suhrheinrich, J., Reed, S., Bolduc, C., & Sreibman, L. (2010). Pivotal response teaching in the classroom setting. *Preventing School Failure*, 54(4), 265-274.
- Wilkinson, L. A. (2011). Best practice report: Evidence-based interventions/treatments. *Best practice autism*. Retrieved November 2, 2011, from <http://bestpracticeautism.blogspot.com/2011/04/best-practice-report-evidence-based.html>

About the Author

Lilianne Colter has been teaching for over 17 years in a variety of schools and programs. She is currently working as the pedagogical advisor for language programs at Canadian Forces Base Shilo in Manitoba, Canada. She is working toward her master's degree in special education at Brandon University.

Supporting English Language Learners with Reading Recovery

Jennifer Flight

Abstract

English language learners (ELLs) need to build competency with the English language quickly, in order to benefit from classroom instruction. Reading Recovery offers theoretical underpinnings which support accelerated language acquisition with valuable applications in a classroom setting. Teachers need to develop language as a meaningful whole, making connections between speaking, reading, and writing. By carefully observing a child's use of language, teachers can design instruction to build on the child's current language strengths. Learning a new language is complex and teachers must support ELLs by providing explicit teaching and massive opportunities to practise speaking, reading, and writing.

Learning to speak, read, and write are complex tasks. In the school setting, language develops through reading, writing, and speaking. During Reading Recovery lessons, most English Language Learners (ELLs) make excellent progress in speaking, reading, and writing (Reading Recovery Council of North America, 2007). Understanding the value of the speaking, reading, and writing connection in instruction would better support ELLs in early years classrooms. Reading Recovery procedures develop language as a whole, with explicit connections between reading, writing, and speaking. The theories of emergent literacy, working with whole texts, teaching from the known, and developing language through speaking, reading, and writing would assist ELLs in a classroom setting. ELLs need to be supported in learning and practicing complex literacy tasks.

Emergent Literacy

Language learning does not begin when students enter school. Children learn language from the time they are born and begin noticing the world around them. Whether children enter school with English as a first or an additional language, they have experiences on which to construct new learning (Clay, 2005a; Ruddell & Ruddell, 1994; Wilson, 2001). Children have learned that language is a social tool for receiving and sending messages (Halliday, 1994). ELLs have learned spoken language in their mother tongue and have an innate understanding that language is used to communicate.

ELLs come from cultural backgrounds that are likely different from that of the teacher. The more a teacher understands about the home culture and the social groups important to the child, the easier it is to build on language experiences (Wilson, 2001). When teachers make connections between home and school, ELLs are better supported (Chen, Kyle, & McIntyre, 2008). In fact, the function of language at both home and school is "to communicate, to understand, and be understood" (Cazden, 1988, p. 76). When teachers make an effort to understand students' home cultures and prior experiences with language, students are better supported in the classroom setting.

Working with Whole Texts

Speaking, reading, and writing are means of delivering or receiving an informative message (Halliday, 1994; Wilson, 2001). When working with ELLs, it might be tempting to teach small components of information in isolation, but the concepts of purpose and message will be lost. Without drawing on prior understandings of language as a means of communication, students lose "motivation to use such forms in personally meaningful situations" (Jones, 2011, p. 12). As a result, language development slows and students will be reluctant to speak, read, and write.

The Reading Recovery lesson is supported by a framework of work, with whole texts intertwining speaking, reading, and writing. Lessons are built on a framework of whole stories or messages. In every lesson, children read four or five whole books, talk about books, tell their own stories, and write a story. The teacher supports children's use of what they know in reading to help with writing, and what they know in writing to help with reading. Talking, reading, and writing improve when teachers "strengthen children's control over the structures of the language they use" (Clay, 2004, p. 1). A foundation of using whole texts in speaking, reading, and writing promotes understanding of language.

Determining a Child's Control of Language

Teachers need to understand the ELLs' ability to use language in speaking, reading, and writing before they can begin teaching (Manitoba Education, 2011). Reading Recovery teachers use tools and procedures to observe students control of language in reading, writing, and speaking (Kelly, 2009). Classroom teachers might consider gathering evidence of what students can do in one or more of the following ways: the Record of Oral Language task (Clay, Gill, Glynn, McNaughton, & Salmon, 2007), the Biks and Gutches task (Clay, 2007), running records of text reading, writing samples, and recording longest utterances. Teachers need to know what each ELL controls, and this knowledge supports further instruction (Alberta Education, 2009).

The Record of Oral Language task is delivered in a one-on-one setting with the child repeating sentences after the teacher. The sentences are graded for difficulty according to language structures. Students requiring additional language experiences can be identified (Clay et al., 2007; Clay, 2005b). The task also indicates which language structures the child uses correctly, or in other words "controls," in speech (Rodriguez-Eagle & Torres-Elias, 2009, p. 56).

The Biks and Gutches task prompts the child to answer to fill in the blanks by predicting what word comes next in the story. The responses are analyzed to see which inflections or word endings the child controls (Clay, 2007). Understanding the inflections a child controls can help the teacher to understand how to support a child to hear, speak, read, and write words with complex endings.

Running records of text reading provide evidence of language that the child controls. The teacher notices vocabulary and structures that are difficult and uses this information to support the learner in continued book reading (Clay, 2002). The running record also indicates whether the book is easy, instructional, or hard. Each child needs practice in reading books that are easy and can be read successfully (Clay, 2005b).

Writing samples collected on a regular basis provide evidence of language learning (Clay, 2005b). Writing is speech recorded in written form. For ELLs, teachers can note changes in sentence construction, tense usage, and clarity of message.

The classroom teacher might keep records of longest utterances produced by ELLs in the regular classroom setting (Clay, 2005a). This record provides evidence of the language structures children control and if noted by the teacher on a regular basis, evidence of growth over time.

Reading Recovery teachers are careful observers of student behaviours; classroom teachers also need to be keen observers of ELLs, in order to provide instruction built on students' language capabilities. Tools can be used to support observation of students' language competencies. The classroom teacher must have a way of observing and recording what ELLs can do, in order to determine what needs to be taught.

Explicit Instruction is Critical

Explicit instruction and high expectations are important for ELLs. Without quality instruction, the risk of ELLs dropping out of school is high (Fien et al., 2011; Pinnell & Fountas, 2009; Rodriguez-Eagle & Torres-Elias, 2009). Teachers can not instruct ELLs as they would instruct

children whose first language is English. Teaching ELLs requires specific consideration of “vocabulary and comprehension instruction, academic language instruction, increased practice opportunities through small-group instruction, and peer-assisted learning” (Fien et al., 2011, p. 149). ELLs have literacy needs that must be addressed.

Massive Opportunities for Speaking, Reading, and Writing

Improving language competency requires practice. ELLs require massive amounts of practice with speaking, reading, and writing (Manitoba Education, 2011). It is important to remember that English is a complex language, children make grammatical mistakes, and teachers need to work at understanding the child’s message, not correcting speech errors (Rodriguez-Eagle & Torres-Elias, 2009). ELLs may also speak with “the phonology and intonation patterns of their primary language” (Pinnell & Fountas, 2009, p. 441). Teachers must work to understand their message and not attempt to correct these differences. ELLs must engage in conversations (Rodriguez-Eagle, 2009), and teachers must plan to provide opportunities for talking. Through continued practice using language, children will learn the rules of how English sounds and how words are put together to make sense (Jones, 2011).

Language Learning in the Classroom

To support ELLs in the classroom, teachers need to consider the language structures that the students currently control. Teachers need to get ELLs to practise new language structures in ways which link speaking, reading, and writing. Teachers need to “get the new phrase or sentence: to the ear (listening), to the mouth (saying), to the eye (reading), and to the written product (creating text)” (Clay, 2004, p. 5). Using one or more of the assessment tools previously mentioned, teachers are ready to make effective teaching decisions.

Speaking Opportunities in the Classroom

ELLs need opportunities to speak in the classroom. Engaging in conversation is oral language instruction that extends vocabulary and grammatical skills (Bowyer-Crane et al., 2008). Students need opportunities to participate in meaningful conversations with more “expert” others: teachers, children with English as a first language, volunteers, or anyone whose English language proficiency is stronger than their own. Speaking and hearing language aids language development.

Genuine conversation needs to be guided by an expert. In Reading Recovery, the teacher engages the child in conversations about personal experiences and supports language development by re-phrasing incorrect structures in an acceptable manner for the child to hear (Van Dyke, 2006). Appropriation describes a child’s ability to use language that he or she had not previously been able to control. Re-structuring the child’s words puts the “teacher’s language . . . out there for the child’s subsequent appropriation if it is the ‘just-in-time’ language the child needs to be understood” (Van Dyke, 2006). The teacher’s language creates a scaffold, which is similar to the mother responding to a young child by continuing the conversation with more expert language structures (McNaughton, 1995).

The classroom needs to be structured so that ELLs have many opportunities to talk with more expert others. For children learning a new language, these opportunities are supported one on one or in small groups. Children might talk about books and share stories that they have written in a partner setting (Boushey & Moser, 2006). Children can be encouraged to work together to solve problems. Most young children are eager story tellers and, out of necessity, teachers often minimize the length of stories told because time is limited. ELLs must be invited and encouraged to tell stories (Rodriguez-Eagle, 2009). Teachers need to observe conversations carefully and “develop activities that encourage real dialogue between child-child

and adult-child” (Alberta Education, 2009, p. 13). ELLs require more opportunities to talk and use language.

Reading Instruction in the Classroom

Reading instruction in the early years classroom typically takes place in a guided reading setting, wherein the teacher works with a small group of students. ELLs can be supported in this setting, but thought needs to be given to book selection, introduction of new vocabulary, and language structures (Rodriguez-Eagle, 2009). Before the child reads a new book, the teacher must provide a supportive introduction by discussing the meaning of the story as a whole, and by considering the problem and solution in addition to new language structures. Although the interaction is social in nature, it is teaching (Clay, 1998). The social aspect of the guided reading setting facilitates language development in ELLs (Iddings, Risko, & Rampulla, 2009).

Careful book selection for ELLs ensures that the text is readable and understandable. By considering children’s control of oral language structures, through the Record of Oral Language or notes of the children’s longest utterance, the teacher can make a good match between the text and the readers. Teachers must anticipate what will be difficult (Pinnell & Fountas, 2009). The closer the grammatical structure of the text is to that of the children’s spoken language, the more the children’s language structures can help in reading a new book (Kelly, 2009). At the same time, the text needs to “enrich their English vocabularies, help them learn about English language syntax, and understand how texts are structured” (Pinnell & Fountas, 2009, p. 437), promoting new language learning. Thoughtful book selection by the teacher ensures children’s ability to read and understand the selected story.

The classroom teacher provides a critical link between reading and speaking by providing a thoughtful book introduction. The introduction engages children in conversation before reading a new text, and “helps ELLs become familiar with new concepts, text meaning, and English structures, and fosters their ability to problem-solve as they read new texts” (Kelly, 2009, p. 75). For ELLs, the introduction will likely include hearing and repeating language structures and unusual vocabulary used in the text of the new book, so that the structure can be used in reading (Cazden, 2005; Kelly, 2009; Rodriguez-Eagle, 2009). Talking about a new book before reading gives students opportunities to practise speaking the language before reading the language.

Writing Instruction in the Classroom

Writing begins with the children’s spoken language; writing is speech recorded in print form. Writing is a complex social activity which is strongly linked to speaking and reading (Harste, Burke, & Woodward, 1994). Teachers need to encourage complexity, not simplicity, when children record their stories, as complexity fosters language growth. In the classroom, ELLs could orally share their stories with a peer who might confirm, praise, and ask questions, further supporting language development. If ELLs orally rehearse before writing, they will have a way to say what they want to write.

Teachers need to be observant and monitor students’ writing to ensure that equivalent complexity is seen when comparing the children’s writing to their oral language and reading texts (Rodriguez-Eagle & Torres-Elias, 2009). Retaining the complexity of language is essential if children are to learn the nuances of language (Harste et al., 1994). Given teacher support, ELLs can be successful using advanced language, building a strong foundation for continued language development (Cazden, 1988). The writing of ELLs should match the language of their speech and the language they control in book reading.

In Reading Recovery lessons, teacher and child engage in a conversation that is developed into a story to be written down. Conversation would also support ELLs in the classroom to compose their own stories for writing. The value in the child recording a story that he or she has

developed through conversation with the teacher is that “the child can draw upon established speaking competencies” (Clay, 2001, p. 33). “Oral and written language grow and develop in parallel” (Harste et al., 1994, p. 60), increasing the efficiency of language development.

Children’s stories in written form provide familiar reading material. Children learn by reading and re-reading their own written messages, which contain language structures and vocabulary that are controlled in speech. ELLs could also share their stories with others (Wilson, 2001), bridging writing with reading and speaking.

Conclusion

ELLs have language learning needs that must be considered when teaching them as readers, writers, and speakers. Reading Recovery teachers need to observe carefully and build on children’s current understandings, by keeping texts meaningful: telling whole stories, reading complete books, and writing entire stories. Teaching must be explicit and must consider what children can do and what they need to do next. Reading Recovery teachers are required to provide massive opportunities for speaking, reading, and writing if ELLs are to become confident users of the English language.

References

- Alberta Education. (2009). *Working with young children who are learning English as a new language*. Retrieved July 23, 2011, from <http://education.alberta.ca/media/1093791/earlylearning.pdf>
- Boushey, G., & Moser, J. (2006). *The daily five: Fostering literacy independence in the elementary grades*. Portland, ME: Stenhouse.
- Bowyer-Crane, C., Snowling, M. J., Duff, F. J., Fieldsend, E., Carroll, J. M., Miles, J., . . . Hulme, C. (2008). Improving early language and literacy skills: Differential effects of an oral language versus a phonology with reading intervention. *Journal of Child Psychology & Psychiatry*, 49(4), 422-432.
- Cazden, C. (1988). *Classroom discourse: The language of teaching and learning*. Portsmouth, NH: Heinemann.
- Cazden, C. (2005). The value of conversations for language development and reading comprehension. *Literacy Teaching and Learning*, 9(1), 1-6.
- Chen, C., Kyle, D. W., & McIntyre, E. (2008). Helping teachers work effectively with English language learners and their families. *The School Community Journal*, 18(1), 7-20.
- Clay, M. M. (1998). *By different paths to common outcomes*. York, ME: Stenhouse.
- Clay, M. (2001). *Change over time in children’s literacy development*. Portsmouth, NH: Heinemann.
- Clay, M. M. (2002). *An observation survey of early literacy achievement*. Portsmouth, NH: Heinemann.
- Clay, M. M. (2004). Talking, reading, and writing. *Journal of Reading Recovery*, 3(2), 1-15.
- Clay, M. M. (2005a). *Literacy lessons designed for individuals: Part one, why? when? and how?* Portsmouth, NH: Heinemann.
- Clay, M. M. (2005b). *Literacy lessons designed for individuals: Part two, teaching procedures*. Portsmouth, NH: Heinemann.
- Clay, M. M. (2007). *Biks and gutches: Learning to inflect English, a guide for teaching*. Portsmouth, NH: Heinemann.
- Clay, M. M., Gill, M., Glynn, T., McNaughton, T., & Salmon, K. (2007). *Record of oral language: Observing changes in the acquisition of language structures, a guide for teaching*. Portsmouth, NH: Heinemann.

- Fien, H., Smith, J. L. M., Baker, S. K., Chaparro, E., Baker, D. L., & Preciado, J. A. (2011). Including English learners in a multitiered approach to early reading instruction and intervention. *Assessment for Effective Intervention*, 36(3), 143-157. doi: 10.1177/1534508410392207
- Halliday, M. A. K. (1994). The place of dialogue in children's construction of meaning. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (pp. 70-82). Newark, DE: International Reading Association.
- Harste, J. C., Burke, C. L., & Woodward, V. A. (1994). Children's language and world: Initial encounters with print. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (pp. 48-69). Newark, DE: International Reading Association.
- Iddings, A. C. D., Risko, V. J., & Rampulla, M. P. (2009). When you don't speak their language: Guiding English-language learners through conversations about text. *Reading Teacher*, 63(1), 52-61.
- Jones, N. (2011). Language choices: Responding to language diversity and deviation. *Journal of Reading Recovery*, 10(2), 5-13.
- Kelly, P. R. (2009). English language learners in primary classrooms: Literacy assessment and instruction. In C. Rodríguez-Eagle (Ed.), *Achieving literacy success with English language learners: Insights, assessment, instruction* (pp. 59-84). Worthington, OH: Reading Recovery Council of North America.
- Manitoba Education. (2011, June). Section 1: Overview. Draft. *Manitoba kindergarten to grade 12 curriculum framework for English as an additional language (EAL) and literacy, academics, and language (LAL) Programming*. Winnipeg, MB: Author. Retrieved July 23, 2011, from <http://www.edu.gov.mb.ca/k12/cur/eal/framework/section1.pdf>
- McNaughton, S. (1995). *Patterns of emergent literacy: Processes of development and transition*. Auckland, NZ: Oxford University Press.
- Pinnell, G. S., & Fountas, I. C. (2009). *When readers struggle: Teaching that works*. Portsmouth, NH: Heinemann.
- Reading Recovery Council of North America. (2007). *Reading Recovery and English language learners: Briefing paper*. Retrieved July 23, 2011, from http://www.readingrecovery.org/pdf/reading_recovery/ELL_Brief-07.pdf
- Rodriguez-Eagle, C. (2009). English language learners: Lessons learned from Reading Recovery. In C. Rodriguez-Eagle (Ed.), *Achieving literacy success with English language learners: Insights, assessment, instruction* (pp. 43-58). Worthington, OH: Reading Recovery Council of North America.
- Rodriguez-Eagle, C., & Torres-Elias, A. (2009). Refining the craft of teaching English language learners. *Journal of Reading Recovery*, 9(1), 53-61.
- Ruddell, R. B., & Ruddell, M. R. (1994). Language acquisition and literacy processes. In R. B. Ruddell, M. R., Ruddell & H. Singer (Eds.), *Theoretical models and processes of reading* (pp. 83-103). Newark, DE: International Reading Association.
- Van Dyke, J. (2006). When conversations go well: Investigating oral language development in Reading Recovery. *Journal of Reading Recovery*, 5(2), 25-33.
- Wilson, A. (2001). *Language knowledge for primary teachers: A guide to textual, grammatical and lexical study*. London, UK: David Fulton.

About the Author

Jennifer Flight is a graduate student at Brandon University, pursuing her M.Ed. in curriculum and instruction. An experienced early years teacher, she is currently a Reading Recovery Teacher Leader, supporting the implementation of Reading Recovery in the River East Transcona School Division and surrounding rural divisions.

Technology in Mathematics

David Schroeder

Abstract

Teachers are increasingly expected to integrate technology in their classroom while teaching mathematics, focusing on using graphing calculators. Teachers are professionals, and must commit to using technology through training in their school or researching it themselves. It is a progressive change that is useful for differentiated instruction and different learning styles, and it engages students in every lesson. Students and teachers alike are using technology constantly in 2012 outside of the classroom, and it can benefit students substantially if it is used as a teaching tool inside the classroom as well.

Teachers are professionals, and the kinds of technology they wish to employ in their classroom depends on their beliefs, philosophy, and comfort levels in terms of their class and the needs of the students. The leaders of a school must provide teachers with the required professional training to assist them in integrating technology into their classroom. Concerns regarding the use of graphing calculators in the classroom revolve around the expensive price tag attached to the calculators, as well as the perceived negative effect the tools will have on individual student's computation skills. The graphing calculator is a progressive tool that assists in differentiated instruction and benefits visual learners in being able to see the graph that they are working with. Using technology in the classroom stimulates the students and encourages them to engage in the lesson, because they are attracted to using similar technology in the classroom to what they use in their personal lives outside of the classroom.

There needs to be a significant amount of time invested in training new and experienced teachers in the use of technology, if they are expected to use it to teach their students. School administration must lead the integration of technology if they have expectations of their staff using it effectively (Ball & Pierce, 2009). There must be support for the teachers from the leadership in the school by means of professional development in technology. Teachers will not use technology if they are not confident in their abilities to use it (Ball & Pierce, 2009), because they do not want to be embarrassed in front of their students or colleagues. A substantial determinant of a teacher's use of technology is the confidence level in using it (British Education Communications, 2004). It is the responsibility of school administrators to develop their teachers' knowledge and confidence of using technology in the classroom and then place a level of expectation on their teachers.

Once teachers are properly trained to use technology at a high-level in their classrooms, it is their decision as a professional how much they wish to use it. The use of technology in teachers' classrooms relies profoundly on their beliefs and knowledge (Monaghan, 2004). Different departments within the school should have guidelines and expectations that are consistent throughout the different classrooms of those departments, and it is crucial that there is communication between the teachers of these departments. Many teachers complain about the frustrations of technology failing and its inconsistencies, which lead teachers to give up using it (Babstiste & Erdogan, 2008). These exacerbations should not drastically alter a teachers' use of technology, because every teacher should be capable of a back-up plan if technology fails. Regardless of a teacher's views or philosophies regarding the use of technology in mathematics class, they should be trained properly to be capable of using it.

Every classroom is filled with students who have varying skills and needs, and each class has different skills and needs relating to the use of technology. The role that a graphing calculator plays in a classroom is directly related to the teacher's theories relating to how it is used (McCulloch, 2011). Students in the twenty-first century are used to having their mobile devices in their hands, and they can compute any calculation or "google" any question that they

have on a world-wide range of subjects. Having a calculator in their hands will give them the same feeling of comfort and can relieve any anxiety in learning mathematics (Crowe & Ma, 2010). The confidence of students grows exponentially when they can use a graphing calculator and hold it in their hands, and they have a better attitude toward mathematics (Dunham, 2000, as cited in McCulloch, 2011). Allowing students to use a graphing calculator reduces anxiety for the students and brings the classroom closer to a real-world situation.

The cost of graphing calculators presents a concern in low socio-economic households and can prevent issues that are completely unrelated to how they are used in the classroom. Monaghan (2000) declared the algebraic calculator to be so costly that it is only for wealthy students. Schools that have lower socio-economic families should be supplying graphing calculators for the class in the same way that the majority of schools supply computers for students in a lab. The minimum a school should do is provide graphing calculators for students that must stay in the classroom or can be signed out at the library for a certain amount of time each day. Ball and Pierce (2009) referred to the cost as a major issue because of the equity problems. It would be completely unfair for certain students to use a graphing calculator on an examination simply because their family is wealthier than the students sitting next to them.

The graphing calculator is an educational tool that assists teachers in delivering differentiated instruction, specifically to students who are visual learners. These tools have the ability to “enhance students learning opportunities by selecting or creating mathematical tasks that take advantage of what technology can do efficiently and well – graphing, visualising, and computing” (Crowe & Ma, 2010, p. 187). Having the ability to visualize a graph on a graphing calculator after drawing it is an important tool for students to have immediate feedback on their work. Continually allowing students to use these tools gives them a chance to comprehend mathematical conceptions in a progressive manner (Forster & Taylor, 2000, as cited in Crowe & Ma, 2010). Graphing calculators are a powerful tool that can propel students into a higher level of thinking and understanding through their visual aid and different learning functions.

In Algebra I (grade nine) alone, there are a plethora of topics in each general textbook that can and should be studied using a graphing calculator. Subjects such as graphing systems of inequalities and equations, graphing linear relations, evaluating expressions, and factorization all include the use of a graphing calculator (Carter et al., 2005). Many chapters in the Glencoe Mathematics Algebra I textbook include a graphing calculator investigation section that clearly explains how to use a graphing calculator to solve a topic such as graphing radical equations (Carter et al., 2005). The graphing calculator can show multiple graphs that compare multiple inequalities representing the costs of two different mobile device plans, in order to evaluate which would be a more practical or affordable purchase. There are many ways to use graphing calculators within the curriculum in a way that relates to students’ personal lives and their interests.

There is concern that using calculators will weaken students’ computation skills, but the focus should be on the possibilities of higher-level thinking that using the calculator presents. Allowing students to use calculators’ challenges the teacher to focus on questions relating to evaluation style questions involving creating, designing and composing mathematical problems. Calculators provide students with an opportunity to solve complex real-world problems, (Cicci, 2001, as cited in Crowe & Ma, 2010). The use of the financial calculator is one example. It should be noted that students’ computation skills are not on talent checklists when deciphering talented students from the norm (Deal & Wismer, 2010). The concern of students possessing weak computation skills and dependency on calculators is an important concern (Dion et al., 2001, as cited in Crowe & Ma, 2010), but this fear relates more directly to those students’ prior math learning. The use of calculators generates more time for students to focus on problem solving and assists in more accurate calculations to solve those problems with (Dimock & Sherron, 2005, as cited in Crowe & Ma, 2010), so teachers can challenge students with higher-level thinking questions because there is no concern about the difficulty of computation. When

students use calculators, their teachers can ask higher-level problem solving questions where the focus is on their strategies and analysis and not their computation skills.

When students are engaged in a teacher's lesson, the teacher can focus on maximizing student learning rather than worrying about classroom management or maintaining the attention of the learners. One of the vital points to ensure students are learning is to ensure that they are engaged in the lesson (SMART Technologies, 2006), because if they are not involved or engaged there is little chance of retaining any knowledge from the lesson. Teaching with information communication technology (ICT) is essential to reach students in the twenty-first century because the students often use technology outside of the classroom. The expanded use of ICT has had a revolutionary effect on the different methodologies used in teaching and learning (Peeraer & Van Petegem, n.d.), and this should be the future of education. Students could use their knowledge of technology outside of the classroom to assist their learning inside of the classroom. Students are more likely to be involved and thoughtful while holding a graphing calculator in their hands, in comparison to simply holding their pen or pencil while working with the teacher through an example on the graphing calculator. Students are truly stimulated while graphing with the visual tool a graphing calculator provides, and they follow the lesson closely as their confidence grows with the opportunity to interact with the technology. The opportunity for learning increases dramatically when the students are attentive in the classroom and involved in the learning they are surrounded with.

If the leaders of a school have any interest in integrating technology into their classrooms, they will seek the necessary funds to train their teachers in using graphing calculators. Teachers who are not confident in teaching using technology need to be encouraged to learn and be trained properly and professionally before they can be expected to teach using technology. Every classroom is filled with students who have different needs, and it is the teacher's professional opinion how much ICT they use in their classroom regarding their beliefs of technology and the needs of their individual students. The amount of technology that students use outside of the classroom is remarkable, including laptops, iPads and smartphones; they are engaged in the classroom when technology is used, because it is so familiar to them. Teachers should not feel as if they have to integrate technology into their lessons without any assistance from outside sources. Many textbooks offer investigations and projects involving the use of technology, and the internet is full of lesson plans and videos suggesting that implementing technology is not only possible, but beneficial to the clients in every school.

References

- Babtiste, J-B., & Erdogan, E. O. (2008). Teachers' emergent goals in spreadsheet-based lessons: Analyzing the complexity of technology integration. *Educational Studies in Mathematics, 71*, 65-84.
- Ball, L., & Pierce, R. (2009). Perceptions that may affect teachers' intention to use technology in secondary mathematics classes. *Educational Studies in Mathematics, 71*, 299-317.
- British Educational Communications and Technology. (2004). *A review of the research literature on barriers to the uptake of ICT by teachers*. Retrieved October 30, 2011, from http://dera.ioe.ac.uk/1603/1/becta_2004_barrierstouptake_litrev.pdf
- Carter, J. A., Casey, R. M., Cuevas, G. J., Day, R., Hayek, L. M., Holliday, B., . . . , Moore-Harris, B. (2005). *Algebra I*. New York, NY: Glencoe/McGraw-Hill.
- Crowe, C. E., & Ma, X. (2010). Profiling student use of calculators in the learning of high school mathematics. *Evaluation & Research in Education, 23*(3), 171-190.
- Deal, L. J., & Wismer, M. G. (2010). NCTM Principles and standards for mathematically talented students. *Gifted Child Today, 33*(3), 55-65.
- McCulloch, A. W. (2011). Affect and graphing calculator use. *The Journal of Mathematical Behavior, 30*, 166-179.

- Monaghan, J. (2000). Some issues surrounding the use of algebraic calculators in traditional examinations. *International Journal of Mathematical Education in Science and Technology*, 31(3), 381-392.
- Monaghan, J. (2004). Teachers' activities in technology-based mathematics lessons. *International Journal of Computers for Mathematical Learning*, 9, 327-357.
- Peeraer, J., & Van Petegem, P. (n.d.). Factors influencing integration of ICT in higher education in Vietnam. Retrieved October 31, 2011, from http://www.vvob.be/vietnam/files/SubmissionGlobalLearnJP_v2.pdf
- SMART Technologies Inc. (2006). *Interactive whiteboards and learning: Improving students' learning outcomes and streamlining lesson planning*. Retrieved November 4, 2011, from http://downloads01.smarttech.com:80/media/research/whitepapers/int_whiteboard_research_whitepaper_update.pdf

About the Author

David Schroeder is in the graduate studies program at Brandon University, pursuing his M.Ed. with a specialization in educational administration. He is currently teaching Algebra I and Business Mathematics at the American Creativity Academy in Kuwait, while travelling the world during his holidays.

Literacy Rates in Manitoba

Ann Barbour-Stevenson

Abstract

Public education in Manitoba has the responsibility of graduating students who possess literacy skills that enable them to perform at high levels and to thrive in rigorous post-secondary education programs. While provincial standards tests in English language arts and mathematics provide some information in terms of literacy rates, data from other national and international standardized tests compares the performance of public education students in Manitoba to those nationally and internationally.

Students who graduate from high schools in Manitoba should have the requisite literacy skills to enter post-secondary studies. However, across Canada attention has fixed on the perceived declining literacy and numeracy levels of high school graduates. Canadian universities professors have commented on the lacking skill levels of new students, "There is no doubt that large numbers of first year post-secondary students have difficulty writing and in expressing themselves coherently, and in manipulating mathematical symbols and expressions" (Barbeau, as cited in Canadian Council on Learning, 2007, p. 7). In order to ascertain whether high schools in Manitoba are graduating students with sufficient literacy and numeracy skills to transition successfully to post-secondary education, it is worthwhile to assess the performance of Manitoban students on various standardized tests.

The Programme for International Student Assessment (PISA), sponsored by the Organisation for Economic Co-operation and Development (OECD), is a well-known international assessment of student literacy skills in three domains (Willms, 2004). The PISA was first introduced and administered in 2000 to 15 year-olds. The test sought to measure the mathematical, reading, and scientific literacy levels of the participants. Since 2000, the test has been administered in 2003, 2006, and 2009. While the three areas of literacy are measured with each test, in a rotational basis a stronger emphasis has been placed one of the three literacy areas (Bussiere, Knighton & Pennock, 2007).

The results of Canadian students on the 2000 PISA were favorable (Willms, 2004a). In comparison with the other 27 OECD countries who participated, Canadian students ranked second in reading, sixth in mathematics, and fifth in science. Overall, Canada ranked in the top seven or eight top-scoring countries. Based on the 2000 PISA, students in Manitoba were reading at the Canadian average. Willm's 2004 study of the data indicated that unlike in some other provinces, the social economic status of a family had no significant on the reading score of the individual in Manitoba. However, there was a significant difference between schools in middle or high social economic communities and those in low social economic communities. The students of schools serving a lower social economic population obtained reading scores significantly lower than both the Canadian and Manitoban average.

The main focus of the 2006 PISA assessment was science. On the combined science scales, Canada ranked third among the 57 participating countries (Bussiere et al., 2007). Provincially the results of Manitoban students were significantly lower than the Canadian average. Countries and provinces that performed better than Manitoba were Finland, Alberta, Hong Kong-China, British Columbia, Ontario, Canada, Chinese Taipei, Estonia, Japan, Quebec, New Zealand, Australia, Newfoundland and Labrador, and the Netherlands. The number of Manitoban students who performed at level 1, described as having great difficulty continuing studies in science and in daily life activities involving the application of science skills, was similar to the Canadian average. The number of Manitoban students who scored a level 5, at the high end of the continuum, was also consistent with the Canadian average.

Overall, Canadian students scored well on the reading and mathematics components of the 2006 PISA (Bussiere et al., 2007). When compared to the Canadian average, students from Manitoba scored lower than the Canadian average in reading. Provinces that scored higher than Manitoba on the reading component were Alberta, Ontario, British Columbia, and Quebec. In mathematics, students in Manitoba scored at the Canadian average. Again, Quebec, Alberta, Ontario and British Columbia scored higher than Manitoba in this area.

In Canada, reading performance of students has remained stable between 2000 and 2006 (Bussiere et al., 2007). In Manitoba, reading scores have experienced a statistically insignificant negative change from 2000 to 2006. Since the inception of PISA, the reading levels of Canadians and Manitoban 15 year-olds have been consistent. As with the reading tests, the scores of Manitoba students on the mathematics assessment have remained level (Busseire et al., 2007).

Analysis of the 2006 PISA data revealed some interesting trends. In Manitoba, girls performed significantly higher than boys on the science of identifying phenomena scientifically and reading (Willms, 2004b). Boys performed significantly higher on the science of explaining phenomena scientifically and mathematics. These data seem to indicate that gender is related to the academic proficiency of students in Manitoba. The analysis also revealed that the level of parental education and status of being an immigrant affected student performance. While students have access to the same programs of studies, it appears that in Manitoba student background and characteristics influence academic performance (SPR Associates, 2008).

On a national scale, the Council of Ministers of Education, Canada (2007) has developed the Pan-Canadian Assessment Program (PCAP) to ascertain the performance levels of Canadian students in reading, mathematics, and science. The PCAP assessment was introduced in the spring of 2007 with a main focus on reading and a secondary focus on mathematics and science. The assessment was administered to approximately 2000 13 year-olds in 100 schools across Canada. Based on PCAP, Manitoban students scored significantly lower than the Canadian mean on the reading component of the test. The results also indicated that Manitoba had higher numbers of students reading at the lower levels of one and two in comparison with the Canadian average. The percentage of student Manitoban students reading at the higher level three was 9% lower than the Canadian average (Council of Ministers of Education, 2007, p. 62). A comparison of scores based on gender indicated that both Manitoban males and females scored significantly lower than the Canadian averages for each gender (Council of Ministers of Education, 2007, p.63). In mathematics and science, Manitoban students scored significantly lower than Canadian mean. Based on these findings, the literacy and numeracy levels of Manitoban students are lagging behind their peers in other parts of Canada.

Prior to the introduction of PCAP, the Council of Ministers of Education (2004) supported the cyclical assessment program of School Achievement Indicators Program (SAIP). Before being replaced by the PCAP, SAIP was last administered in 2004 with a primary emphasis on the science skill levels of 13 and 16 year-olds. The SAIP revealed that the thirteen year olds in Manitoba performed at levels similar to those of their peers across Canada. The 16 year-olds Manitoban cohort performance was below the Canadian average at all achievement levels. The results of SAIP were repeated by result of the low academic performance of Manitoban students three years later on the PCAP (Council of Ministers of Education, Canada, 2004).

Like the PISA, the 2003 International Adult Literacy and Skills Survey (IALSS) measured the literacy performance of Canadians against an international standard (ABC Canada, 2005). The IALSS sought to profile the literacy levels of individuals over the age of 16 years. The results for the 2003 were compared to those of the 1994 IALSS (Human Resources and Skill Development Canada [HRSDC], 2005, p. 7). The decade between assessments saw little improvement to the literacy proficiency of Canadians.

Nationally, approximately 48% of the Canadian adult population performed below the desired level 3 on the prose and document literacy scales and 57% of the adult Canadian

population scored below the desired level on the numeracy scales (HRSDC, p. 9). In Manitoba, the average scores were not significantly statistically different from the Canadian averages.

One of the national goals for involvement with the IALSS was to examine the literacy performance of Aboriginal people (ABC Canada, 2005). The results of Aboriginal people in Manitoba and Saskatchewan were grouped together. In each of the age groups examined, the average scores of non-Aboriginal people were consistently higher than the average scores for Aboriginal people. To illustrate this phenomenon, approximately 60% of the urban Aboriginal population scored below a level 3 on prose literacy, compared to 45% of the non-Aboriginal population (ABC Canada, p. 4).

Other results of the IALSS, supported somewhat by the result of PISA, revealed a relationship between income and literacy level. Study of IALSS concluded that individuals from lower incomes have lower levels of literacy. This relationship has been described as the social gradient in educational outcomes (Fransoo et al., 2005). Family background has been labeled as a predictor of educational success. Progress up the socio-economic ladder is equated with stronger school performance and literacy levels.

To illustrate the social gradient, the results of the 2001/2002 grade twelve Manitoba provincial English Language Arts standards test were studied (Fransoo et al.). Upon first review, the results seem to indicate that students performed similarly regardless of socio-economic status, with 92% of students from homes of high economic status and 75% of students from homes of low economic status passing the test (Fransoo, et al. p. 7). However, when failure rates were compared, students from low socio-economic homes were three times more likely to fail than students from high socio-economic homes. A more complete picture evolved when data from the Manitoba Centre for Health Policy was included. By examining the 1984 birth cohort, researchers surmised that more than half of the potential students from low socio-economic areas were not enrolled in grade twelve and thus did not even write the assessment. The studies indicated that 20% of students from low socio-economic birth cohort had dropped out of school and that 36% were in grade eleven or lower (Fransoo, et al., p. 7).

Particular attention needs to be drawn to the literacy levels of Aboriginal people in Manitoba. Currently, Aboriginal people constitute 15% of the population of Manitoba, representing the highest proportion in any province or territory in Canada (Bear Spirit Consulting, 2007). The Aboriginal population in Manitoba is young, and by 2020 it is predicted that one in four people entering the workforce will be Aboriginal. As indicated previously, the literacy and numeracy skills of Aboriginal people lag behind those of non-Aboriginal people. It is estimated that 37% of Aboriginal youth in Manitoba have completed high school, compared to 63% of non-Aboriginal youth (Bear Spirit Consulting, p. 2). The 37% of Aboriginal people who do graduate from high school have literacy and numeracy skills that are lower than non-Aboriginal high school graduates.

A simple answer does not exist to the question of whether students who graduate from high school in Manitoba have the requisite literacy skills to handle the demands of post-secondary studies. In general, students in Manitoba tend to score at or slightly below the Canadian average on standardized literacy assessments. However, the scores of Manitoban students on standardized assessments have begun to drop. In Manitoba, literacy appears to be influenced by gender, school socio-economic intake area, and Aboriginal ancestry. For students to be successful in post-secondary education programs, high school graduation is not sufficient: students in Manitoba must graduate from high school with high literacy levels. Public schooling is challenged to ensure that all students attain high levels of learning and skill development.

References

ABC Canada. (2005, November). *International Adult Literacy and Skills Survey, findings regarding the literacy proficiency of Canadians*. Retrieved December 29, 2007, from http://abc-canada.org/media_room/media/ialss_summary_nov_05.pdf

- Bussiere, P., Knighton, & Pennock, D. (2007, December). *Measuring up: Canadian results of the OECD Pisa study. The performance of Canada's youth in science, reading and mathematics*. (ISSN 1712- 5472). Ottawa, ON: Statistics Canada. Retrieved January 6, 2008, from <http://www.statscan.ca/english/freepub/81-590-KIE/81-590-XIE2007001.htm>
- Canadian Council on Learning. (2005, October 28). *Do students entering university have the basic writing and math skills they need?* Retrieved February 10, 2008, from <http://www.ccl.ca>
- Fransoo, R., Ward, T., Wilson, E., Brownell, M. & Roos, N. (2005). The whole truth: Socioeconomic status and educational outcomes. *Education Canada, 45(3)*, 6-10.
- Human Resources and Social Development Canada. (2006, September). *Recent post-secondary education: National policy research*. Winnipeg, MB: Author.
- Manitoba Competiveness, Training and Trades. (2006, September). *Essential Skills*. Winnipeg, MB: Author.
- Rogers, T., Anderson, J., Klinger, D., & Dawber, T. (2006). Pitfalls and potential of secondary data analysis of the Council of Ministers of Education, Canada, national assessment. *Canadian Journal of Education, 29(3)*, 757-770.
- Willms, J. D. (2004). *Variations in literacy skills among Canadian provinces: Findings from the OECD PISA*. (ISSN 1704-8885). Education, skills and learning research papers. Ottawa, ON: Statistics Canada. Retrieved February 9, 2008, from www.statscan.ca/english/research.81-595MIE/81-595-MIE2004012.pdf
- Willms, J. D. (2004). Why the difference? Variations in reading scores among Canadian provinces. *Education Canada, 45(1)*, 43-44.

About the Author

During her career, Ann Barbour-Stevenson has had the opportunity to work as a regular classroom teacher, at-risk instructor, research facilitator, and career development resource person. She graduated from Brandon University in June 2011 with her Master of Education in educational administration.

The Way Forward: Strategic Leadership for the Manitoba Emergency Services College Instructor Network

Erin Cummings

Abstract

Managing educational organizations through the change process presents many challenges: the ability to engage stakeholders while respecting past practices; creating strategic leadership principles for sustained practice; and the adoption and implementation of professional development strategies. This paper explains the proposed course of action for the Manitoba Emergency Services College's engagement in the change process, including the incorporation of strategic leadership principles moving forward. It focuses on the role that management teams fulfil while working collaboratively with stakeholders in order to create clear, future-oriented leadership.

The Manitoba Emergency Services College (MESC) is no exception to the twentieth century challenges faced by educational institutions. They have encountered lower enrolment rates, rising operating costs, increased demand for diversification in program delivery methods, and requests for regionalization of training. In order to meet these demands, the MESC has begun to research the feasibility of bringing the vast MESC instructor network on as casual employees. Taking on the leadership of this instructor network poses several challenges for the MESC management team. First is the challenge of engaging the Manitoba fire service and the municipal instructors in this change while still respecting what has been done in the past. The second test will be creating a platform for strategic leadership that will sustain the instructor network. Finally the MESC will need to address the challenge of creating a professional development strategy to encourage and enable the MESC instructors' network in the continued cultivation of their skills and knowledge.

Background

The MESC is a branch of a provincial government department, the Office of the Fire Commissioner. The college was created in 1974 by the powers provided to the Fire Commissioner-of-the-day under the Fires Prevention Act. The mandate of the MESC is to provide free training to the Manitoba municipal fire service in order to meet the needs of their communities. Since 1984, the college has trained personnel from across Manitoba in specialty courses ranging from fire fighting, technical rescue specialties, to instructor programs. This effort has enabled the municipal fire service to sustain a degree of independence with the management of their training. Currently, the MESC maintains the certification for all programs as well as the training for instructors; the municipal fire service has been responsible for setting up and delivering courses in their municipalities through the municipal instructor network at the municipal or department level.

Recently, due to a number of changing variables, the municipal fire service is struggling to maintain the levels of training required within its communities. The college is observing trends of lower enrolment, reduced success rates, and greater frustration on the part of the students and instructors. This trend has led the MESC management team to begin researching the feasibility of bringing the MESC municipal instructor network on as casual employees of the college. By engaging in this course of action, the college can provide additional supports to the municipal fire service through instructor accessibility, reduced costs, increased instructor development programs, and improved quality control measures. In order to restructure the architecture of this provincial network, the MESC management team needs to engage the municipal fire service in the change process.

The Change Process

For an organization as diversified as the MESC, the proposed change of moving the municipal instructor network out of the employment of the municipal fire service, and on as contract employees of the MESC, may seem to be a simple process. However, when there is proposed change of this magnitude, organizations such as the MESC need to be prepared for the loss, anxiety, and struggle that will come along with the change, whether it is desired or resisted (Fullan, 2007). For successful, and most importantly sustainable, change to occur, the MESC needs to recognize that change is the response to external needs; diversification, standardization, and professionalization; thinking more imaginatively about the future; and regionalization, collaboration, and professional development (Senge et al., 1999).

This writer proposes that the MESC management team will need to recognize the local line leaders, network leaders, and executive leaders of the municipal fire services as allies and collaborators in the change process. These are the people with accountability for the results, and sufficient authority to champion the change process within the larger populace (Senge et al., 1999). It is imperative for the MESC management team to offer those individuals in leadership roles the opportunity and time to reflect on the organizational changes, in order to enable a seamless and more accepted change process. Fullan (2007) wrote, "Everything must change at one time or another or else static society will evolve" (p. 3). The MESC, as an educational organization, is no exception to this rule. For the MESC to succeed in the creation of a new architecture for the municipal instructor network, a new way of thinking must be engaged. The MESC will need to assign an ad hoc committee, consisting of representation from all leadership levels in the municipal fire service, to investigate the management of an instructor network that works as learning outcome teams (LOTs), placing learning above all else and overhauling the traditional architecture of education (O'Banion, 2007). The tasks of this committee would be outlined by the strategic leadership of the MESC management team.

Strategic Leadership

Hand-in-hand with change is the requirement for strategic leadership. The MESC management team will need to find a platform for leading the MESC instructor network into and through the change process. Strategic leadership is deliberate and focused, guiding an organization to the highest advantage, in order to maximize goal attainment. Quong and Walker (2010) proposed seven principles of strategic leadership. These seven principles state that strategic leaders demonstrate the following through their actions: (1) are futures oriented and have a futures strategy, (2) make evidence-based and research-led plans, (3) get things done, (4) open new horizons, (5) are fit to lead, (6) are good partners, and (7) do the next right thing. The MESC management team should adopt these principals to set the strategic direction for the ad hoc committee.

The strategic direction for the MESC ad hoc committee needs to begin by building coalitions of staff to create conditions for change to engaging these overarching principles throughout the strategic process (Davies & Davies, 2010). Initially, the MESC management team needs to envision or conceptualize the architecture of the new and improved management scheme for the municipal instructor network. In order to achieve the first principle of strategic leadership, the management team needs to provide a vision of "where we want to be" (Davies & Davies, 2010, p. 5). Using this vision, the ad hoc committee will become responsible for executing strategic leadership principles two-through-four. The committee will work with leaders within the municipal fire service to articulate the requirements for the operational level details. Vital to the sustainability of this program is for all persons involved to view their responsibilities as an ongoing process, not a project with a start or end date. As Hargreaves (2007) articulated, "When change has only a present or future tense it becomes the antithesis of sustainability" because "sustainable development respects, protects, preserves, and renews all that is valuable

in the past and learns from it in order to build a better future” (p. 226). Strategic leadership is continuous, collaborative, ethical, and believe in developing the knowledge capital of their networks.

The Way Forward

Moving forward with significant changes in the management of the municipal instructor network presents the MESC management team with an additional challenge or opportunity, depending on the vantage point of the observer. In order for this change to be successful, and for the municipal fire service to observe concrete benefits, the MESC needs to research and implement improved professional development models for this instructor network. Researchers and authors in all areas, including change management, strategic leadership, and organizational development, express the importance of investing in the knowledge and skills capital of the organization’s people. The results of this form of investment are immeasurable. This writer proposes two methods for the MESC to engage in ongoing professional development. The first is to research the development of an online continuing professional development platform, and the second is to facilitate community partnerships with other similar educational institutions and community organizations.

Professional Development

The MESC currently utilizes the online learning platform Moodle™ to deliver some theory-based courses. In order to lead change, the education development officer will attempt to incorporate the strategies of Hargreaves (2007), whereby “leaders of change . . . reuse, redeploy, and recombine . . . parts that organization already has lying around its corporate basement” (p. 226). The proposed manager of the instructor network, the education development officer at the MESC, could access this resource as a medium to cultivate the skills and knowledge of the instructor network on an ongoing basis. The development of this platform, like the architecture of the instructor network itself, will require the application of the seven principles of strategic leadership in order to be sustainable. The benefits of providing continuous professional development activities online – ease of use, reduced need for travel, and wide availability of information and resources – needs to be measured against the applicability and quality of the learning experience (Friedman, Watts, Croston, & Durkin, 2002). In addition to the aforementioned considerations, the strategic planning for continued professional development of the municipal instructor network also needs to account for the nature of the skills and knowledge to be developed. With this in mind, deliberation needs to be given to face-to-face opportunities and the potential for partnerships within the communities of Manitoba.

Community Partnerships

The creation of partnerships between the MESC and community organizations or educational institutions providing similar training could provide immense benefit to the MESC instructor network. These benefits could include, but are not limited to, research opportunities, joint exercises, skills development sessions, course or program development opportunities, access to facilities, and more. The facilitation of such relationships needs to be incorporated into the strategic leadership of the MESC management team and their future-oriented thinking. Sustainability of these relationships is another factor for the management team to consider during the development of their vision and organizational goals. Many articulation agreements or memorandums of understanding begin as formal processes or contracts; however, the general observation for most organizations is that, over time, these agreements become more about the trusting relationships and social values of the parties involved (Amey, Eddy, & Campbell, 2010). This social dynamic of relationships being at the core of such partnerships

demonstrates the importance for the management team to include succession planning as a key strategic indicator in their vision and goals for the MESc.

Conclusion

In conclusion, central to the success of changing the architectural structure of the municipal instructor network is the ability of the MESc management team to act as a change management team. Stakeholder collaboration throughout the change process, communication initiatives, and clear strategic direction, as well as continuous professional development through future-oriented visions and partnerships, are essential. The abilities of the MESc leadership team to think toward the future, collect research, make decisions based on evidence, be leaders of action, encourage risk taking, demonstrate concern for the health and well being of their most valued assets, the people, and uphold the trust and camaraderie of their partnerships through ethical actions will pave the way forward in the leadership of the MESc instructor network.

References

- Amey, M. J., Eddy, P. L., & Campbell, T. G. (2010). Crossing boundaries creating community college partnerships to promote educational transitions. *Community College Review*, 37(4), 333-347.
- Davies, B., & Davies, B. J. (2010). The nature and dimensions of strategic leadership. *International Studies in Educational Administration*, 38(1), 5-21.
- Friedman, A., Watts, D., Croston, J., & Durkin, D. (2002). Evaluating online CPD using educational criteria derived from the experiential learning cycle. *British Journal of Educational Technology*, 33(4), 367-378.
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). NY: Teachers College Press.
- Hargreaves, A. (2007). Sustainable leadership and development in education: Creating the future, conserving the past. *European Journal of Education*, 42(2), 223-233. doi:10.1111/j.1465-3435.2007.00294.x
- O'Banion, T. (2007). Creating a new architecture for the learning college. *Community College Journal of Research and Practice*, 31, 713-724. doi:10.1080/10668920701564016
- Quong, T., & Walker, A. (2010). Seven principles of strategic leadership. *International Studies in Educational Administration*, 38(1), 22-34.
- Senge, P., Kleiner, A., Roberts, C., Ross, R., Roth, G., & Smith, B. (1999). *The dance of change: A fifth discipline fieldbook for mastering the challenges of learning organizations*. NY: Doubleday.

About the Author

Erin Cummings, Education Development Officer at the Manitoba Emergency Services College (MESc), is currently specializing in educational administration in Brandon University's Master of Education program. She is responsible for consulting on educational issues, delivering train-the-trainer programs, administering the instructor cadre, and representing the MESc with national and international accrediting agencies.

OPINION PAPER

Using a Ning Social Network Site as an Alternative to Moodle: Thinking Outside the Learning Management System

Clark Gawletz

One of the first courses I was required to take for my Master of Education degree was an online offering that was delivered completely at a distance. The instructor had dedicated a great deal of time and thought into developing an online environment that promoted engaged discussion within a disparate community of graduate students, many re-entering the higher education milieu for the first time in a many years. The instructional design of the course included features such as podcast lectures accompanied by slide-shows, a discussion page used to explore topics in detail, a detailed calendar of events and deadlines, a section to post grades for the numerous assessments, and an atmosphere of collegiality that inspired and provoked thoughtful discourse about the subject matter. The site was well organized, with forums for weekly assignments, collaborative course work, lively discussion, and a sense of community that I seldom experienced in face-to-face delivery of higher education. The course, however, was hosted on a learning management system (LMS) known as Moodle. As a result, access to the site ended once the course was completed. The lively virtual dialogue and interactions that I had experienced with my classmates were no longer available, along with the connections made during the three months of virtual class time. I felt that my colleagues and I had missed an opportunity to create a sustainable community of learners. Although the course was well designed and highly functional, my right of entry did not extend beyond the time frame allotted by the LMS.

My ensuing graduate experience came the following academic session, and again the course contained a Moodle component. However, the instructor instituted an additional feature to the syllabus, one that utilized a newly added digital environment predicated on the notion that personal learning networks can be utilized for digital delivery of higher education. This particular instructor and a colleague had recently created a social network for educators using a Ning in Education platform to host interested individuals with links to BU's Faculty of Education. The goal of these instructors was to offer an alternative to institutionally based digital environments, such as Moodle. They hoped to establish a site that provided its users with more flexibility, increased chances for collaboration, and the opportunity to create meaningful professional connections in a virtual milieu. The purpose of this opinion paper is to compare the merits of an online social network to the utility of a traditional learning management system. I contend that the Brandon University Faculty of Education Ning site can provide an effective option to the institution's Moodle LMS, based on Ning's flexible and open features that promote an interactive community of educators.

The development of Web 2.0 social software has fundamentally influenced new approaches to teaching and learning. These applications include blogs, wikis, social bookmarking collaborative word processing programs, and social networking sites. The present lecture-based model of higher education is slowly being supplanted by a more participatory dialogue between instructor and student, owing to the collaborative nature of these Web 2.0 developments. The emergence of social software technology, characterized by their ease of use, free access, and collaborative nature, has greatly improved the use of computers for many facets of education programs at all levels. The premise of these programs is that open source software (OSS), freely available digital systems, should liberate the user from commercial software's limitations and impositions. The ramifications for distance education are significant, as geographical location is no longer an impediment for individuals in remote or rural areas to

be engaged in the teaching and learning process, as well as professional development opportunities. Thus, open source software that facilitates improved distance education delivery has also provided the opportunity to develop sustainable communities of practice. In essence, OSS offers a forum for a new style of professional development predicated on continued engagement within a group, designed to foster mentoring within a collaborative environment.

An emerging trend in higher education is to employ social network sites (SNSs) as places to deliver and promote online participation in courses, professional development sessions, and study groups. SNSs, including the seemingly ubiquitous Facebook, are popular applications that promote a sense of community in a virtual environment. The Faculty of Education Ning is a form of SNS that has been developed with the expressed purpose of fostering dialogues between present and former graduates, instructors, and staff associated with the Faculty at some point during their professional careers. Thus, members of Ning possess a common frame of reference, and are encouraged to contribute to the overarching sense of community afforded by the site. Now entering its third year of service to the faculty, the site has more than 550 active members, including participants from other educational jurisdictions such as the Manitoba Government Department of Education and Training.

The administrators of the Ning hope to attract an increased number of present and former faculty and students to the site by promoting it as an alternative to Moodle, BU's institutional LMS. Moodle is a popular option for hosting course materials and resources, owing to its default standing as the university's digital course management system. The Moodle LMS is a fixture of online course delivery in higher education. Moodle and other LMS platforms offer instructors a central depository for course outlines, calendars, grades, and discussion forums. Moodle can also be an effective online delivery system, when utilized in a manner not unlike the example provided at the beginning of this paper. However, the sites are often static, with little engagement or utility other than to store course information in a digital format.

There can be a decidedly top-down, "instructor-centric" feel to Moodle, and a lack of learner-oriented features utilized to promote discussion, collaboration, and cooperation. Thus, a Moodle-style LMS is in some ways simply a digital version of traditional models of teaching and learning. Instructors may utilize a modicum of features, such as posting a course syllabus, links to readings, and providing a means to upload assignments. These activities do not represent a paradigm shift in higher education, and fail to utilize the power of Web 2.0 applications as a means to enrich the delivery of material in a manner representative of 21st century educational technology. Other than the outlier I have discussed previously, this has been the case with the majority of courses I have taken that have been hosted on the Brandon University's Moodle LMS. Generally, the course design does not take advantage of the tools available on the site, functions that can foster meaningful dialogue and continued engagement for its participants. This lack of community building limits the effectiveness of Moodle as a genuine professional learning environment, and diminishes the online experience for instructors and learners alike.

The Faculty of Education Ning, in contrast, was chosen to allow all participants an opportunity to take control of their own virtual community, in a number of capacities. Each participant hosts a page with personal and professional information available for other Ning members to visit. The site has the capability to host groups for educational purposes, such as course offerings. Also, members can create a study group, mentor pre-service undergraduates enrolled in a course hosted on the site, and become involved in discussion regarding a particular educationally relevant topic. The Ning site is always available to any member with internet access. More importantly, individuals are encouraged and welcome to join the various groups (including course sites) formed on the Ning. The social aspect of Ning fosters interaction between groups, and can establish connections that might not exist without the impetus to interact freely outside one's own group.

The resulting relationships can provide opportunities for mentorship. Practising educators, for example, can assist pre-service teachers in their educational journeys by offering advice and suggestions gleaned from experience. I joined a colleague's group to become part of a

discussion regarding the merits of Moodle versus Ning. Although much of the discussion identified both Ning and Moodle as viable options for course delivery, I argued that I would not be able to participate in the debate if it was hosted on Moodle. This is an instance when communities of practice can overlap, giving Ning participants the type of freedom not readily available through learning management systems. It is Ning's cooperative, collaborative, and open environment that facilitates potentially dynamic interactions within its membership.

This virtual crosspollination and the ability to operate without many of the boundaries imposed by a traditional LMS, separates social networking sites such as the Faculty of Education Ning from the insular approach offered by institutional LMSs. There remains a great deal that can be accomplished with the Brandon University Faculty of Education Ning. The administrators continue to tweak and improve the site's functional aspects, and ceaselessly champion the network as a forum for academic discussion and collegial repartee. My own involvement with Ning centres on my thesis topic, an educational design research evaluation that will utilize qualitative inquiry to develop effective improvements to the site's efficiency and usability. My goal is to create a personal learning environment that provides an indispensable instrument for all members of the Faculty of Education Ning. The administrators hope to develop to develop Ning as a social networking site dedicated to producing communities of practice for all points on the education spectrum. Ultimately, it is conceivable that Ning can grow to include users from other faculties as well. In conclusion, Ning's success depends on the ability of its members to maximize the effectiveness of the features that set it apart from Moodle. Those features accentuate the social aspect of the site – namely, its openness and accessibility that allows for the convergence of teachers and learners in higher education.

About the Author

Clark Gawletz is employed by Campus Books at Brandon University. He is currently completing thesis work for an M.Ed. in educational administration, as well as a Master of Rural Development.

CELEBRATION OF SCHOLARSHIP

We are honoured to recognize the following students who defended M.Ed. projects and theses in 2009, 2010, and 2011.

Robyn Paulishyn

May 7, 2009

Project Advisor: Dr. J. Leseho

A Study of Counsellor Fatigue and Stress in a Small Urban School Division

This research study was designed to examine the effect of stress on counsellors and psychologists in the Brandon School Division. Eleven surveys were completed by Brandon School Division counsellors regarding their individual experiences. The survey contained both quantitative and qualitative questions to determine negative countertransference, vicarious traumatization/compassion fatigue, job stress/burnout, and specific wellness programs. The survey was completed in June and July of 2008.

Lylia Jardine

August 28, 2009

Thesis Advisor: Dr. C. Symons

Students' Success and Satisfaction with Online Learning: An Examination of a Secondary School Online Learning System in a Rural School Division in Southwest Manitoba

The challenges faced in providing online learning at the high school level include higher dropout rates, lower levels of student success, and lower levels of student satisfaction than those realized with on-campus courses. This mixed study gathered data from online teachers, online students, and an online coordinator in a rural school division in southwest Manitoba, in order to determine the factors that contribute to or detract from student success and satisfaction in taking online courses.

The participants included 50 online students, 5 online teachers, and 1 online coordinator recruited from the pool of students enrolled in online courses in the 2007-2008 school year. Quantitative and qualitative data were obtained from participants regarding their prior experiences with technology and their preferences for course design, learning activities, and learning supports in online instruction. Based upon the results of the study, an inventory of recommendations for students, teachers, online departments, and institutions was created that suggests strategies for improving the online learning experience for students.

Olga McIvor

April 30, 2010

Project Advisor: Dr. T. MacNeill

The Thinking Processes

The purpose of the master's project was to develop a "Thinking Processes" curriculum. The document will provide support for educators willing to implement a curriculum that will help students to expand their skills in decision making, creative thinking, critical thinking, problem solving, and metacognition. Students will learn "how" to learn, when they participate in the learning process as active thinkers and when thinking processes and thinking skills are part of their studies. Developing productive habits of mind is the focus of a thinking curriculum, because feelings, emotions, beliefs, and values are involved in teaching thinking.

Jill Martine

May 7, 2010

Thesis Advisor: Dr. I. Huggins

Understanding Literacy Development: One Child's Journey

A case study of Davey, a 45-month-old child, showed that through storybook reading children can learn many strategies and skills that will help them become successful readers. The themes that emerged from the data collected during storybook reading sessions showed that Davey developed print concepts, comprehension skills, reading strategies, knowledge of language, and a love of reading.

If one considers what a proficient reader does before, during, and after reading, Davey exhibited many of these strategies and skills, although he was not yet a reader in the conventional sense. However, the skills and strategies learned during storybook reading should allow him to confidently participate in school-related literacy activities and to further develop these skills and strategies in the read-alouds and shared readings in school. Furthermore, in guided reading, Davey will be able to use this knowledge to focus on the actual decoding of texts and become a reader in the conventional sense. This case study confirms the literature on emergent literacy: that children learn skills and strategies from storybook reading that will lead to future growth in literacy achievement.

Heather Linski

May 10, 2010

Project Advisor: Dr. C. Symons

Behaviour Disorders and the Gifted Paradox: Strategies for the Teacher

This retrospective examines the paradox between students with identified behaviour disorders who are also gifted. A classroom resource teacher examines her practice and develops strategies for success with students in a district behaviour program over a period of one year.

These students exhibited typical behaviour patterns associated with ADHD, ODD, and sensory processing disorder (SPD). These same students also displayed typical behaviours and traits associated with giftedness and Dabrowski's overexcitabilities. The teacher was able to demonstrate how behaviour disordered students could reach cognitive potentials and reduce negative behaviours by engaging in strategies typically developed for use with gifted and sensory processing disordered students.

Andrea Loepp

September 2, 2010

Project Advisor: Dr. T. Skinner

Teachers' Perceptions of the Role of Administration in Teacher Engagement

Focusing on educators, this project examines the perceptions of the role that teachers believe the school administration plays in their engagement in schools. Information was obtained from 14 elementary teacher interviews, and then summarized in a survey which was then distributed to thirty teachers in two elementary schools in the same division. Teachers were asked to respond to questions regarding their own engagement level as well as how their administrators, both past and present, have impacted their perceptions of their professional engagement.

The findings supported the literature on collegiality, collaboration, professional feedback, and support from the school administration for teacher engagement. The survey questions supported the findings from the individual teachers, while also providing insight into what

other aspects of professional administrative support teachers expect from school administrators. The results suggest that administrators need to pay particular attention to their “presence” in the school; this includes mentoring teachers, role modelling new initiatives, and providing effective leadership within the school.

Jacqueline Frost

November 1, 2010 Thesis Advisor: Dr. A. Okrainec

Summer Intervention: Improving Educational Outcomes for Children Living in Poverty

Cumulative years of summer learning loss can lead to significant learning gaps, sometimes resulting in school dropout. The purpose of this study was to determine whether participation in a summer learning enrichment program is associated with positive educational outcomes for children living in poverty. The summer learning enrichment program that became the focus of this study was established in 2003 in several target schools, catering to their at-risk populations and located in the urban core of a Canadian city. Thirty-nine school-aged children from grades 1-6 from one participating school were involved in the study (10 boys, 29 girls). In May 2008, classroom teachers administered a division-wide standardized baseline assessment in literacy and numeracy to all students in the school. Fifty-six percent of the 39 students participating in the study attended the five-week summer intervention program. The program included an academic focus in the morning and summer fun activities in the afternoon. All 39 students were re-assessed in the fall of 2008, after some of them participated in the summer learning program.

All children who attended the summer learning enrichment program either maintained or showed significant gains in numeracy; almost all children (90.4%) also showed gains in literacy. Unfortunately, 41% of the students who did not attend the summer learning program experienced “summer learning loss” in the areas of numeracy and literacy. These findings underscore the value of summer learning enrichment programs for students living in poverty. The study has implications for developing and maintaining summer enrichment programs in the inner city.

Trudy Zelmer

November 23, 2010 Project Advisor: Dr. J. Leseho

Peer Tutoring: A Secondary School Model

Peer tutoring is a unique form of student support that has the ability to expand the capacity of secondary schools to meet the needs of a broad range of students. Peer tutoring programs have the advantage of providing direct support to struggling students, while offering a broad range of benefits to the tutors and school system as well. This project explored the research supporting peer tutoring programs and followed with the development and implementation of a secondary peer tutoring program.

Lorelei Kelly

March 25, 2011

Project Advisor: Dr. I. Huggins

Reading Recovery 12 Years Later: A Longitudinal Study

Reading Recovery was first implemented in the 1996-1997 school year in School District 27. This study was conducted to determine whether the former Reading Recovery students were achieving at average levels 11 years after completing the intervention. In order to answer the question, the study compared the achievement of students who wrote the

Provincial English Language Arts at the end of grade 12. It examined the achievement levels of Reading Recovery students who were at the end of their grade 12 year, and the results show that these students had achievement levels similar to their classmates.

Also included is a review of the future plans of students after graduation, in an attempt to demonstrate that those students who participated in Reading Recovery in grade one have the same opportunities as students who did not require the early intervention of Reading Recovery.

Marian Goldstone

June 27, 2011

Thesis Advisor: Dr. C. Symons

An Educational Model for Assisting Students with Non-Verbal Learning Disabilities

The nonverbal learning disability (NLD) is a condition distinctly different from the more commonly known language-based learning disabilities. Scholarly literature regarding educational planning for the NLD student is, as yet, far from exhaustive. Also wanting is information presenting models to address the educational needs of NLD learners. Relying upon evidence from published research and literature, current practices, and the author's experience in special education, resource, and regular classroom, this thesis contributes to these areas of concern by –

- reviewing the scholarly literature regarding NLD,
- selecting twelve published case studies of NLD individuals and discussing them in relation to the literature review, and
- constructing an educational model to address the needs of NLD individuals, based on information gleaned in the literature review and the consideration of the case studies.

Rena Gillingham

July 11, 2011

Project Advisor: Dr. A. Okraïneç

The Little Resource: An ADHD Source for High School Teachers

This project consists of a number of evidence-based academic and cognitive-behavioural resources and programs that classroom high school teachers can utilize across whole classes to support students with ADHD, while also providing support for other students in the class. These resources have been presented in a multimedia website format with easy-to-download and print PDF documents.

BU JOURNAL OF GRADUATE STUDIES IN EDUCATION

Call for Papers

Brandon University's Faculty of Education invites current and past BU Faculty of Education graduate students to submit the following types of manuscripts for publication in the *BU Journal of Graduate Studies in Education*.

- Refereed Articles
 - scholarly papers dealing with specific issues in education
 - 2500 to 5000 words, including the title, abstract, and list of references
- Special Interest Papers
 - papers of useful, practical interest (such as proposals for services and programs), including a literature base
 - 1500 to 2000 words, including the title and list of references
- Research Reports
 - summary reports of educational research completed or in progress
 - maximum 1000 words
- Opinion Papers
 - focus on current issues in education
 - maximum 1000 words

Note to authors:

Prepare your manuscript according to the 2009 (6th) edition of the *Publication Manual of the American Psychological Association*.

Use double-spacing, one-inch margins, and Times New Roman 12-point font. Include the title of your manuscript, the type of submission (refereed article, special interest paper, research report, or opinion paper), your name, BU student number, email address, and a 50-word biography on the title page. Put page numbers in a header in the top right corner. For a refereed article, insert a 100-word abstract below the title on page 2.

Send your paper electronically to Dr. Marion Terry, Editor (terry@brandonu.ca), as an email attachment in Microsoft Word. Include the following copyright permission notice in the body of your email message:

This email message confirms that I agree with the following conditions of copyright: Copyright for articles published in the *BU Journal of Graduate Studies in Education* is retained by the authors, with first publication rights granted to the journal. By virtue of their appearance in this open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings.

All manuscripts that adhere to the content and style requirements will be reviewed. One of the following recommendations will be sent to you via an email message: accept, accept with revisions, or reject. If the recommendation is "accept with revisions," you will also receive the specifications for revision.

