

## **THE THREE-BLOCK MODEL OF UNIVERSAL DESIGN FOR LEARNING IMPLEMENTATION IN A HIGH SCHOOL**

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The role of the school leader (principal) in supporting educational reform is explored through a case study of one high school implementing the Three Block Model of UDL (Katz, 2012a) in an effort to meet the needs of a diverse student population. This case study is a part of a much larger study exploring outcomes for students and teachers of implementing the model with social and academic inclusion as a goal (Katz, 2013). In this article, analysis of the principal's field notes, photographs, and video evidence is detailed to illuminate a process for supporting inclusive education through teachers' professional development in universal design for learning. Results indicated the principal's efforts to provide teachers with professional development, planning time for collaboration, vision, and direct involvement in instructional delivery resulted in positive outcomes for both students' and teachers' learning, self-efficacy, and sense of community.

### **Introduction**

In Canada, it is illegal to discriminate based on a disability. Indeed, Canada is considered a leader around the globe in human rights. Educationally, Canada is a signatory to the Salamanca Statement that was adopted by the UN World Conference on Special Needs Education, which asserted that there was a "necessity and urgency of providing education for children, youth and adults with special educational needs within the regular education system" (UNESCO, 1994, p. viii). Law, policy, and reforms to overall education have addressed the need for a move to inclusive education in every province and territory (Canadian Council on Learning, 2007; Katz, 2012b). Despite this, a large number of students with disabilities continue to be

excluded from the regular classroom (Canadian Council on Learning, 2007). The role of school principals in this issue has changed (Macmillan, Meyer, & Sherman, 2001). At one time, principals were seen as managers of a system, not responsible for determining vision, or implementing evidence based practices. However, this role has changed and current definitions of the role emphasize educational and instructional leadership (DiPaola & Walther-Thomas, 2003). As such, the responsibility of implementing law and policy related to inclusion, and improving outcomes for students now fall within a school leader's purview.

Many questions have been raised about the practicality and efficacy of inclusion and inclusive education (Chmiliar, 2009; Curcic, 2009). After thirty years of research around the world, it is now clear that the presence of students with disabilities does not negatively impact the learning of other students (Katz, 2013). Students in inclusive classrooms show at least equal, and in many cases significantly better literacy and numeracy skills, scores on standardized tests, and college entrance rates than those in non-inclusive classes (Bru, 2009; Cole, Waldron, & Majd, 2004; Crisman, 2008; Kalambouka, Farrell, Dyson, & Kaplan, 2007; Timmons & Wagner, 2008). This research has been replicated over decades and across countries (Curcic, 2009). When inclusion is effectively implemented, research shows that typical students in classrooms that include students with disabilities develop stronger communication and leadership skills, have more positive attitudes toward diversity, and may also demonstrate superior reading and math skills to those in classrooms that do not include students with disabilities (Bunch & Valeo, 2004; Cole & Waldron, 2002; Kalambouka, Farrell, Dyson, & Kaplan, 2007). Students with disabilities in "high inclusion" classrooms (i.e. those utilizing effective, evidence based strategies) are in better social, mental, and physical health (Timmons & Wagner, 2009), demonstrate improved academic outcomes, including literacy, numeracy, general knowledge, and higher order thinking

(Ruijs & Peetsma, 2009), and outperform peers in segregated classes in life skills (Kurth & Mastergeorge, 2010; Myklebust, 2006).

If inclusion is both policy in Canada, and evidence based practice, then it is incumbent on school leaders to further its implementation. According to Fullan, “the moral imperative in education consists of the deep commitment to raising the bar and closing the gap for all students” (2013). Ainscow and Sandill (2010) point out that because inclusion is viewed differently by many different people, and there is therefore a lack of consistency in policy and practice, the role of the educational leader becomes paramount in steering schools toward a vision. Often, leaders who are successful in moving their schools towards a more inclusive model do so by sharing a vision, taking a strong leadership position on what is expected, and then gradually releasing responsibility to a more distributed form of leadership (Muijs et al., 2010).

The impact of inclusive education has been at times negative in the case of one population—teachers (Brackenreed, 2011). According to the Canadian Teachers Federation (in Brackenreed, 2011), 47% of teachers quit before retirement age, citing stress and lack of support as reasons. In general, teachers support the philosophy of inclusion—however, they feel ill equipped to teach diverse learners, and stressed by their perceived inability to “meet the needs” (Van Reusen, Shoho, & Barker, 2000–2001). In fact, a positive attitude has been shown to increase burnout, perhaps because those who believe strongly in the value of inclusion are most stressed by their perceived inability to make it work (Talmor, Reiter, & Feigin, 2005). For many teachers, it is the organizational climate that most affects their level of burnout (Lavian, 2012). Losing one half of the workforce is destructive to everyone—the system, the students, and the teachers themselves. It is therefore critical that

1. an instructional framework be developed to support both teachers and students in inclusive classrooms, and

2. a process for providing organizational support be identified.

As leaders, school principals are tasked with direction setting, developing people, and redesigning the organization (Jacobson, Johnson, Ylimaki, & Giles, 2005). Part of developing people includes supporting “peoples’ professional and (often) personal development by actively responding to their constituents’ needs” (p. 613). Determining how to develop teachers’ capacity to implement inclusive education and meet the needs of diverse learners, and building capacity towards these goals in personally supportive ways, are therefore likely to reduce teacher stress.

Universal design for learning (UDL) is a framework that guides the development of curricula and instructional practice based upon the needs of students (CAST 2013; Rose & Meyer, 2002). UDL involves designing a curriculum in ways that offer students more autonomy and personalisation by scaffolding difficult content or allowing students to express what they have learned in different formats (Meo, 2008). The principles of a UDL framework offer supports to assist students and teachers in disciplines ranging from high-school social studies to college courses (Abell, Jung, & Taylor, 2011).

The Three Block Model of UDL (Katz, 2012a) expands traditional UDL foci on technology and differentiation to explore both the social and academic practices of the classroom. Block one sets the foundation for inclusion through the Respecting Diversity (RD) program to build a class climate that respects diversity and encourages interaction through democratic classroom management. Block two includes a planning framework and teaching practices that allow for student choice so that students are able to develop conceptual understanding, and access activities and materials in ways that work for them. This process synthesizes evidence based practices for planning, instruction, and assessment of diverse learners in ways that reduce teacher workload and facilitate teachers’ ability to instruct small groups at

their instructional level. The UDL classroom created by this model maintains the high expectations set by provincial curriculum for all students, while supporting teachers’ self-efficacy and reducing the workload of trying to plan multiple programs (i.e. adapting multiple programs for individual students). In block three, the systematic and structural reforms needed to increase the efficacy of inclusion are delineated. The role of the principal in supporting teachers’ professional development, and distributing leadership are highlighted, in addition to the importance of collaborative practices such as co-teaching amongst staff.

### **THE 3 BLOCK MODEL OF U.D.L.**

<b>Systems &amp; Structures</b>	<b>Instructional Practice</b>
Inclusive Policy – No “Except!” Administrators with expertise/vision Distributed Leadership Professional Development Staffing for collaborative practice Team planning time, Scheduling in cohorts/teams Resource / EA allocations to classrooms / cohorts, Co-planning / teaching /assessing Budgeting changed from segregated practices/funding allocations Assistive technology Multi-levelled resources	<ul style="list-style-type: none"> <li>•Integrated Curriculum</li> <li>•Student Choice</li> <li>•Flexible Groupings / Co-operative Learning</li> <li>•Differentiated Instruction</li> <li>•Differentiated Assessment</li> <li>•Assessment for learning / Class Profiles / Strategic Teaching</li> <li>•Technology</li> <li>•Discipline Based Inquiry</li> <li>•Meta-Cognition – Assessment as learning</li> <li>•Understanding by Design / Essential Understandings</li> <li>•Social &amp; Academic Inclusion of Students with Exceptionalities</li> </ul>
<p><b>Social &amp; Emotional Learning:</b>  <b>Developing Compassionate Classroom Communities</b></p> <ul style="list-style-type: none"> <li>•Respecting Diversity Program (RD)</li> <li>•Developing Self-Concept                          Awareness of and pride in strengths and challenges                          Sense of belonging                          Goal setting and planning                          Leadership skills / opportunities</li> <li>•Valuing Diversity                          Awareness of the strengths and challenges of others                          Valuing of diverse contributions to community                          Sense of collective responsibility for well-being, achievement of all                          Empathy, Perspective taking, Compassion</li> <li>•Democratic Classroom Management                          Collective problem solving, recognition of rights and responsibilities                          Promotion of Independent learning, student choice &amp; empowerment, leadership                          Increase in student engagement, ownership</li> </ul> <p style="text-align: right; font-size: small;">© Dr. Jennifer Katz</p>	

*Figure 1. The Three Block Model of Universal Design for Learning*

The outcome of combining evidence based practices such as differentiating instruction, teaching to essential understandings, inquiry, and assessment for learning together in one comprehensive model is beginning to be revealed. Katz reports that the Three Block Model produces significantly positive results for students in grades one to twelve in terms of student engagement, autonomy, and positive interactions with peers and teachers (2012c). Students taught in classrooms using the model have reported an increase in their feelings of belonging and improved self-concept, and greater willingness to include others (Katz, Porath, Bendu, & Epp, 2012). Overall classroom climates have improved with increased pro-social behaviour and a reduction in aggressive and disruptive behaviour (Katz & Porath, 2011). It is particularly noteworthy that results were significant in the high school setting, as previous studies have emphasized the difficulty of effectively implementing inclusion in secondary settings (Mastropieri, 2001; McNeely, Nonnemaker, & Blum, 2002). In fact, research investigating student engagement revealed high levels of disengagement, particularly in secondary school, thus raising concerns about educational systems and pedagogies that do not create social and academic engagement and inclusion for diverse learners at the secondary level (Dunleavy & Milton, 2008). According to Willms, Friesen, and Milton (2009),

Across Canada, many students have told CEA (Canadian Education Association) that classrooms and learning as they are currently organized are not working. They are not working for students who can keep up with the pace set by the lectures, textbooks and tests, and they are not working for those who cannot. (p.5)

The Three Block Model of UDL has been shown to result in increased differentiation of instruction, and significantly improved student engagement at both the elementary and high school levels. Thus the evidence is mounting that the Three Block Model of Universal Design for Learning can be effective for all (Katz, 2013), and may provide an instructional framework that

supports both teachers and students in inclusive education classrooms.

This addresses the first need identified above. However, the need to create organizational supports remains.

Literature exploring the outcomes of both inclusion and UDL continue to raise two important questions about systematic implementation:

1. What is a supportive and effective process for implementing a change towards inclusive education and universal design for learning, and what is the role of educational leaders in supporting this process?
2. Given the structure of most secondary/high schools (i.e. subject specific teaching, large student populations, semester scheduling, exams...) how can inclusive education be implemented in ways that serve both teaching and learning for all students and staff?

### **Purpose**

What follows is an account of the implementation of the Three-Block Model of Universal Design for Learning in a rural high school in Manitoba. The purpose of this study was to address the two questions above: that is, to examine the process by which one high school effectively implemented inclusive education and universal design for learning, and how that process was facilitated by the school principal.

The active engagement of students in their learning is predictive of educational achievement, positive attitudes to learning, and student self-efficacy (Skinner, Kindermann, & Furrer, 2009). As well, if students are more engaged, teachers will have less challenging behaviour to deal with, and more time to facilitate learning—hopefully resulting in improved self-efficacy and job satisfaction. This requires teachers who know how to plan, instruct, and assess diverse learners in ways that support the social and academic inclusion of all students,

while also being efficient with their time and efforts. Training in universal design for learning can provide the skills and knowledge to achieve this goal (McGuire, Scott, & Shaw, 2006). Through the planning of instructional environments that increase accessibility, teacher workload is reduced, as there is not need to plan separate programs for students who cannot currently access the regular curriculum. At the same time, students benefit, as they are able to learn in interaction with each other, rather than being segregated and potentially stigmatized (Rose & Meyer, 2002). Thus student engagement can be used as a measure of the success of a move toward inclusive education—because if students are actively engaged in learning, in interaction with their peers, they can be said to have been socially and academically included. However, in order for any educational reform to be implemented on a systematic scale (as opposed to a classroom here or there), a process must be identified that illuminates the necessary training and supports that lead to sustainable change.

It is hoped that this case study will begin to illuminate a process for, potential barriers to, and benefits of implementing the Three Block Model of UDL in high schools.

## **Methods**

### *Participants*

For the purpose of clarity and exemplars, the account of the implementation will allude to a small high school in South Eastern Manitoba. Pseudonyms will be used to preserve the anonymity of staff, students, and the institution. The school, “Park West” (PW) has approximately 243 students from grade 7 to 12 and about 33 staff, including one full time principal. In Manitoba, students are funded at three levels (Manitoba Education, Training, and Youth, 2012). Level one students are block funded, and fall into high incidence diagnostic



categories such as students with learning disabilities, attentional challenges, and so on. Level 2 support is funded “based on the student's profile of need and level of support required for a major portion of the school day, and full time attendance” (Manitoba Education, Training, and Youth, 2012). Level 3 supports are provided “based on the student's profile of need and level of support required for the entire school day, additional specialized supports provided by the school division/district, and programming requirements significantly beyond those established for Level 2 support” (Manitoba Education, Training, and Youth, 2012). The school in this case study had 25 funded students at levels two and three (10% of the population), and a significant number of students who needed supports from student services who did not meet official diagnostic criteria, resulting in student services involvement for over a third of the student population. This school was very diverse as are many of our schools in Manitoba and around the world.

### *Data Collection*

This study reports on one piece of a larger study investigating outcomes of implementing the Three Block Model of UDL, in which students in ten schools completed surveys regarding self-concept, respect for others, and classroom and school climate. A subsample of students was also observed for engaged behaviour. Teachers completed surveys exploring changes in instructional practices, self-efficacy related to inclusion, and perceived student outcomes. Quantitative data for the larger study are reported in other articles (Katz, 2013). Of interest to this case study may be outcomes related specifically to the high schools in the study, including the high school being discussed herein.

Engaged behaviour improved significantly in the high school settings involved in the study when the Three Block Model of UDL was introduced as compared to control group

classes,  $F(9,32) = 89.584$ ,  $p < .001$ , partial  $\eta = .691$ . In practical numbers, this meant students in UDL classrooms were actively engaged 44/60 minutes, whereas those in control classes were actively engaged 16/60 minutes. Extrapolated across days, weeks, and months, this is a very large difference in time students would spend actively engaged in their learning. Academic engagement predicts achievement in and completion of school (Skinner et al., 2009). Students who are highly engaged at school learn more, get higher grades, and more often pursue higher education (Park, Holloway, Arendtsz, Bempechat, & Li, 2012). Thus these findings have significant implications for improving student engagement and achievement in high schools, and raise the question of how these schools achieved these results given the documented difficulties of doing so in secondary settings.

This study is a case study of one high school's process for implementation of the Three Block Model. The high school participated in the larger study during the 2010–2011 school year. Data for this study were collected by the second author, Mr. Sugden, who was the school principal, across a period of one school year beginning in September 2010. Methods included field notes, video observations and interviews, and photographs. Field notes comprising brief jottings, direct quotations, and episodes of dialogue were used. Data analysis was done through a thematic coding of these notes, videos, and photographs, and teachers surveys.

The account of the implementation will follow the Three-Block Model of Universal Design for Learning (Katz, 2012a): 1) Social and Emotional Learning (Respecting Diversity Program); 2) Inclusive Instructional Practice, and; 3) Systems and Structures. The account will also include a brief introduction of how and why the process started, a summary of the process overall, and comments on the effectiveness of the framework at the high school level. This implementation was the result of a school–university partnership, in which the first author, Dr.

Katz, a researcher and professor at a university, collaborated with the second author, Mr. Sugden, the principal of the school, to support teachers' professional development in, and implementation of, the Three Block Model of UDL.

### *Why Universal Design for Learning?*

The student population at PW was very diverse, and employed fourteen educational assistants who worked with a wide range of students in and out of the classroom. There was a need for an instructional framework that would allow for educational programming that was inclusive of all learners in the classroom. In the 2009–2010 school year staff had identified the need for a program that would benefit both teaching and learning of a diverse student population. At this point in time one of the staff at PW was enrolled in a course on Universal Design for Learning (UDL) at the University of Manitoba and suggested that we look into the framework. The principal at the school had recently embarked on research into UDL and a decision was made to introduce the program to staff. PW invited Dr. Katz, the first author, to present the Three Block Model to staff in the fall of 2009, and most of the staff collaboratively agreed to implement the model. The model became part of the school plan, and helped to drive the indicators of success and the data to follow.

### *Social and Emotional Learning (Respecting Diversity Program)*

The Respecting Diversity Program (RD) is a social and emotional learning program that was introduced to staff in the spring of 2010 at PW, to allow teachers planning time over the summer for the following school year. The program has been shown to develop students' self-concept and respect for others, and improve classroom and school climate (Katz &

Porath, 2011; Katz, 2013). Staff agreed to implement the RD program in September, followed by units designed using the framework of the Three Block Model. The program uses multiple intelligences theory (MI) (Gardner, 1983) as a framework for discussing learning profiles and diversity with students. The aim is to help students recognize that everyone has strengths and challenges, and that a learning community requires this diversity in order to successfully work collaboratively, think critically (as multiple perspectives are needed), and master the curriculum (as multiple skills are needed) (Katz & Porath, 2011). Ultimately, this idea that diversity is necessary for the functioning of a community, and that everyone contributes to the richness of the experience, can then be used to discuss what different cultures, races, genders, and other demographic differences contribute to the richness of the larger community.

Brain research has shown that learning requires both cognitive and affective processes, as emotions control a variety of academic precursors such as attention and memory (Levine, 2001; McCombs, 2004). This means that students must feel safe, comfortable, and positive about themselves and their community for them to be able to stay focussed, learn, and remember (Dwyer, 2002). The theory of multiple intelligences is a regular education reform movement that appears to include many of the teaching philosophies, techniques, and assessment methods found to be effective for developing social and emotional learning and positive classroom climates (Katz, 2012a). Students learn well through their strengths, and are more motivated academically when given opportunities to work in strength areas (Dwyer, 2002; Elias, 2004). This can be accomplished by helping students work through their multiple intelligences (Armstrong, 1994). As Elias eloquently states, “working through multiple intelligences is more than just pedagogy. It represents finding windows into the souls of children and ways to reach them in powerful and meaningful ways” (2004, p. 58). The recognition of these intelligences, and development of them

in students, would therefore provide a vehicle for SEL programs, as well as engaging students in academic activities that are more likely to be motivating and self-managed, and build self-efficacy. However, before these intelligences can be developed, they must be introduced to students and teachers, in a way that facilitates students' self-understanding and appreciation for others.

When school began in September 2010, a four foot by eight foot sign with the words "Respecting Diversity" and "Learning Through the Use of Themes" greeted students and staff as they entered the building. Most students were curious, and questioned staff about the sign and what it meant. The principal of PW met with each of the grade levels separately in an assembly and discussed the term respecting diversity. The students were asked "What does smart mean?" and "Who is smarter, Einstein or Crosby?" as a means of beginning the conversation about diversity and learning profiles. Students discussed the meaning of multiple intelligences and were aware that everyone is smart, and began to recognize that we are all diverse in the ways we learn and express ourselves. Students were then informed that they would be learning more about multiple intelligences, and that teachers would be learning about the students' multiple intelligences and their styles of learning in order to be more inclusive of their learning styles. In this way, the principal served as inspirational and motivational leader, became directly involved in program delivery—and then supported teachers taking on the leadership as the year moved forward.

The staff at PW decided to meet students in home rooms by grade level (grades 9–12) to discuss the multiple intelligences and survey their students. The grade 9–12 teachers used a power point and discussion groups designed by the teachers to explain the different multiple intelligences. The Middle Years teachers discussed the multiple intelligences with their students

and surveyed each student. The students built a brain out of plasticine and each student made a flag which signified their top intelligences (ways in which they are smart and learn best) and placed the flag on the brain. The brain was then used as a reminder of the diversity in the classroom and that everyone in the classroom had something to contribute within a community of learners. The surveys were collected and a school wide directory of student multiple intelligences at PW were used by teachers to inform them of the variety of learning styles when planning lessons. Teachers could use the data to understand individual and classroom profiles of learners, and thus assessment for learning was facilitated.

Students viewed a documentary called *Battle of the Brains* which helped students understand the diversity of our world around us and that being smart is not just about excelling in math, reading, and writing, or having the highest IQ; all people are diverse in the way they express themselves and learn, and that we need to respect each other's diversities. Students discussed the importance of working on weaknesses and setting goals. The Middle Years students viewed the video separately while the grade 9–12 students assembled in the gym. Each of the groups discussed the different careers connected to the multiple intelligences and understood the importance of each intelligence, and that as a collaborative group of people working together as a team, they could create a strong community of learners. Thus all nine lessons of the RD program were implemented.

Social and emotional learning programs are only effective when carried forward over time and in cross-curricular ways (McCombs, 2004). To carry on the program and maintain the social and emotional learning students had achieved, throughout the school year the principal invited guest speakers representing a variety of careers (teachers, athletes, actors, musicians) to the school to talk about the importance of setting goals. Students were encouraged to set goals

and create journals to track their goals. After each of the speakers students would go back to their home rooms to discuss and plan their own goals. Teachers then carried forth the idea that all students are intelligent, and that each learner can contribute to the learning of the community through their instructional practice, by planning activities that required multi-modal thinking and skills. The class profiles of students' learning were also used throughout the year. For instance, when one teacher was struggling with behavioural challenges in his class, he looked at the class profile, noted that two thirds of his class preferred kinaesthetic learning activities, and altered his unit plan accordingly. In looking at the results of this work (Katz, 2013), students in the high schools who took part in this programming showed significant gains in self-concept and sense of belonging, perhaps as a result of the time and emphasis the school placed on social and emotional learning and providing options for student success.

### *Inclusive Instructional Practice*

As stated earlier, the staff at PW learned about the UDL framework during a full day session in the early spring of 2010 prior to the next school year. A key aspect of the model is the implementation of cross-curricular themes and learning to facilitate students' learning and retention of concepts and skills (Katz, 2012a). Collaboration amongst teachers in such planning is critical, and the delivery of the content in a way that facilitates students understanding of the connection between what they are learning in each subject area, their own background knowledge, and their daily lives increases students' engagement and achievement, particularly for at risk youth (MacMath, Roberts, Wallace, & Chi, 2010). The principal arranged that staff at PW worked in four collaborative groups: 1) grade 7 teachers (two homeroom teachers, an Industrial Arts teacher, and a Physical Education teacher); 2) grade 8 teachers (two home room

teachers, a resource teacher, and one school councillor); 3) grade 9 and 10 teachers (one Social Studies, one Science, one Math, one resource, and one Physical Education teacher; and 4) Grade 11 and 12 teachers (one History, one Science, one ELA, and one Math teacher). The four student services teachers joined in with all of the groups, forming a group of four to five teachers in each of the four groups.

The groups were instructed to bring their curricula to an afternoon meeting to explore common themes and essential understandings for each of the grade groups. Teachers were given time to share the content of their courses with each other, and find connections amongst them. Because the school operated on a semester system, two units were designed for each grade level. All teachers would then connect their course/curriculum to the theme. Staff at PW decided on the following four themes: grade 7, “Earth Above and Below, and Diversity and Independence”; grade 8 “Human Progress and Water”; grade 9 and 10, “Safety, Consumer Decisions, and Sustainable Development”; grade 11 and 12, “Canada at War and Native Studies.” So, for instance, in the Canada at War theme, science teachers connected content to the scientific innovations of the war years (flight, splitting of the atom, etc.), history and geography teachers explored the cultural and geographical impacts of the great wars, language arts teachers selected literature from that time period, mathematics teachers used data related to the war (e.g., economics, populations, refugee numbers), and so on. For students, the unit allowed them to feel like they were studying one thing—Canada during the war years—across all subject areas. Students engaged in the unit through their own interests—military aspects, human rights issues, and changes in gender roles among them. The staff spent time sharing ideas, activities, and designing units based on the process suggested in the Three Block Model. Consideration for the learning styles and the diversity of students was essential in the development of lessons. Future



staff meetings allowed for further discussion and collaboration to build common links across the curricula. The principal consistently provided time for planning and reflection, and Dr. Katz attended occasional sessions, and was available for consultation, providing teachers with a sense of support and community, and reducing feelings of time pressure and incohesion.

Distributed leadership is a critical factor in any educational change (Harris, 2009). Teachers must be empowered as active participants in decision making (Hargreaves, 2007). In the fall of 2010 teachers met during common prep times, and participated in allocating a budget and developing a schedule for collaboration time to prepare for their universally designed units. In this way, they were empowered to take ownership over the implementation process.

### *Systems and Structures*

A servant leader is servant first. It begins with the natural feeling that one wants to serve. Then conscious choice brings one to aspire to lead. The difference manifests itself in the care taken by the servant - First, to make sure that other people's highest priority needs are being served. The best test is: do those served grow as persons; do they while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And what of the least privileged in society: will they benefit, or at least, not be further deprived? (Greenleaf, as cited in Crippen, 2005, p. 19)

School leaders are critical facilitators—supporting teachers, who in turn, support students who are otherwise marginalized or excluded. It is incumbent on principals, then, to support both staff and students, while holding high expectations for both. Leadership is especially important in schools serving diverse students and leadership for diverse populations needs to be practiced differently (Leithwood & Riehl, 2005). Leithwood and Riehl suggest that developing teachers' capacity to teach in powerful ways, and creating a sense of community are critical to leading inclusive schools. Principals need to invite staff to be involved in decision making, and then expect “those who accept the invitation to share the responsibility as well” and

implement decided-on changes (Schlechty, 2000, p. 185). The principal and staff at PW used the school plan as a vehicle to drive the Three Block Model of Universal Design for Learning.

Fullan (2013) points out that plans need to be balanced, a small number of goals set, and practical plans made, and then persistence is needed for follow-through. In PW, dates were set with staff responsible for the execution of defined tasks. The Respecting Diversity program started in September and dates were decided upon for homeroom discussions about multiple intelligences. The multiple intelligence surveys were administered and collected by the end of October. Teachers were expected to invite the principal into the classroom to observe Universally Designed Lessons at the end of term one and beginning of the second term, in an effort to insure implementation and collaboratively decide on further goals for teacher professional development, and any additional resources needed. This resulted in progress being made in terms of teachers' implementation of flexible groupings and differentiated instruction,  $F(7,34) = 3.779, p < .001, \text{partial } \eta = .438$ , such that teachers in secondary UDL classes utilized significantly more small group instruction while teachers in control classes grouped students in whole class and independent structures significantly more often. One student noted, "learning together works better than just listening to the teacher." However, some teachers in the case study school noted that these changes were not pervasive: "Good teachers teach in diverse ways. Other teachers teach the old traditional ways. Nothing has changed." This teacher's own practice had grown and evolved. However, she expressed frustration regarding what we know to be true about the change process—that change takes time, not everyone gets involved at the same time, or progresses at the same pace, and that leaders need to have "impressive empathy" and the ability to discern when to nudge, and when to push (Fullan, 2013).

Collaborative planning and co-teaching have long been cited as effective strategies for

supporting inclusion, building teacher capacity, and reducing teacher burnout (Damore & Murray, 2008; Murawski & Hughes, 2009; Talmore, Reiter, & Feigin, 2005; Tannock, 2008). However, critical to the efficacy of a professional learning relationship is the time to plan collaborative instruction, and lack of such time is often cited as a barrier to inclusion (Bennett, 2009; Kritikous & Brinbaum, 2003; Scruggs & Mastropieri, 1996). In PW, the grade 7 and 8 teachers were given common collaboration time built into their time table through the time tabling of combined grade 7 and 8 Physical Education classes and combined specialty courses such as Industrial Arts and Home Economics; this allowed the two homeroom teachers time to plan and collaborate on their unit and lesson plans. The grade 9 to 12 teachers met during common prep times when possible, and were given the option of booking a substitute teacher to allow for collaboration and planning. When asked what would help them implement inclusive instructional practice, many teachers acknowledged, and emphasized, the importance of this time to the success of the implementation: “more prep time and more collaboration time” was a common response.

A structure of support in the area of resources for activities and projects, and consultative services was also a consideration. Leadership in providing resources for projects played an intentional role in these structures. If the Physical Education teacher and the Home Economics teacher wanted to collaborate on a healthy food unit, they were given a budget to help purchase material for students to prepare healthy meals, make consumer decisions, and understand what foods are healthy.

The division employed coordinators in early, middle, and senior years; the principal sought out these coordinators and invited them to attend UDL professional development sessions and they were then utilized as a resource for teachers in the areas of backward design and

identifying the essential questions. Coordinators would book time with staff and work collaboratively on unit and lesson plans.

Inclusive leadership requires a building of the self-efficacy of both teachers and students, since teachers' attitudes and beliefs influence student learning (Ainscow & Sandill, 2010). Staff meetings at PW were designed to share observations by teachers and administration and to celebrate the successes of their journey. The principal took pictures of activities and projects developed by the students and staff, and shared these at staff meetings. In this way, he served as a visionary—constantly reminding staff of their goal, and their successes on the way to achieving that goal. The principal would ask students if they enjoyed expressing their learning in different ways, using activities designed to challenge their learning styles; and the overwhelming answer was that they preferred the variety of activities to express their understandings. One student said, “sitting in a desk is boring. I just zone out. I like to move around and work with other kids. I like this way better”.

The school turnaround movement created an increased focus on data based decision making (Leithwood, Harris, & Strauss, 2010). Data collection was another structure put in place to measure student engagement (passive and active), and student and teacher qualitative information. The University of Manitoba in coordination with Dr. Katz's research on UDL collected data both pre and post. Data revealed that implementation of the model doubled students' active engagement in their learning, and improved students' self-concept and perceptions of school and classroom climate (for detailed statistical outcomes, see Katz, 2013). Teachers reported an increased sense of self-efficacy regarding the ability to include students with disabilities, and meet the needs of diverse learners:

I was extremely organized due to this process, and the activities planned were better because of idea sharing. It reaffirmed what I have always believed in.

Thank you for giving me strategies and ideas that will make my job easier and enhance the school lives of my students.

### *Implications and Limitations*

As with all case studies, generalizability is limited. The purpose of this case, within the context of a larger study with more generalizability in terms of outcomes, was to highlight a process by which inclusive education was promoted in a high school setting, and the role the school leader played in this effort.

According to Leithwood and Riehl (2005), successful leaders of inclusive schools have three key characteristics:

1. **Setting the Direction**—Effective leaders define the vision, set the direction, and help people create a shared set of goals and the strategies for achieving them. The staff at PW were concerned about meeting the needs of a changing population of students. The principal led them to a discussion about the need for a change in practice, in order to meet the needs. Staff intrinsically believed that the Three Block Model would benefit the students, and were motivated to move towards more inclusive instructional practices. Like all staffs, there was a range of “buy in,” however, in general the staff had come to the conclusion that given a changing student population, a change in practices was necessary. Without this internal motivation, the process may not have been as successful. The staff also commented on the extrinsic rewards; they found that setting up the unit was time consuming but then allowed them plenty of time to work with students and assess students both formatively and summatively. Had planning time not been provided, this initiative may not have taken hold.
2. **Developing Capacity**—Teaching through modelling, intellectual challenge, and individual and collective support. As stated earlier, the principal played a key role in arranging professional development and consultation support, and meeting one to one with teachers after visiting their classrooms to determine learning goals. Observational data of the lived experiences of those involved in a cultural change toward inclusion are powerful. The principal in the school took time to observe in classrooms, dialogue with students and teachers, and document the process/outcomes over a school year. For instance, he observed grade 12 ELA students use drama, music, multimedia, oral presentations and model building to understand the culture during the Holocaust. The students were

engaged in activities that touched on almost every multiple intelligence, and developed a deep understanding of the global impact it had.

Observations of students in a grade 7 Industrial arts class, using drama, music, song, and multimedia to actively engage students in learning about safety made clear that such instruction was far more effective than a paper and pencil, true/false quiz sheet. Students had a deep understanding and could evaluate and analyze situations involving safety and were not just memorizing facts and parts of machinery. These students and the grade 12 ELA students were learning conceptually and thinking at the top of Blooms Taxonomy and were able to justify decisions and create points of view.

Thus, a key characteristic in the evolution of this process was the direct involvement of the principal in instruction – for both teachers and students. Principals who roll up their sleeves and enter classrooms to teach, who sit in on meetings and professional development days, who walk outside at recess and get to know kids, families, and staff are perceived as interested and involved — and are highly respected by all (Jacobson et al., 2005).

3. Redesigning the organization—Having an ability and willingness to reshape school culture and organization through challenging the status quo, introducing new initiatives, and collaborating to achieve new objectives. At PW, planning time, divisional support staff, and university professor support were all called upon to support staff in meeting their goals. At the same time, high expectations were held for staff and students, and communicated through assemblies, staff meetings, and individual conferences.

The leadership at PW was a balance mixture of Thomas Sergiovani’s servant leadership (1993), Micheal Fullan’s leveraging of school plans (2008), and Andy Hargreave’s collaborative approach to developing professional communities (2007). Not all the staff were fully involved in the process, while some had been practicing many pieces of the framework already.

The sustainability of the framework like any other framework would need to be practiced over a period of time to become part of the culture. The research and implementation took place in 2010–11 and leadership at PW changed in the fall of 2011. Despite this change, there are many staff who report they are still using the framework in 2012–2013, three years

after the initial training was provided. Clearly, the principal played a key role in a change toward inclusive education in this high school.

This case study, as with all case studies, is limited in its generalizability. The high school involved was a fairly typical rural high school—encountering challenges with student diversity, and seeking an instructional framework to improve teaching and learning. However, as it was a fairly small high school in comparison to some urban schools, the process followed to implement UDL may or may not be possible in much larger settings. None the less, this high school achieved impressive results, and we believe that for that reason, an exploration of the process they used to implement an inclusive educational reform is warranted and hopefully informative.

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