Enacting Glasser's (1998) Choice Theory in a grade 3 classroom: a case study

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ABSTRACT

Choice theory identifies five psychological needs: survival, freedom, power, belonging, and fun (Glasser, 1998). There are close parallels with self- determination theory (SDT), which specifies autonomy, competence, and relatedness as essential needs (Deci & Ryan, 2000). This case study examines a very successful example of choice theory enacted in a Grade 3 class. Despite no training in either choice theory or SDT, the teacher blended all the dimensions of these theories to provide a supportive **learning** environment in which mutual trust was key.

Keywords: Glasser, choice theory, theory to practice, self-determination theory, case study

INTRODUCTION

This paper will examine the enactment of Glasser's (1998) choice theory in a Grade 3 classroom, using the methodology of a case study (Yin, 2009). Glasser's choice theory will be used as a framework, and supplementary discussion will be based on self-determination theory (Deci & Ryan, 2000). This case is especially interesting because the teacher involved had no training in choice theory, and no knowledge of the principles or supporting research of Glasser's work.

CHOICE THEORY

Glasser's (1998) choice theory identifies five basic needs that each person seeks to satisfy. These needs are survival, freedom, power, belonging, and fun. Sullo (2007) describes Glasser's work as "the most comprehensive, fully developed psychology of internal control" (p. 8). Sullo continues that choice theory is " a biological theory that suggests we are born with specific needs that we are genetically instructed to satisfy" (p. 8). The five needs are sometimes elaborated. For example, survival may be expanded to include safety and security, as well as psychological survival/nourishment. Power may be framed as competence, both actual and perceived, thus impacting self-efficacy, self-esteem, and peer perceptions. Freedom is usually associated with choice. The choice must be actual rather than illusory, and must not be forced or restricted, although the number of choice options is important (Brooks & Young, 2011; Patall, Cooper, & Robinson, 2008; Schwartz, 2009). Patall et al. (2008) indicate that bounded choice, free choice with a limited number of options, is optimal. Three to five options allows real choice. Increasing the number of choice options results in ego depletion (Patall et al., 2008; Schwartz, 2009), in which large numbers of options forces the chooser to spend inordinate amounts of time considering the options, shifting the focus to the choice process and away from the quality of the options. An important tenet of choice theory is that each person acts intentionally to satisfy these needs. Therefore, every act is intentional, and every act is motivated to meet one or more of the five needs (Glasser, 1998). Like Sullo, the five needs are sometimes referred to as psychological needs or innate needs (Lloyd, 2005). Self-esteem (also referred to as self-concept, self-worth, self-image) is based on a person's thoughts, opinions, attitudes, and perceptions of self-efficacy, and is the basis for behaviors, including actions, interactions, and decision making (Zeeman, 2006). This illustrates how difficult it is to tease out elements of choice theory. They are intertwined with concepts of self, with metacognition, goal setting and goal monitoring, engagement, empowerment, and agency.

There are also links between Glasser's (1998) choice theory and Purkey's (as cited in Zeeman, 2006) invitational theory. Zeeman points out that there are strong similarities between the two theories: "Essentially, both Glasser and Purkey believe that we perceive the world looking for people or things that will satisfy what we want" (p. 47). Other researchers identify the importance of the social dimension in both learning and choice theory. Louis (2009) identifies the congruence of choice theory with Vygotsky. He lists three major propositions of Vygotskyan educational theory as the Zone of Proximal Development, assistance given by a more knowledgeable person (scaffolding), and psychological tools. The importance of social interaction enables scaffolding as well as the sharing of these psychological tools. To meet Glasser's five needs, social interaction is paramount. Louis outlines how the meeting of these needs might unfold in a classroom setting. Although, in my opinion, some of his suggestions

could be significantly improved, he does point out that the accomplishment of these needs results in feelings of pleasure. Therefore, emotion is a major component of needs satisfaction (Louis, 2009), and thus emotion is a major component of learning (Sullo, 2007).

> Another closely related concept is self-determination theory (SDT; Deci & Ryan, 2000). Self-determination theory conceptualizes psychological needs as essential nutrients that are required for optimal psychological growth and well-being. The needs for autonomy, competence and relatedness are thought to be universal across people and cultures and applicable throughout all aspects of a person's life. Autonomy refers to the experience of choice and volition in one's behaviour and to the personal authentic endorsement of one's activities and actions. Competence involves the ability to bring about desired outcomes and feelings of effectiveness and mastery over one's environment. Finally, relatedness reflects feelings of closeness and connection on one's everyday interactions. (Milyavskaya & Koestner, 2011)

There is a very close similarity between the two theories. Glasser's freedom need is reflected in SDT's autonomy. Belonging is very similar to relatedness, and power essentially identical to competence. Autonomy is identified as a major factor in intrinsic motivation (Deci, Vallerand, Pelletier, & Ryan, 1991; Milyavskaya & Koestner, 2011). As with choice theory, SDT presumes that all behaviors are intentional or motivated (Deci et al., 1991). Autonomy has been identified as a significant element in student engagement (Jang, Reeve, & Deci, 2010), and, more generally, needs satisfaction is seen as critical to engagement as well (Lewis, Huebner, Malone, & Valois, 2011).

Choice is a major factor in meeting the need for autonomy (freedom). For example, Gambrell (2011) lists choice as one of seven factors leading to increased student engagement in reading. Several researchers have identified choice as important for student motivation, and link choice explicitly to SDT (Brooks & Young, 2011; Katz & Assor, 2007; Patall, 2012; Patall et al., 2008; Patall, Cooper, & Wynn, 2010; Schwarts, 2009). Katz and Assor subdivide choices into autonomy-enhancing choices, competency-enhancing choices, and relatedness-enhancing choices, and give instances of how teachers can provide such choices in the classroom. They also point out (as do Brooks & Young, 2011; Schwartz, 2009) that the choices must be actual and not forced, and the number of choices must be bounded to avoid ego depletion. Schwartz identifies several studies that illustrate both the positive and negative effects of choice, where the negative effects occur when the number of choices becomes unwieldy, or the choice is not freely available, and the student is manipulated in some way to choose an option preferred by the instructor. Researchers have shown a direct causal link between choice and intrinsic motivation (Patall et al., 2010), and between intrinsic motivation and academic performance (Deci et al., 1991).

CASE STUDY

This paper examines a holistic, single case study (Yin, 2009), with the unit of analysis one Grade 3 class. The case examines diachronic covariation (Gerring, 2007) of student engagement, motivation, self-efficacy, and attitudes across one school year.

The research question was:

How can a teacher use choice theory to support and enhance student engagement, intrinsic motivation, attitudes towards learning, and self-efficacy, by fostering ownership of learning?

Propositions

- Teaching methods and activities that address student needs, as articulated in Choice Theory, will increase student engagement.
- Teaching methods and activities that address student needs, as articulated in Choice Theory, will increase intrinsic motivation, and thus student achievement.
- Teaching methods and activities that address student needs, as articulated in Choice Theory, will improve student attitudes towards learning, by increasing students' sense of ownership.
- Teaching methods and activities that address student needs, as articulated in Choice Theory, will improve student self-efficacy, by modifying the time constraint on learning, and shifting the focus to student accomplishment.

The primary method of investigation was semi structured interviews. Two 60-minute interviews and one 30-minute interview were conducted with the teacher. All interviews were recorded and transcribed. The first two interviews used a series of pre-specified questions, with elaboration and probing for clarifications. The third interview was to clarify questions that arose during the transcription and case write-up. Construct validity was addressed in multiple ways. The teacher involved read a draft of the case report to ensure accuracy. Data were triangulated using teacher artifacts (specifically, the teacher's daybook from that year), plus informal discussions with six of the students when they entered secondary school, 6 years after the Grade 3 class. Information in the daybook included daily lesson plans, teacher planning notes and ideas, comments on individual students, and student evaluations. However, the most prominent feature of the daybook was its flexibility and fluidity. The teacher commented that although she was always well-planned, a single student question had the potential to alter the entire day, moving expectations from a planned, possibly distant day, to the current day, and altering both content and sequencing for the day. Thus, she had to be "over prepared," and could not be functioning on a day-to-day planning basis. The teacher reported that she encouraged these deviations from her daybook, based on current student needs or interests. In the later informal student discussions, all six students interviewed in secondary school characterized their Grade 3 year as the highlight of their elementary school education. They recalled the year as one of lots of fun and lots of learning.

This case study examined one Grade 3 class over one full school year. The class was one of five Grade 3 classes in a Kindergarten to Grade 5 school of 700 students. The school is located in a suburban area of Ontario, Canada, in a city of approximately 500,000. Both the city and the school are ethnically diverse, with significant minorities consisting of South Asian, Black, Caucasian, and East Asian. The class consisted of 25 students, 14 males and 11 females, ages 8 and 9. There was a broad range of ability levels, with most students working at grade level, but several at least one grade below, and three working above grade. The teacher had 21 years of experience, from Grade 3 through Grade 12. She had been a secondary school department head for 8 years, had 10 years' experience in middle grades (Grades 6,7,8), and the previous year had been her first teaching Grade 3. The teacher also had extensive, successful

coaching experience at the community college and secondary school levels. In this coaching, she routinely made use of goal setting and motivational strategies. The teacher had no prior knowledge of choice theory or self-determination theory, and all strategies implemented in her Grade 3 class were self-generated, without specific training or research.

The teacher's motivation for implementing a choice program was based on her experience in her previous year teaching Grade 3. She was disturbed to find that most students in her class had lacked motivation, critical thinking skills, and independent work habits She frequently was asked questions such as "Should I sharpen my pencil?" This is consistent with Nuthall (2007), whose research noted that as students progress through formal schooling, both the quantity and quality of student questions decreases significantly. Nuthall speculated that this is due to the teacher assuming the role of questioner, compared to pre-school situations, where the child generates the majority of questions asked throughout the day. Nuthall compares several hundred questions per day by a pre-school child to an average of three student questions per day by a typical Grade 8 student. When contrasted with the teacher's experience at other grade levels, especially secondary students and college athletes, this lack of independence was the impetus to modify the program for the incoming Grade 3 class, with the goal of having the students take more ownership of their learning.

Freedom

Choice was a cornerstone of the program. The teacher employed a process she called "opening my daybook." When class began in the morning, the teacher would identify cooperatively with the students "What do we need to learn today?" She would open her daybook to the students, identifying topics and expectations that were the focus of the day. She would also identify blocks of time in which the teacher planned to carry out specific activities or lessons. For example, from 10:00 AM to 11:00 AM, we will be doing a math lesson in groups. The topic will be two-digit addition. There will be some questions to work on chosen from your textbook, on page 26. From 2:00 PM to 2:30 PM, as a whole class, we will be reading the story *The Lion, the Witch, and the Wardrobe*. The questions we will be answering about the story are listed on the board. Once the teacher's time blocks were identified, the students employed a strategy, "Must Do, Should Do, Could Do." On cards, each student identified his or her goals for the day, and longer term goals for the week. Each student then specified during what time periods of the day they planned to work on each goal, although the time commitments could be flexible. For example, a student might identify a Must Do goal of "finish the first draft of my paragraph;" a Should Do goal of "review spelling words with my partner for Wednesday's test;" and a Could Do goal of "plan my art presentation." Each student's goals were different, but chosen from their personal list of outstanding work, plus future planned activities. This is consistent with Schwartz's (2009) research on bounded choice. The goals might or might not be related to the teacher's planned activities for the day. If a student was already familiar with the story, he or she could choose to work on the questions before the afternoon reading activity. They could then choose to read a different story during the class reading time. The choice time blocks were flexible in that a student need not work on the same activity for an entire time block; they could choose to change activities, thus avoiding boredom and reducing frustration, but the new activity must be on their list for the day. This structure addressed the basic need for autonomy (Deci & Ryan, 2000). It also eliminated behavior problems and the need for active classroom management. Even students with attention deficits and students whose preferred

learning modality was kinesthetic exhibited no negative behaviors, since they were able to switch activities at will. When the researcher asked the teacher "What if the student did not choose anything to do?" the teacher responded:

> That never occurred, and that was the interesting thing. I even had some kids that were ADHD and had trouble sitting, so with this style of teaching, they could get up and move about. They could change their activity. It wasn't like you had to do this for half an hour, you just had to get it done. So they selected their time, and then, now and then, I would pick up a card and say OK, if your priority was that you were working on your story, then I would go and I would see if that was what you were doing. So it freed me up to do a lot of small group or one on one work with kids. (Teacher, Interview A)

The teacher's role during choice times became facilitator, guiding students through active questioning, and scaffolding for students in need of assistance.

Power

In addition to the power/competence gained through freedom of choice, the students' need for power was addressed in a number of ways. One example involves a monthly writing program. One day per month, the entire day was devoted to student writing. The class brainstormed topics, and the teacher reviewed structure, such as paragraphs, essay formats, grammar, etc. Then each student wrote, after planning, without volume or time limits. Some wrote a few paragraphs, some wrote multiple pages, and some wrote only a few lines. The finished products were posted on the bulletin board, and remained there for the entire year. Each month, new writing was posted. Students were able to see and recognize their growth in writing competency over time. Student comments included "Wow, look at this. I can't believe how much better I am at writing now than at the beginning of the year "(Student comment, related by teacher, Interview A). Patall et al. (2010) point out that "support for cognitive autonomy (e.g. affording opportunities for students to evaluate work from a self-referent standard) may be most effective for promoting enduring engagement and deep-level thinking" (p. 899). The work was also available on the bulletin boards for parent interviews, with students proudly showing and discussing their growth.

A second example involving students' need for power involved "scientist for a day." Based on a class visit from Doctor Z, the teacher built a "scientist for a day" program. She purchased all of Doctor Z's books. Every day, two students were chosen to be scientists for a day. Each was given a lab coat to wear, and they were called "doctor" for the day. "For example, your name is Jeff, so we would call you Dr. Jeff all day" (Teacher, Interview A).

Each doctor student would demonstrate an experiment that they had found in one of Doctor Z's books, and then do a presentation to the class. While there is some conflicting discussion on whether acting like a scientist is an appropriate way to teach science (Duschi & Duncan, 2009; Kirschner, 2009), the scientist for a day program was very powerful for the students, with its elements of choice, power/competence, and self-efficacy. Katz and Assor (2007) point out that choice situations are more likely to be motivating if participants had the opportunity to demonstrate their performance. The scientist for a day activity readily fits this parameter. Deci et al. (1991) emphasize that "(competence) supports will facilitate intrinsic

motivation and integrated internalization only to the extent that they are accompanied by autonomy-supportive rather than controlling interpersonal contexts" (p. 333). The teacher provided autonomy-supportive guidance and assistance as needed.

Survival/Safety and Security

The teacher felt that a major reason for the success of the program was mutual trust. She trusted the students to follow through on their commitments. The students trusted her to provide them with appropriate learning experiences, and to in turn trust them to carry out the tasks to which they had committed. In addition, there were two morning rituals that increased students' feelings of security. As each student entered the classroom in the morning, he/she did a positive affirmation. They told the teacher something good about themselves and why they liked themselves. Once in the classroom, there was a whole class sharing session on anything that the students felt needed discussion.

> For example, one day a kid said 'I saw a cat get hit by a car,' and that's pretty upsetting to kids. So we'd do a lot of talking on any questions that we had, and sometimes, through their questions, it fit right into my curriculum. So I was able to teach a lesson just off that question. (Teacher, Interview A)

Another activity that fostered trust was the daily student journal. This was done at home, on any topic of the student's choice. It could include a picture. The first line of each journal entry had to be in cursive writing, while the remainder could be done using any format. The teacher responded daily to every student, using her lunch hour to write responses, always in cursive. The teacher might add questions, formative comments, supportive comments, etc. This again emphasized the mutual trust between students and teacher.

Belonging

Belonging needs were met naturally through the fluid structure of the classroom. For example, problems in mathematics were addressed in nonthreatening conversations at each table group. The group was asked to make a decision, as a table, concerning the problem. The objective was that any student at the table could be asked to outline the "what" and "why" of each problem. Peer interactions and peer tutoring were key. In addition to multiple, fluid groupings, there were a number of activities that built on students' need for belonging and social interactions. One of these activities was spelling pairs. The teacher paired stronger and weaker students to work on the weekly spelling words. The 50 words were chosen by the teacher based on words needed for the week's other activities, such as reading, social science, etc. The pair would be given a word verbally by the teacher, and the pair then discussed how they thought the word would be spelled. Each member of the pair was motivated to ensure that both members of the pair knew how to spell the word. Although the students were evaluated individually on their spelling, the pairs sought prestige through both members of the pair being successful. This strategy proved to be very successful, with the average student mark in spelling over 90%.

A second technique promoting belonging was the art program. Each month, students presented to their peers a justification for why their planned piece of artwork should be selected by the class to be one of the "art windows" of the portable classroom. This entailed painting the

chosen work directly onto one of the windows of the portable. The class then voted on which pieces would be chosen. The teacher indicated that the presentations were always accepted. The art windows were changed monthly, and every student had a chance to display their work for the class during the year. The work was also on display for parents' nights and classroom visitors.

The general atmosphere of mutual trust, the attention to positive affirmation, and the instructional mix of individual, pairs, small groups, and whole class, all acted to support and enhance the students' need for belonging and social interactions. Relatedness is the third dimension of SDT. It is also a key component of Vygotsky's theory of learning (Louis, 2009).

Fun

This was a very fun class of which to be a part. Six years after this class occurred, students recalled that fun was a centerpiece of the activities. However, fun should not be presumed to mean frivolous fun. As Sullo (2007) points out, "Each time we learn something new we are having fun, another universal human motivator. It is our playfulness and our sense of discovery that allows us to learn as much as we do" (p. 9). Among the examples recalled by the students were (a) recess role plays and reenactments of book segments that had been read in class; (b) estimation and graphing tied to model car tracks constructed by the students; (c) learning to understand seconds by estimating the time for a student to run around the portable, which was a reward for good answers in class; (d) differentiated pen pal letters, with different letters for their Grade 3 pen pals compared to their Grade 6 pen pals; and (e) choosing a character from the books they were reading, assuming the role of that character, and presenting the case for that character to a panel of student judges. The teacher recalled

> There were no behavior issues because they were all engaged and we had a lot of fun. I did a lot of guided reading and different things like that. ... there were a lot of fun things. We did a lot of different things, it wasn't just 'Oh, go to your card and do this'. (Teacher, Interview B)

ASSESSMENT

The teacher employed portfolio assessment extensively. This was a good fit with the program since students worked on multiple assignments during the week and finished at varied times. The portfolio included spelling tests, math assignments, and other work. "It's not like you were marking A, B, C, you were marking 'OK, I got this done, I got that done,' so they could see the achievement, and I think that's what kept this going" (Teacher, Interview B). Aiding in the assessment process were the student (self) exemplars, such as the writing activity artifacts, which were always on display on the classroom walls. This allowed students to self-assess. Many of the activities also included an element of informal peer assessment, where individual students were asked to justify to their peers a position or response to a question or problem.

DISCUSSION

The structure of this class mirrored the learning sequence postulated by Marzano (1998; Marzano & Kendall, 2001, 2007). Marzano's taxonomy identifies that the self-system engages first, with a decision about choosing to engage in a new activity. This is followed by the

metacognitive system, setting goals and selecting monitoring strategies. Then the cognitive system is engaged to understand and process the new learning task. The teacher began each class by addressing the students' self-systems through positive affirmation. The next portion of the class involved the metacognitive systems, with extensive supported goal setting and task prioritization. This was followed by engagements in the chosen tasks involving the cognitive system. Metacognitive monitoring was encouraged throughout the day through the structure of activities, such as the spelling pairs, and through the teacher's functioning as a facilitator.

Validity

Construct validity was addressed in multiple ways. The teacher involved read a draft of the case report to ensure accuracy. Data were triangulated using semi structured interviews, teacher artifacts (specifically, the teacher's daybook from that year), plus informal discussions with six of the students when they entered secondary school, 6 years after the Grade 3 class. Internal validity was addressed through pattern matching (Yin, 2009). Predicted patterns of increases in student engagement, motivation, attitudes, and self-efficacy were all supported by the evidence in the case. External validity is supported by the close correlation of the class activities to Glasser's (1998) choice theory, across all five dimensions. Reliability was supported through the use of case protocol (Yin, 2009). All propositions of the case study were supported, with one exception. The proposition that teaching methods and activities that address student needs, as articulated in choice theory, will increase intrinsic motivation, and thus student achievement, was only partially supported. While there were dramatic increases in intrinsic motivation, the link to increased student achievement cannot be verified. The teacher reported that all students in the class demonstrated strong achievement over the course of the year, including students who entered the Grade 3 year performing below grade level. However, since achievement was not one of the variables assessed in the case study, the link to teaching through choice theory cannot be made. It is possible that the students would have achieved at the same level if other teaching methods had been employed. External validity was addressed by using the theoretical framework of choice theory, supported by self-determination theory. There were clear links to both theories in the strategies and activities employed by the teacher in this case.

CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH

This was a hugely successful program. The students loved coming to class. Both the teacher and the students animatedly recalled this year as the most outstanding of their educational careers. The foundation of this program was mutual trust, and an emphasis on student ownership and engagement in their learning. The teacher described the class as "a dialogue, not a monologue" (Teacher, Interview C). She used the analogy of the class as a keyboard. Each student played different notes, all with competing melodies, occasionally coherent chords. "Sometimes we were Linus, sometimes we were Beethoven" (Teacher, interview C). The teacher reported that there was never an instance of a student choosing to do nothing during the choice periods. She indicated that her main focus was on increasing student self-esteem, to make students want to continue learning. The structure of the program also allowed and encouraged differentiation in teaching and learning since each student was at a different place, both cognitively and temporally, based on his/her chosen tasks.

However, this class occurred in relative isolation, in a portable classroom. The teacher stated that while the administration was somewhat aware, particularly of the total absence of discipline referrals, the other Grade 3 teachers were relatively unaware of the program. The parents of the students were all very aware of the program, and supported it wholeheartedly. "Most of the parents on the school council had children in my class, and I talked to them on a regular basis about what we were doing. One of the student's grandmothers was a superintendent of the (school) board" (Teacher, Interview B). The students took very strong ownership of the program. The teacher reported that when she was absent, and a supply teacher was in the class, it was necessary for the teacher to arrange in advance with the class what activities they would work on, on their own, when she was away. She reported several instances of students telling a supply teacher "that's not the way we do things here" (Teacher, Interview B). Six years later, the students had very vivid recollections of their Grade 3 year, with most citing it as their most fun year in school, the year when they enjoyed the most free choice and ownership of their learning, and a year when they learned a lot.

When asked to compare student achievement in this class, compared to her previous Grade 3 class, the teacher commented that such a comparison was not possible, given the different chemistry and makeup of each class. I found this comment to be profound, highlighting the teacher's philosophy of teaching each student as an individual. She reported that for the class under study, the students accepted and endorsed the program very quickly based on mutual trust. The students also commented that some of them had significant difficulties adjusting in the following year, when their Grade 4 teacher reverted to a more traditional approach. They gave anecdotal evidence that the students who found it hardest to adjust were the kinesthetic learners, and the students with attention issues. This then, leads to several questions for future research. It seems clear that while this was a very successful year-long program, optimal impact would suggest that the program cannot be only a 1-year event. Research needs to be done to identify when in a child's education this program should be implemented. For example, was Grade 3 a fortunate accident? Are children in Kindergarten, Grade 1, or Grade 2 too young to have bounded choice? Alternatively, should such a program be implemented even earlier since the current Kindergarten program is play based, and thus when more formal schooling begins in Grade 1, should a version of the choice program begin immediately? Similarly, the optimal length of such a choice program needs to be investigated. Is it necessary for this program to occur throughout a student's education, or can the program be scaled back in later grades without significant negative impact on students' learning? I suggest, based on the spectacular success of this program in the case studied, that the answer to this research question will be that such a program needs to be continuous throughout a student's education, and implemented at an early stage of his/her formal learning, such as Grade 1. It seems clear that to offer such a program for only a portion of the student's education, is unfair to students, and likely to cause resentment, and possibly even result in negative impacts on future learning.

Another aspect for future research involves teacher training and teacher self-efficacy. The program outlined in the case study involved a teacher with no training in either choice theory or self-determination theory. What is the impact of such a program implemented by teachers who have had training in these theories prior to implementing classroom programs? Ross (2009) identifies teacher self-efficacy as very resilient to change. In the case study, the teacher had very high self-efficacy and confidence to implement a very different program based on her perceptions of student needs. She also has a very unique background, with experience from Grade 3 to Grade 12, and coaching at the secondary and community college level.

Therefore, a very real question is whether such a program can be replicated by other teachers, with training in choice theory serving as a proxy for the rich background of the teacher in the case study.

Another question arose during my literature search. Despite an extensive database search (EBSCOhost, JSTOR, Scholars Portal, Education Research Complete, Google Scholar), I found only one article (Hale & Maola, 2011) relating choice theory and education. I find this startling. Given the success outlined in this case study by a teacher with absolutely no training in choice theory, and given that choice theory has been in the literature for over 15 years, I find it unfathomable that I was able to find only one research study on this topic. This appears to be an area that cries out for further research.

The teacher in the case study became a school administrator the following year. In our final interview, she indicated that as principal of a large elementary school, she uses many processes with her staff that are similar to her Grade 3 program. Each year she has a "fireside chat" with every staff member, discussing their goals for the next year, 5 years, and 10 years. The goals may be educational, personal, or even financial. She also includes elements of choice theory by facilitating differentiated staff meetings, where teachers choose, for example, what technologies and at what level they wish to pursue. Other features include (a) setting long range plans by grade teams rather than individual, (b) financial allocation to grade teams based on the team submitting a case for how the expenditure will impact student learning, (c) extensive teacher input into their evaluations (Teacher Performance Appraisals), and (d) year end and year beginning celebrations. While the activities are, of course, different, all the elements of Glasser's (1998) choice theory are addressed. The success of the Grade 3 program was particularly surprising since the teacher had no formal training in either choice theory or SDT, yet structured activities that addressed all the dimensions of both theories. Patall et al. (2008) point out that "choices that allow one's actions to reflect personal values, goals, or interests will have the greatest effect on motivation, performance, and learning" (p. 273). The program examined in this case study met all of these criteria.

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