

Mount Saint Vincent University

**Teacher Perception of the Acceptability and Utility of a  
School-Wide Positive Behavioural Approach to Discipline**

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## ABSTRACT

Studies have shown that school culture and climate have an immense influence on students' academic achievement (Coyle & Witcher, 1992; Rutter, 1983). Review of current research literature reveals an abundance of programs designed to improve the behavioural functioning of students. A concomitant proliferation of studies delves into the effectiveness of these programs. Many studies base determination of efficacy upon achieving a criterion of reduced office discipline referrals per month. An underlying assumption is that, as the climate of the school improves, challenging behaviour is reduced.

A complementary means of evaluating efficacy is via examination of the social validity of a program. Social validity is defined as the social significance of the goals of interventions, the social acceptability of the components of interventions used to attain those goals, and the social importance of the effects of an intervention (Wolf, 1978). Adherence to policies and techniques are more likely to be adequately achieved by individuals who believe in a program's goals and effects, as well as its techniques or processes.

Initiatives adopted to address childhood behaviour must be deemed useful and acceptable by those implementing it; otherwise implementation may lack integrity and risk failure. This could not only undermine the use of a promising and potentially beneficial initiative, but also risks burn-out and cynicism in response to future attempts to improve school climates.

Given the importance of school climate, and disciplinary approaches as part of this climate, the purpose of this study was to examine teachers' perceptions of the effectiveness and usefulness of a district-wide, school-based initiative - Positive and Effective Behaviour

Supports (PEBS) - in one school board in Nova Scotia. Currently in Nova Scotia, evaluation of this program is focussed upon evaluation of discipline referrals. It was the aim of the current research to provide complementary analysis to inform the School Board's implementation of the PEBS initiative. Results demonstrated that elementary teachers were more likely than middle/junior high teachers to perceive PEBS as useful for managing behaviour and effective in communicating school wide expectations to children. Elementary teachers also tended to report improved management style and climate change to a greater extent than did middle/junior high teachers. Results were discussed in relation to training and implementation improvements.

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## CHAPTER I: INTRODUCTION

### Discipline and Development

The term “discipline” connotes diversely. Often discipline is misguidedly construed to mean punishment, when it would be more appropriate to invoke the original Latin roots of the word *disciplina*, meaning teaching or learning (Merriam-Webster, 2006). It is essential that educators appreciate the magnitude of responsibility invested in their roles as disciplinarians in a school and that this duty is fulfilled in an educational rather than a punitive manner.

Discipline is not one-size-fits-all; many factors must be taken into consideration. Of particular note are developmental continua. Individual developmental trajectories are somewhat age-progressive, but are also impacted by a myriad of factors, whether psychological, social, ecological, or medical in origin (Erikson, 1959) (Mash & Dozois, as cited in Mash & Barkley, 2003).

Due to developmental differences, discipline suitable for an early school age child is liable to be different than discipline suitable for an adolescent. Early school age children are engaged in activities designed to develop their sense of industry (Erikson, 1959). Children at this point of development require discipline that complements and increases their sense of mastery of themselves and their environment. Children in whom a sense of industry, or capability, is not successfully developed are vulnerable for developing a sense of inadequacy (Erikson, 1959). Developmentally appropriate discipline at this point could be seen as protecting and enhancing a budding sense of capability, enabling an “I can do it” attitude. Thus, it would not shame or ridicule; but teach and shape the development of self-control in a positive, affirming manner.

Adolescents, for whom an embryonic sense of identity is beginning to mature, require discipline appropriate for their unique developmental condition. Identity development requires a separation of self from others - a pulling away from main caregivers - to determine the answer to the question: "Who am I as an individual?"(Erikson, 1959). Because the process of individuation, that is, the separation of self as different from others, particularly one's parents or caregivers, requires a pulling away from the values and control of others, misperceptions can arise that attribute adolescent behaviour to defiance. It is important that educators, as well as others, appreciate the very human need for adolescents to develop their personal values and standards of behaviour. Thus, discipline ought to convey respect for the budding individual while conveying the school's standards for behaviour. As with the early school age child, discipline for an adolescent is intended to positively teach and shape the development of self-control. In the early years, it does so within the context of developing the child's ability to garner or maintain self-control, whereas, in adolescence, this is accomplished within a context of the development of mutual respect for values and standards of behaviour.

The Nova Scotia Department of Education School Code of Conduct (Nova Scotia Department of Education, 2001) upon which individual schools base their codes of conduct, states that discipline is intended to promote the learning of self-control and to change inappropriate behaviour. It sets a standard that expected behaviours must be taught. Strategies for responding to inappropriate behaviour are flexible and constructive; nevertheless, consequences can be imposed if a student's inappropriate behaviour does not change despite the use of positive strategies. However, the code states that all such consequences will be chosen, foremost, for their educational value, and further, for their

appropriateness in relation to timing, developmental stages, special needs, frequency, and duration. It is also important that consequences make as much sense to the student as possible.

### **Purpose of the Study**

Studies have shown that school culture and climate have an immense influence on students' academic achievement (Coyle & Witcher, 1992; Rutter, 1983). Given the importance of school climate, and disciplinary approaches as part of this climate, the purpose of this study is to examine teachers' perceptions of the social validity of a district-wide, school-based initiative – Positive and Effective Behaviour Supports (PEBS) - in one school board in Nova Scotia. This program is designed to be a climate-changing approach to discipline.

To date, this program has not been evaluated in terms of its social validity in Nova Scotia. According to Wolf (1978), social validity is defined as the social significance of the goals of interventions, the social acceptability of the components of interventions used to attain those goals, and the evaluation of the social importance of the effects that result from an intervention.

Specifically, this study examined teachers' perceptions of the adequacy of their training, their understanding of the principles of PEBS, as well as the type and level of their involvement in program implementation. The areas in which teachers believe they require additional training are also examined. In addition, the sources of teachers' information about the program are examined. Other areas of inquiry are teachers' perceptions of the usefulness of the program for managing behaviour, effectiveness in communicating behavioural expectations, acceptability of the techniques and impact on school and classroom climate.

Due to developmental differences between early school age and adolescent children, comparisons are made between elementary and junior high teachers to detect if any differences are reported in experiences and perceptions between these two populations.

## Research Questions

The following research questions will be evaluated:

1. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of the adequacy of their education/training to implement PEBS a) throughout the school and b) in their classrooms?
2. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' understanding of the principles of PEBS?
3. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' level of involvement in PEBS?
4. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of the usefulness of PEBS in helping to manage children's behaviour in school?
5. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' beliefs that PEBS has been effective in communicating school expectations to children?
6. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of the acceptability of the PEBS techniques/strategies?
7. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of the adequacy of their training in their classrooms and whether the teacher's involvement was required or volunteer?

8. What is the relationship between teachers' perceptions of the adequacy of their education/training to implement PEBS a) throughout the school and b) in their classrooms and teachers' perceptions of the acceptability of the PEBS techniques/strategies?
9. What is the relationship between the source of teachers' information and teachers' perceptions of a) the acceptability and b) the usefulness of the PEBS techniques/strategies to manage children's behaviour in school?
10. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of children who are not being adequately served by PEBS?
11. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' ratings of children who are being adequately served by PEBS?
12. What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of how PEBS has changed a) school/classroom culture climate and b) classroom management style/climate?
13. What themes are raised regarding teachers' perceptions of the usefulness of PEBS?

## CHAPTER II: REVIEW OF THE LITERATURE

### School Culture and Climate

The study of human behaviour in the school setting is a complex and challenging province, described aptly, if dauntingly, by Argyris (1958, p.501) as the “ordering and conceptualizing [of] a buzzing confusion of simultaneously existing, multilevel, mutually interacting variables.” Even given this relatively early tip of the hat to the importance of the multifarious variables involved, it was not until the 1980s that improvement initiatives in schools, as in other organizations, truly embraced what may be the broadest, most ubiquitous, and most pervasive variable of all: the environment (Detert, Schroeder, & Mauriel, 2000). Punishment-based, reactive strategies have come to be recognized generally as erroneous in laying the blame for a child’s behaviour solely on the individual. In addition, social behaviour is coming to be recognized as perhaps equally, or more important than educational attainment in the whole context of an individual’s life (Rahill & Teglas, 2003). Accordingly, the contextual and ecological components of a student’s behaviour cannot be overlooked. Schools must be proactively involved in teaching, modeling, and reinforcing good social behaviour. Thus, especially where improvement initiatives are concerned, the concepts of school culture and school climate, though once ignored, now must take centre stage.

Studies have shown that school culture and climate have an immense influence on students’ academic achievement (Coyle & Witcher, 1992; Rutter, 1983). Purkey and Smith (1983) and Rosenshine and Stevens (n.d.) in Coyle and Witcher (1992) identify that classrooms in which students achieve are those that demonstrate order, structure, purposefulness, and a humane atmosphere, along with the appropriate techniques for effective instruction.

School culture is the belief system that directly influences school climate; students feel comfortable, valued, accepted, wanted, and secure in a positive environment where they can interact with caring people whom they trust (Manitoba Education, Training and Youth, 2001). Climate reflects the positive or negative feelings toward the school environment. It may directly or indirectly affect learning outcomes. (Peterson & Skiba, 2001)

Although the terms culture and climate are somewhat interchangeable, school culture refers to the manner in which teachers and other staff members work together, while school climate refers more to the school's effects on students. School culture denotes the values, practices, and structures within a school that cause it to function and react in particular ways (School culture & climate, 2007). Both Schein (1989) and Foley (1999) refer to culture as the artefacts (i.e. behaviour, organization, and architecture), values, and assumptions that shape how an organization solves its problems and purports to be the correct way to perceive, think, and feel in relation to those problems.

School culture then, is the lens through which educators interpret everything that occurs within a school. School culture envelopes a whole host of factors, including: school size, type of community (e.g. rural or urban), administrative leadership, personalities and biographies of teachers, teacher movement within the system, number of teachers, type of school (elementary or secondary), educational policy, and even the physical architecture of a school (open-concept vs. closed classrooms, younger children separated from older children, etc.) (Foley, 1999; Hargreaves et al., 1992).

Schools may experience a culture of fragmented individualism, where each teacher and class is an entity in and of itself; balkanism, with cliques and divisions of formal and

informal authorities; or collaboration, where trust and openness govern, and ideas, resources, and responsibilities are shared (Hargreaves et al., 1992).

Fullan and Hargreaves (1991) have looked closely at the development of professional teachers and collaborative school cultures. They emphasize that teachers and principals are the source of improved school cultures; any improvement ultimately rests on their actions. When looking at school improvement initiatives, the researchers noted that these initiatives frequently fail. This failure can be partially attributed to neglect of important and complex characteristics of the teachers who must implement these initiatives. One of these components is the teacher's "purpose" - that which is valued or hoped to be achieved through their teaching. This, much more than a pay-cheque, is what motivates teachers on a day-to-day basis and, according to Fullan and Hargreaves, is frequently and deleteriously overlooked. Mary Stager and Michael Fullan (in Hargreaves et al, 1992) found that all teachers engender a sense of purpose from making a difference, caring, and advocacy for their students. While elementary teachers get their sense of purpose from caring for and working with young people, the form of a secondary teacher's sense of purpose seems elusive, not clearly defined. A theme was uncovered that secondary teachers noted over time they become less discipline or subject-focussed and more student-focussed. This leads one to deduce that at least for part of a secondary teacher's career, the endowment of discipline or subject knowledge may be central to a secondary school teacher's sense of purpose.

While school culture has been described as the artefacts, values, and assumptions that shape the "correct" way to perceive, think, and feel in a school, Freiber and Stein (as cited in Bucher & Manning, 2005) claim that the "school climate is the heart and soul of a school...It can foster resilience or become a risk factor" (p. 59). Focusing on improving school climate

results in improved behaviour (Discipline that supports achievement, 2004). A school climate focused on positive regard, clear expectations, teaching and modeling of behaviour, as well as a flexible, person-centered approach to discipline promises greater opportunity for student success for all children. According to Dupper and Meyer-Adams (2002), a school climate should be characterized by “ warmth, tolerance, positive responses to diversity, sensitivity to others’ views, cooperative interactions among students, teacher and school staff, and an environment that expects and reinforces appropriate behaviour” (p.350).

In a positive school environment, there is recognition of the importance of teaching a child in relation to that child’s experiences. While the importance of school rules may be straightforward for some children, it may not be so clear to the child who is tired from a long bus ride, worried about abuse, is hungry, wonders if Mom or Dad will come home tonight, or who does not understand the social value of the rules and must save face in front of other children. Some children already have a negative self-identity and feel a need to live up to it, because that is who they are and how they are known. A positive school climate enables children to feel accepted for who they are, not for what they do. Linda Albert (1996) asserts that children need to feel connected, capable and contributing to accomplish this sense of belonging and acceptance.

When children feel comfortable, valued, safe, and accepted in a positive school climate, the effects are evident for all staff, parents, and the community. The benefits manifest themselves in areas of school success such as: academic achievement, high morale, staff productivity, and effective management (The Crown in Right of Manitoba as represented by the Minister of Education, Training and Youth, 2001)

How can schools, while achieving provincial standards for outcomes, provide a positive climate? To begin, educators must recognize the power inherent in school communities to stifle or enhance a child's development. Educators must make efforts to see children "at promise" instead of "at risk", to focus on strengths rather than weaknesses, to hear the voices of the children, and to empower children to actively contribute in school (Thomsen, 2004). Schools must have visions of being a safe, supportive place where children know they matter, they can learn and that they have a voice. Efforts can be made to move from a reactive, problem-centred approach, to one that is positive, preventative, and proactive, and that seeks to teach children emotional literacy skills (such as empathy and respect) and create a sense of community (Bucher & Manning, 2005; Dake, Price, Telljohann, & Funk, 2003).

James P. Comer (2005) asserts that educators have underestimated the importance of school climate. He emphasizes that a positive climate is not a given; it must be intentionally created. According to Comer (2005), positive school climate, [adolescent] development, and sound academic learning are interactive and mutually facilitating processes. He maintains that too often focus is on an individual child, or on a problem behaviour, when the focus should be on creating a positive school climate that promotes development on six critical developmental pathways: physical (including brain development), social/interactive, psycho-emotional, ethical, linguistic, and cognitive/intellectual.

Clearly, the shift from a punishment-focused orientation – whereby school personnel are preoccupied with establishing and enforcing rules, and wherein punishment is perceived as a solution rather than as a consequence – to an orientation focused on changing the school environment; targeting and intervening with children at the level required to meet their needs

– is a three hundred and sixty degree shift. This shift, however, is in keeping with current efforts to develop responsive, respectful, and effective climates in schools.

A huge array of interventions or programs have been proposed to improve school functioning or climate. These range from mentoring programs, bullying programs, anger management, social skills, peer mediation, peer tutoring, empathy training, conflict management, anti-racism and anti-sexism programs, 1-2-3 Magic, co-operative discipline, violence prevention programs, Peaceful Schools, Non-Violent Crisis Intervention, co-operative learning, literacy initiatives, and numerous others. Some of these initiatives, such as peer mediation, may be ineffective, or even harmful (Erickson, Mattaini, & McGuire, 2004). Many of these programs have solid research that evidences them as promising or even exemplary programs. To deploy such programs piecemeal, outside of a comprehensive school plan, however, is hit or miss, and reduces their impact. Their potential is greater within the scope of an umbrella intervention that can help orchestrate, according to individual school culture and climate, the most salient programs to produce the greatest impact.

### **Development in Children and Youth**

The importance of understanding the principles of child and adolescent development in educational settings is the focus of considerable research. One prominent researcher in this area, James P. Comer, asserts that the often mistaken notion that one's intelligence is genetically fixed leads to a second inaccuracy - that one's performance in school and in life is predetermined. However, recent brain research advocates that intelligence and performance are interactive and developmental (Comer, 2005). He proposes that educators must understand and apply the principles of child and adolescent development to be able to create positive interactions between youth and staff. For example, an understanding of adolescent

development can improve interactions when fourteen year old “Adam” argues about homework. A teacher without an understanding of identity development and individuation in adolescents may perceive and react to Adam as a “problem” child with a bad attitude. Conversely, a teacher informed by an understanding of adolescent development may perceive Adam’s behaviour as a normal and necessary part of development, and is more likely to react in a manner conducive to mutual respect: helping Adam to understand the issues, allowing him to make his own decisions within a framework of choices, and engaging in supportive, rather than argumentative, exchanges. This teacher understands that mistakes are not failures and that some children need to make more mistakes than others before lessons are learned. This does not detract from the value of the child but highlights the importance of an accepting and guiding climate to help each child manoeuvre through his individual developmental trajectory of learning.

Although individual developmental trajectories vary (Mash & Dozois, 2003), development for children five to twelve years of age generally follows a fairly predictable path (Erikson, 1959). Children’s psychosocial tasks are to develop a sense of industry and of confidence in their skills as learners and doers. Most children in the early school years begin to experience the world outside of home more frequently - particularly in a school setting - and thereby engage in opportunities to develop their competencies. Development in the early school years is typically, but not always, more serene than development in toddlerhood, when the child is developing a sense of self-control and autonomy. It is also typically more peaceful than the adolescent years, when the more hormonally-driven child is beginning to individuate and develop an identity. However, the challenges of this stage should not be underestimated because of the lack of a typical developmental “crisis”. This developmental phase sets the

stage for one's identity: Am I a capable, industrious person or am I inadequate? (Erikson, 1959).

Children entering school need to learn to be part of a larger community and to contribute to the world around them: their homes, schools, and communities. They will have to learn to manage externally imposed expectations, such as those of teachers, as well as those imposed internally. Children develop either a sense of industry or inadequacy at this time and this establishes a precedent through which they interpret further experiences (Erikson, 1959).

Adolescence is considered a transitional period between childhood and adulthood (Sebald, 1992). Erickson (1959) proposed that the major psychosocial task of adolescence is the development of a sense of self-definition; one's identity. In Eriksonian terms, this is a time when the adolescent engages in identity development: determining strengths and weaknesses, likes and dislikes, gender roles, as well as life and occupational goals. Adolescents engage with the world around them socially, emotionally, and cognitively, in ways appropriate to their life situation (Olson & Torrance, 1996). Although adolescence can be serenely navigated by a fortunate few, for many, adolescence is a passage of major psychological, biological, and social changes (Poncelet & Associates, 2004), with early adolescence typically being a more turbulent period. Eccles, Lord, and Midgley (1991) succinctly assert that "early adolescence is characterized by increases in the following: desire for autonomy from adult control, especially from one's parents' control; peer orientation, self-focus, self-consciousness and salience-of-identity issues; concern over sexual relationships, and capacity for abstract cognitive ability" (p.534).

Larson, Moneta, Richards, and Wilson (2002) have found that adolescence is marked by a downward trend in emotional states, with a peak in unhappiness in early adolescence. This

trend occurred across a mix of working and middle class, Caucasian and African-American, urban and suburban youth. The trend began from the fifth grade to eighth grades and tended to cease by grade ten.

Eccles et al. (1993) attribute the difficulties experienced during the years of early adolescence as being due, at least in part, to an interaction between the developmental changes at the social and individual levels; namely, a mismatch between the developmental needs of the individual adolescent and the opportunities created by their social environments.

Parents and teachers have long known what researchers have “uncovered”: that adolescents want more control, but not total control; more freedom, but not total freedom; and have a great need for attachment despite sometimes reflecting a persona of detachment or withdrawal. Adolescents develop optimally when they participate in decision-making and rule-making, thus contributing to their own self-determination. This occurs best within supportive environments (Eccles et al., 1993; Ryan & Lynch, 1989). It is vital that an understanding of typical development in a child is unique and influenced by an astonishing mathematical permutation: no two individuals experience the same configuration of genetics, health, culture, experiences, affect, temperament, self-esteem, neurodevelopment, or a myriad of other endogenous and exogenous factors (Levine, 1999).

### **Disruptive Behaviours**

Disruptive behaviours generally are considered to be the recurrent display of oppositional, defiant, aggressive, or anti-social conduct. Ball, Blomfield, Galloway, and Seyd (1982) define disruptive behaviour as “any behaviour which appears problematic, inappropriate and disturbing to teachers [*and others*]” (p. XV). The search for

understanding, prevention, and treatment of childhood behaviour problems has engaged society for centuries. Plato is credited with lamenting:

What is happening to our young people? They disrespect their elders, they disobey their parents. They ignore the law. They riot in the streets inflamed with wild notions. Their morals are decaying. What is to become of them? (DiMartino, 2004, p. 77)

Plato's teacher, Socrates, is often attributed with saying: "Children today are tyrants. They contradict their parents, gobble their food, and tyrannize their teachers" (*Quote details: Socrates*, 2006). While today we acknowledge a multiplicity of values and behavioural standards, these ancient references attest that childhood behaviour has been a concern for as long as there have been children.

The exploration for effective behaviour management techniques intensified in the 1960s and persists to the present (Morris, Todd, Midgely, Schneider, & Johnson, 1995). Behavioural research, constructed from Pavlovian and Skinnerian concepts, matured, moving beyond experiments with cats and rats to creative and innovative human-based research. Along the way, Bandurian social learning concepts – and even some overtones of Rogerian person-centeredness and unconditional positive regard - crept in. Movement was afoot to progress beyond merely lamenting childhood conduct problems. Answers were sought to the questions of why some children had such difficulty with behaviour and how that knowledge could be used to improve behaviour.

According to McMahon and Frick (2005), these questions became a focal point of research for a number of reasons. First, conduct problems - a more severe form of behavioural difficulties - are among the most common reasons that children are referred to mental health clinics or residential treatment. Second, conduct disorder is the form of

psychopathology most associated with delinquency. Third, conduct problems tend to be rather stable, portending adjustment problems throughout an individual's life.

The individual cost of children's conduct problems can be heart-wrenching. While aetiologies vary, misbehaviour clearly is both a manifestation of as well as a cause of suffering. Children may lose self-esteem, friends, family, and hope. They may even be removed from their homes. The societal cost of children's misbehaviour is also staggering. Cohen (1998) stated that 4 years of adolescent conduct problem (CP) offences followed by 10 years of adult CP offences may cost \$1.7- \$2.3 million US. Juvenile delinquency and crime, including harm to victims and associated costs, treatment, residential care, incarceration, and decreased quality of life (Loeber & Farrington, 2000) are results that scream for intervention. Child and spousal abuse, robbery, rape, and murder are all carried out to a greater extent by persons with a history of anti-social behaviour (Robins, 1981).

Clearly, a child experiencing emotional/social/behavioural difficulties may endure loss of potential. In a school setting, disruptive behaviours may cost a child his or her education through time off-task and suspensions, as well as deleteriously impact the education of other students.

Given the multitude of sombre consequences, research abounds examining aetiology and interventions for childhood behaviour. Aetiologies may include genetics, neurobiology, hypo-reactive or hyper-reactive early infant disposition, insecure parent-child attachments, difficult child behaviour, social cognitive deficits, deficits in social learning, emotion regulation and/or impulse control and response inhibition, neuropsychological and/or neurobiological dysfunction, maladaptive patterns of parenting and parental psychopathology (including maternal depressed mood, parental or couple discord, limited family resources and

other poverty related stressors), institutional deprivation, and a host of other potential factors (Mash & Dozois, as cited in Mash & Barkley, 2003). In 1996, the Canadian Education Association (CEA), informed by a Child Institute of Health report (1994), identifies poverty as the major risk factor for disruptive behaviour. Children in poverty are more likely to perform poorly in school, drop out earlier, encounter more health (including mental health) problems, and be disruptive. They are more likely to experience poor self-esteem. Students who display disruptive behaviour are more likely to experience poor academic achievement and have higher truancy rates.

Other factors have also been posited as potentially impacting a child's behaviour, including violence in the media, the number of hours a youth works in a week, stress from myriad sources, and learning disabilities. Developmental psychologists recognize the multiplicity of pathways to developmental disorder and therefore emphasize that there is more than one risk or causal factor (Mash & Dozois, 2003).

Conceding these multifarious aetiologies, it should be no surprise that interventions are also wide-ranging. These may range from individual interventions such as Problem Solving Skills Training, training others (for instance, parents, in Parent Management Training), to working with systems, such as is done in family therapy. Interventions may include medical or psychopharmacological interventions such as Ritalin, or ecological interventions such as adjusting classroom and school structure.

Discipline, as an intervention, should address and redress social and academic difficulties that result in the misbehaviour. Greene (1998), known for his work on "The Explosive Child", advocates that children with disruptive behaviours should be viewed and helped like any other child with a learning disability. The explosive child's disability is in

cognitive flexibility and behavioural control. Some children may exhibit disruptive behaviour as a cover for other learning disabilities. The rationale may be that it is better to look “bad” than “dumb”. Greene asserts that these children need something besides motivation to behave differently; they need their skill deficits identified and remediated. They need a climate that fosters and actively teaches behavioural and social skills rather than punishing mistakes.

According to the CEA, teaching today is a high risk profession, with disruptive behaviour the leading cause of teacher burnout. The CEA goes on to state that, to support teachers, training needs to be provided to help teachers feel confident in their skills as educators. As well, effective school-based interventions for children with disruptive behaviours need to be developed to support both teachers and students (Canadian Education Association, 1996).

Positive behavioural supports are built on the awareness that a child is embedded within familial, cultural, and ecological systems. As such, intervention must target these multiple systems as well as the individual. Classrooms and schools have the potential to be safe or aversive environments. While schools are in an ideal position to identify, influence, and improve children’s potential, they cannot bring about durable transformations without the contributions of students, parents, and communities. Discipline must be re-envisioned, and the erroneous perception that there is a “deficit” in a child’s behaviour, rectified. Constructive discipline results from a supportive climate at school, at home, and in the community. Greene (2006) recommends, “Instead of asking yourself, ‘What is it going to take to motivate this child to behave differently?’ ask ‘Why is this so hard for this child?’

What is getting in his way? How can I help?”(Center for collaborative problem solving, para.1).

### **Discipline and Behavioural Interventions**

Concern over school violence led to the development of punitive, reactionary disciplinary measures, the most notable current trend being zero tolerance policies. Zero tolerance policies were developed and implemented with the underlying principle that, by punishing all disruptive behaviours, no matter how minor, children would receive the clear message that these sorts of behaviours would not be tolerated. The rationale continued that children would, as a result, be less likely to engage in these behaviours (McMahon & Sharpe, 2006). While the message is clear, McMahon and Sharpe (2006) cite a number of studies that reveal unforeseen and serious consequences: zero tolerance is perceived by some youth as a challenge to their behaviour, resulting in escalation, rather than de-escalation effects (Shores, Gunter, & Jack, 1993); punitive disciplinary measures, such as suspension or expulsion, contribute to antisocial behaviour in youth (Mayer, 1995); suspending children increases social exclusion in children, making it difficult for children to trust or to create bonds with adults (Jenkins, 1997); and suspensions may serve as a reinforcer, rather than a deterrent, for those children who do not want to be in school (Tobin, Sugai, & Colvin, 1996).

Zero tolerance is also problematic because youth with conduct problems have fairly predictable cognitive and learning styles (McMahon & Frick, 2005). Children with serious conduct problems evidence a reward-dominant response style, that is, a learning style that is more sensitive to rewards than punishment. This finding is important in understanding the persistence of maladaptive behaviour, even in the face of serious consequences (Frick et al., 2003). Harsh punishment and zero tolerance policies create a negative school climate and do

not prevent children from entering the justice system (Kazdin, 2005). Finally, Skiba et al.(2002) assert that zero tolerance policies have not proven effective in deterring future negative behaviour and may be most ineffective for children at-risk, who repeat offences at a rate of 35 to 45 percent following suspension. Other researchers (Shores et al., 1993) have found that punitive discipline methods interact in a negative coercive cycle with student non-compliance, increasing the likelihood of disruptive behaviour.

Zero tolerance also contributes to marginalization of particular populations (Monroe, 2005). Black students receive a disproportionate number of suspensions compared to others under zero tolerance policies (Gordon, Piana, & Keleher, 2000). Skiba, Michael, Nardo, & Peterson (2002) found that, even when socio-economic status is controlled for, black students still receive a disproportionate amount of school suspensions. Skiba (2002) also found that black students received more subjective discipline referrals, for example, for being disrespectful or for loitering. Black students also receive harsher punishments for minor offences, although they do not misbehave any more than white students (Shaw & Braden, 1990).

In the past, school-wide discipline has focused mainly on reacting to specific student misbehaviours by implementing punishment-based strategies including reprimands, loss of privileges, office referrals, suspensions, and expulsions. Research has shown that the implementation of punishment, especially when it is used inconsistently and in the absence of other positive strategies, is ineffective. Introducing, modeling, and reinforcing positive social behaviour is an important part of a student's educational experience. Teaching behavioural expectations and rewarding students for following them is a much more positive approach than waiting for misbehaviour to occur before responding. The purpose of school-wide positive

behaviour support is to establish a climate in which appropriate behaviour is the norm. (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2006)

Since punitive methods have been tried and are not working, the question becomes: What promises effective discipline in schools? The answer lies largely in discarding punitive methods and engaging in positive discipline that teaches and models appropriate behaviour, thereby fostering a positive school climate.

According to the Discipline Handbook for Nova Scotia Schools,

Discipline is seen as a total school process which grows out of the climate produced by adherence to a school code based on a clear understanding of the mandate and mission of the school. Discipline, in this context, should be part of a school-wide curriculum. It is the process which maintains order and encourages a positive learning environment, teaches students self-discipline and independence, and helps teachers cope with the stresses of the modern classroom (Nova Scotia Department of Education, 1993, p. 4)

The Canadian Education Association (1996) attributes some of the more common reasons for misbehaviour as: a lack of attention, feeling unimportant at school, not understanding expectations, a desire to defy authority, confusion in value systems, and teacher misunderstanding of student emotional problems. The CEA envisions discipline, particularly the development of self-discipline, as an essential element of educating children rather than merely a necessary component of imposing order. From this teaching perspective, we can approach discipline in a much more positive, proactive, educational manner.

Schools have attempted an ample assortment of approaches to discipline, conflict, and violence. These have ranged from zero tolerance to utilizing hardware, such as metal detectors, to posting police at schools. There is a clear need to offer more proactive

alternatives that prevent, rather than react, to school problems. Programs that teach problem-solving and social skills within a school-wide context, as appropriate for the particular school culture, hold promise to create caring and supportive school climates.

### **Positive and Effective Behaviour Supports (PEBS)**

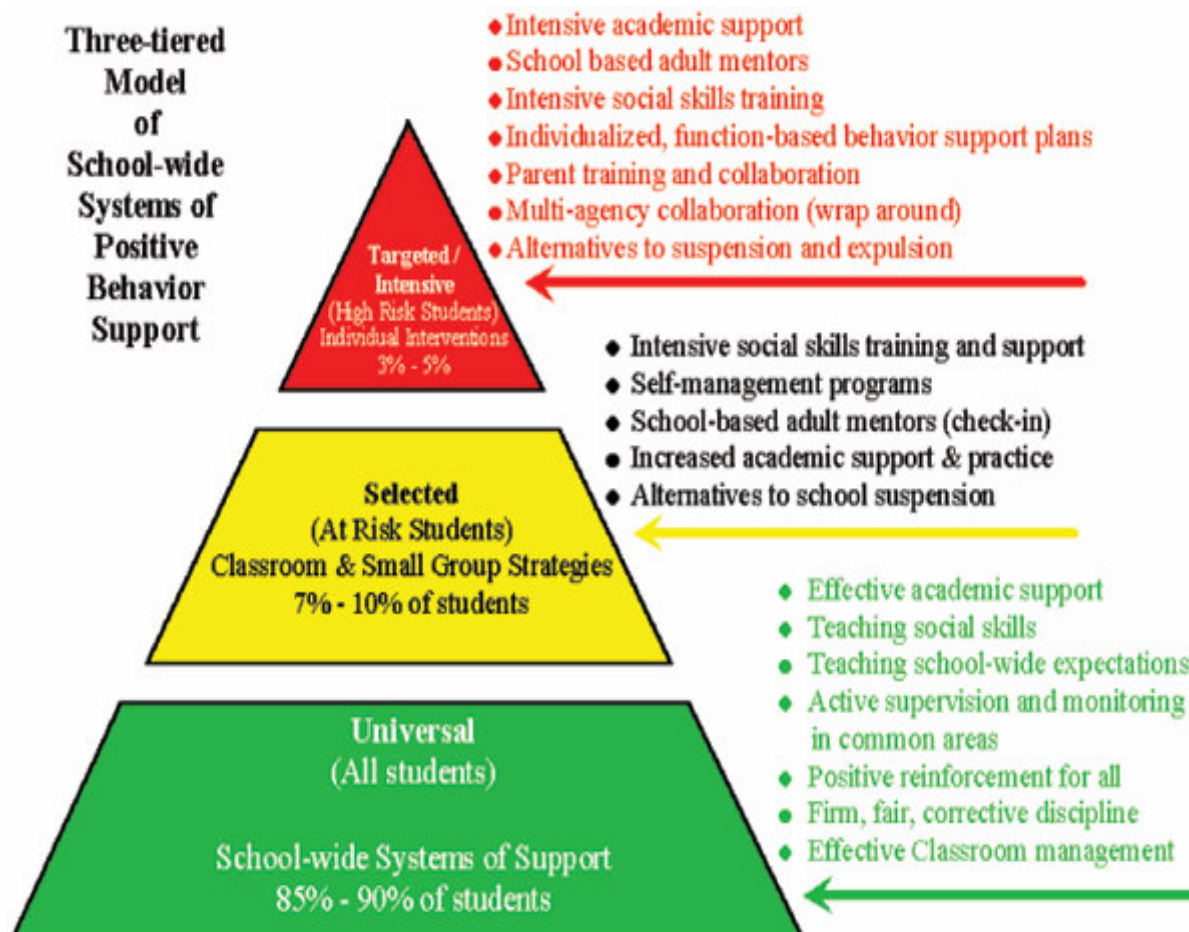
Positive Behavioural Intervention and Supports (PBIS) consists of a broad range of systemic and individualized strategies for achieving important social and learning outcomes while preventing problem behaviour with all students (McGough, 2006; Turnbull et al., 2002). It consists of a multi-systemic approach to improving the educational, behavioural, and social opportunities for all children, with levels of intervention customized to meet individual needs. It is not a model because each school or system may implement it differently. The intent is for children to be engaged *with* the process rather than having it done *to* them. Common amongst implementations is data-based decision-making (Dunlap, Lewis, & McCart, 2006), the use of functional behavioural analysis and ongoing evaluation (Scott, Nelson, & Liapusan, 2001). Empirically validated interventions are utilized, although the particular programs adopted by a school or board may vary. Emphasis is placed on socially important variables such as improved social skills and a safe, inclusive school climate.

Positive and Effective Behavioural Supports (PEBS) is the term adopted by the Nova Scotia Department of Education for its implementation of PBIS research. It is a multi-systemic approach to improving the educational, behavioural, and social opportunities for all children, with levels of intervention customized to meet individual needs. Because PEBS is an approach rather than a specific program or curriculum, each school or system may implement diverse individual programs due to unique factors such as geographic location,

staff composition, or student features (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2006). Although the particular programs adopted by a school or board may vary, common amongst implementations is data-based decision making using functional behavioural analysis, ongoing evaluation, and empirically validated interventions. Functional behavioural analysis consists of a systematic examination of the behaviour a person is exhibiting, establishing antecedents (events occurring prior to behaviour) and consequences (events occurring as a result of behaviour; either positive or negative) to determine the reasons (or functions) at the root of why that the behaviour is occurring. Interventions are then designed using this information to make the unacceptable behaviour less reinforcing, along with teaching and reinforcing behaviours that are more adaptable or suitable.

Expectations of all individuals within the school community - students, teachers, bus drivers, custodians, parents, volunteers, and staff - are clearly communicated. Emphasis is placed on socially important variables, such as improved social skills and a safe, inclusive, school climate respectful of diverse individuals.

PEBS, derived from PBIS, is composed of three levels: primary, secondary and tertiary. The following pyramid depicts its components:



From: <http://www.aacps.org/aacps/sssd/3tier.gif>

Primary prevention, or Universal application, is intended to address the needs of all children. This tier is usually sufficient as a stand-alone measure to meet the needs of approximately 80% of students (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2006). The focus is on preventing the occurrence of new cases of problem behaviour through dissemination of information in school-wide, classroom, and non-classroom/non-instructional settings (Lewis & Sugai, 1999). School behavioural expectations and social skills are explicitly taught through experiences such as lessons, projects, posters, assemblies, and teachable moments as they occur. Adult behaviour is

transformed from focusing on misbehaviour to a concentration on teaching and reinforcing positive behaviour. The common assumption that all children should know how to behave at school is discarded. Appreciation is gained for the understanding that children come from varied backgrounds with many different learning experiences regarding what constitutes acceptable behaviour (King, M., Sims, A. & Osher, n.d.). The school is not a place to judge this behaviour; rather, the school has a responsibility to teach acceptable school behaviour, fostering a positive school climate.

The Secondary, or Selected, component consists of targeted interventions for the approximately 15% of children who do not respond sufficiently to the Primary level of intervention, but have not shown clear need of intensive individualized treatment. Secondary prevention focuses on reducing the frequency and intensity of problem behaviour by providing efficient and rapid responses (Lewis & Sugai, 1999). Based on functional analysis of behaviour, this consists of interventions such as classroom or program adaptations and/or behaviour plans. As well, children may be provided with additional small group learning opportunities, where they are given supplementary instruction targeted to their specific needs in areas such as social skills training, problem solving training, or academic instruction (Freeman et al., 2006). Regular monitoring may be provided in the form of a “check in/check out” program wherein children report to an adult mentor or teacher in the morning coming to school and, then again, after school, before going home. This adult greets the child cheerfully, creating a positive setting event, ensures the child is ready for school (books, supplies, etc.), coaches and supports the child as needed, monitors the child’s behaviour sheet that is filled out by teachers each day, then debriefs with the child at the end of each day.

The Tertiary, or Targeted/Intensive, component, intended for approximately 5% of children for whom the Primary and Secondary components are not sufficient, consists of all of the appropriate Primary and Secondary components, as well as more intensive, assessment-based and individualized, academic, behavioural, and therapeutic interventions. The focus is on reducing the intensity and/or complexity of high risk behaviours (Lewis & Sugai, 1999). The school may coordinate with services such as Mental Health or Community Services to provide a more comprehensive intervention that targets the child's psychosocial and home or residential environments as well as school needs. This level is characterised by its more flexible, focused, and personalized approach to treatment that includes interventions across multiple settings. A child in this level may receive intervention at home, at school, and in the community. This intervention is comprehensive and individualized, with evaluation and modifications monitored and implemented on a regular basis. Training for the support team is provided as needed (Freeman et al., 2006). The support team is characterized by its flexibility; it may consist of parents, teachers, mental health professionals, and community supports, such as an alternative worker and, when feasible, will include the participation of the individual as well. This multi-disciplinary team crosses professional boundaries and targets those who truly have an effect on the everyday life of the child. Rachel Freeman (2006) asserts that supports for students at the Tertiary level can be enhanced by adding components of wraparound and person-centered planning.

Wraparound planning is a strengths-based intervention that addresses needs defined by the child and people significant to the child, such as parents, family, friends, and teachers. It also focuses on providing services that are deemed important and help enable success as defined by the child and family, rather than by outside experts. Inherent in this approach is

the inclusion of families and community resources as active partners, creating a more comprehensive intervention that crosses multiple domains. This requires communication and collaboration amongst agencies such as schools, hospitals, community health or mental health services, child protection agencies, and other professionals, as required, to meet the needs of the child. According to Burns and Goldman (1999), wraparound planning is a valuable delivery process for services to children with emotional and behavioural disorders. Developed by Dr. Ira Lourie of the Child and Adolescent Service System Program (CASSP) in 1987, its core values are the provision of services that are child-centered, family-focused, community-based, and culturally competent. A key aspect to wraparound planning is flexible and unconditional evaluation. If the intervention does not achieve the outcomes as defined, the student is not deemed to have failed or considered to have been unable to be successful despite interventions; rather the interventions are recognized as not being salient or sufficient. The focus remains on seeking the optimal configuration of multi-level interventions to support the individual's needs. This is compatible with the person-centered values of unconditional care and individualization.

Person-centered planning has grown out of the support of individuals with developmental disabilities (O'Brien & O'Brien, 2000), but has come to support many other individuals with wide-ranging challenges. The inherent principle is that an individual should be involved in planning for his or her future. This planning aims to address the individual's goals and increases choices. Focus is on respecting and adhering to children's and families' voices, values, and dignity and ensuring that they have ownership and commitment to strategies and outcomes that are developed to support the individual (Burns & Goldman,

1999). Interventions are sought that are culturally appropriate, respecting each child's and family's individual social, historical, and racial context (Sugai et al., 2000).

To summarize, PBIS envelopes individual and systems behavioural interventions that encourage meaningful and respectful change.

A table that summarizes the assumptions characterizing PBIS follows:

<b>Behavioural Science</b>	<b>Practical Interventions</b>	<b>Lifestyle Outcomes</b>	<b>Systems Perspective</b>
<ul style="list-style-type: none"> <li>➤ Human behaviour is affected by behavioural, bio-behavioural, social, and physical environmental factors.</li> <li>➤ Much of human behaviour is associated with unintentional learning opportunities.</li> <li>➤ Human behaviour is learned and can be changed.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Functional behavioural assessments are used to develop behaviour support plans.</li> <li>➤ Interventions emphasize environmental redesign, curriculum redesign, &amp; removing rewards that inadvertently maintain problem behaviour.</li> <li>➤ Teaching is a central behaviour change tool.</li> <li>➤ Research-validated practices are emphasized.</li> <li>➤ Intervention decisions are data-based.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Behaviour change must be socially significant, comprehensive, durable, &amp; relevant.</li> <li>➤ The goal of PBS is enhancement of living and learning options.</li> <li>➤ PBS procedures are socially and culturally appropriate. Applications occur in least restrictive natural settings.</li> <li>➤ The fit between procedures and values of students, families, educators must be contextually appropriate.</li> <li>➤ Non-aversive interventions (no pain, tissue damage, or humiliation) are used.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The quality &amp; durability of supports are related directly to the level of support provided by the host environment.</li> <li>➤ The implementation of practices and decisions are policy-driven.</li> <li>➤ Emphasis is placed on prevention &amp; the sustained use of effective practices.</li> <li>➤ A team-based approach to problem solving is used.</li> <li>➤ Active administrative involvement is emphasized.</li> <li>➤ Multi-systems (district, school-wide, nonclassroom, classroom, individual student, family, community) are considered.</li> <li>➤ A continuum of behaviour supports is emphasized.</li> </ul>

(Sugai et al., 2000, p. 131)

PBIS was introduced in Nova Scotia by the Department of Education in 2004 under the name Positive and Effective Behaviour Supports (PEBS). A four year training and implementation plan has begun in the province, with two cohorts of teachers and administrators currently trained, some in 2004-2005 and some in 2005-2006. Another group was trained in 2007 and the final group will be trained in 2008. These groups of trainees return to their respective schools and train the remaining staff in the school. Training has been taking place in March of each year, with schools choosing to implement in the current year or to wait until the following September or later, according to the needs and supports of each individual school.

PEBS provides the framework within which schools clearly communicate expectations and then reinforce students good behaviour, facilitating a positive school climate and improved learning for students. Instead of using a mélange of behavioural management plans, a continuum of positive behavioural support is provided for all students, in all areas, by all adults. Each school customizes its approach, depending on the school culture and climate, with the underlying principles of teaching expectations and reinforcing good behaviour.

Currently, most schools in Nova Scotia are implementing only the Primary or Preventative level of PEBS; however, there are some schools implementing the full complement of primary, secondary and tertiary intervention levels. Measurement of efficacy is tracked through a standardized provincial Behaviour Incident Tracking Form which, as the name belies, count the number and nature of behavioural incidents, providing data on the amount, type, severity and location of behavioural incidents. Interventions applied can be tracked on these forms.

## **Social Validity**

Assessment of social validity, or acceptability and utility of an intervention, provides the capacity to discern whether treatment goals are significant, the procedures are appropriate, and the effects produced are important for clients and for society (Fawcett, 1991). Research often neglects to inquire as to whether or not those participating in a treatment deem it helpful or important (Lane, Menzies, Barton-Arwood, Doukas, & Munton, 2005), despite references from as early as 1977 that consumers of treatments should be queried to gauge acceptability and utility (Schwartz & Baer, 1991). Wolf is credited with introducing the concept of social validity to the applied behavioural research field in 1978. Paradoxically, although research demonstrates that researchers and practitioners understand the importance of social validity, assertions also persist claiming that measures of social validity are acutely underused (Carr, Austin, Britton, Kellum, & Bailey, 1999).

The use of subjective measures, such as questionnaires, to ascertain consumers' opinions or ratings of an intervention was once scorned within the field of behaviourism. Leading early researcher B.F. Skinner (1953) advocated that researchers maintain strict adherence to observable measures: "The objection to inner states is not that they do not exist, but that they are not relevant in a functional analysis...In dealing with the directly observable data we need not refer to...the inner state..."(as cited in Wolf, 1978, p. 204).

Montrose Wolf, in the same article, describes the process through which he came to realize that unobservable data, particularly the acceptability and utility of an intervention, are important. While involved in the initial creation of the Journal of Applied Behavioural Analysis (JABA), he began to notice that many researchers submitting articles were noting how socially important their particular interventions were. These claims were being made on

an intuitive basis, however, with no real data measuring it. Wolf (1978) noted that “although [he] wasn’t sure what it was or how to measure it objectively, it was clear that many of [his] colleagues had no trouble at all recognizing it” (p. 205). This finding was troublesome because the current paternalistic thinking assumed that consumers should have no reason not to like the interventions behavioural psychologists were providing; after all, they were solving their problems. An equally troubling contemporaneous attitude held that it did not matter if consumers liked the interventions or not; psychologists knew what was most effective and therefore best for the consumer.

Serendipitously, Wolf (1978) was involved in a Research Project, *Achievement Place*, a community-based, family-style, behavioural treatment program. To his shock, the community rejected this data-proven effective intervention, providing Wolf with the Newtonian apple-falling-from-the-tree discovery that consumer acceptability was immensely important. Consumers will neither accept nor implement with integrity interventions that are not socially important to them or that involve methods unacceptable to them.

Other researchers have furthered research in social validity. Kazdin (1981) defined treatment acceptability as “judgements by laypersons, clients, and others of whether treatment procedures are appropriate, fair, and reasonable for the problem or client” (p. 493). A drawback in social validation research is that a great deal of the research is analogue (for a review, see Elliott, 1988), wherein research subjects are provided with a hypothetical situation and asked to rate acceptability features. Few naturalistic studies have been done in which consumers rate actual interventions (Gresham & Lopez, 1996). Gresham and Lopez (1996) present the arguments that consultation research often is neither educationally nor clinically relevant; that the treatment procedures used are sometimes unrealistic or

unacceptable in daily practice; that the behaviours targeted may not be the most relevant; and that the results often do not represent clinically or educationally important changes. They argue that research and practice guided by principles of social validation may make delivery of consultative services more useful and acceptable to consumers by targeting socially significant behaviours and using socially acceptable procedures to obtain socially important effects.

Other researchers, including Schwartz and Baer (1991) stress the importance that social validity be assessed early in an intervention. This assessment allows an intervention to be altered as necessary and re-evaluated. They caution that, in the quest for social validation, researchers and practitioners do not fall prey to simply providing consumers what they want, but maintain a balance with their observations and empirically-based research. Consumers are in a position to rate social validity but are not always in a position to assess the most effective treatments, nor that which is in the best interests of the recipients of the treatments, often children. Gresham and Lopez (1996) elucidate that the distinction must be made, as well, between problem-centered consultation, such as that amenable to a short term, focused intervention, and developmental consultation, where the goal may be the reversal of antisocial behaviour patterns, with the long-range goal of preventing school drop-out or incarceration, as in Kazdin (1987). Gresham and Lopez (1996) argue that behavioural goals must ultimately be based on a functional or habilitative criterion rather than consumer satisfaction. Procedures to reduce or reverse long-term patterns may be more intensive and less amenable to social validation, for reasons such as the level of intensive intervention required, or the knowledge and skill level that must be attained for consumers, making these interventions less acceptable to consumers, but ultimately, still very important to implement.

Certain procedures are known to be more acceptable to consumers. Complicated procedures, those that require a large investment of time to implement, and those presented with a great deal of psychological jargon, are less acceptable. Positive treatments, such as praise and reinforcement, are more acceptable than negative treatments, such as time out and overcorrection. More experienced teachers rate all treatments as less acceptable than less experienced teachers. Teachers with behavioural experience or knowledge rate these interventions as more acceptable than those with less behavioural experience. As behaviours become more severe, teachers are more likely to accept treatment. See Gresham & Lopez (1996) for a literature review.

Elliott (1988) indicates that despite numerous effective treatment procedures for children with learning and behavioural problems, persistent concerns remain regarding the general acceptance of these methods, resulting in underutilization of valuable interventions. His proposal that future research on the acceptability of interventions needs to be done in naturalistic settings in a consultative context, is sound and especially compelling, given that this affords a stronger test of consumers' evaluations.

### **Summary of Research**

Effective schools cannot be an island, but must be a thriving metropolis, with avenues that reach out to external resources, from academic research to community and healthcare services, as well as parental input. Review of the literature devoted to understanding, preventing, and treating childhood behaviour problems brings to light important and dynamic aspects of success for children in school settings. At the heart of the issue is the sound observation that a child's success in school should be conceived not only in academic terms, but in social and behavioural terms as well. Experience shows that any initiative adopted to

address childhood behaviour problems must be deemed useful and acceptable to those implementing it, otherwise implementation will lack integrity and result in failure. This failure will not only undermine the use of a promising and potentially beneficial initiative, but can also result in burn-out and cynicism in response to future attempts to improve school climates.

Effective school-based interventions support children and adults. School climate – the foundation upon which efforts to create systems and processes designed to facilitate behavioural capacity rests – is affected by the school culture, or the shared assumptions, values, and artefacts of the school. School culture shapes how problems are perceived and asserts the correct manner in which to deal with those problems. Very often, the behaviour of children in schools is seen as a school issue, to be dealt with in schools, but one that results from an outside source, whether in the child or in the parenting. The “blame game” is counterproductive and often erroneous. It relieves the school of the responsibility of teaching, shaping, and reinforcing acceptable school behaviour. Administrators, principals, teachers, and counsellors must focus on the education and development of children while recognizing the short and long-term consequences of disruptive behaviours and respecting the multitude of backgrounds and aetiologies of behavioural challenges.

Services and interventions that wrap around the needs of a child create a nurturing and enveloping climate within which a child can be encouraged and challenged to rise to developmentally appropriate social, emotional, and behavioural standards. Conversely, disciplinary efforts that blame children or parents, or attempt to divert blame from teachers or schools, create a climate of distrust, shame, and blame. As well, punitive measures divert energies from productive efforts to help a child, and can result in wide-ranging repercussions

for the child, including the development of a negative identity; time lost learning due to off-task behaviours, office referrals, or suspensions; social and familial tensions; and concomitant financial costs, such as those associated with residential treatment or justice system involvement. Clearly, positive behavioural approaches are more apt to be effective than punitive disciplinary methods which do not teach or respond to skill or emotional difficulties.

One school-wide positive behavioural approach to improving school climate is an initiative termed Positive Behavioural Interventions and Supports (PBIS). PBIS is characterised by multi-systemic approaches to flexibly meeting the needs of all students; wide-ranging interventions that apply to all students, such as explicitly-taught school expectations for behaviour; and interventions that can be customized to meet the needs of individual students, whether in groups or individually.

The PBIS model is composed of three levels: primary, secondary, and tertiary. The Primary level focus is on preventing behaviour problems with all children, through the dissemination of explicitly taught behavioural and social skills in all areas: school-wide, classroom, and non-instructional. The Secondary level targets “at-risk” students, i.e. those who have not responded to the primary, preventative level of intervention, and thus, in effect, become identified as needing a more intensive level of intervention for school success. These interventions are based on functional analysis of behaviour and focus on reducing frequency and intensity of problem behaviours through more direct, often small-group, teaching and reinforcing of behavioural, social, and/or academic skills. As well, monitoring and mentoring may be provided as added support. The third or Tertiary level of support is provided for children who do not sufficiently respond to the primary or secondary levels of

intervention to attain academic, social, or behavioural success. These children are provided comprehensive, flexible, personalized, wrap-around multidisciplinary supports that are child- and family-centred, are culturally appropriate, and are regularly evaluated and changed as needed to ensure the greatest degree of success possible for the child. Success is defined by the child and family, with input from members of the school or outside agencies, as applicable.

Nova Scotia has begun implementation of PBIS, through an initiative termed Positive Effective Behaviour Supports (PEBS), in which positive school climate is developed through clearly communicated school-wide expectations and reinforcement of positive behaviours. Currently, the Nova Scotian implementation consists largely of the Primary, or school-wide, level of intervention, although some schools are implementing secondary and tertiary level interventions, such as check-in and check-out mentors.

Schools are in a powerful position to help prevent negative outcomes and indeed, foster positive outcomes for children. Therefore, all tasks undertaken to aid children's success - whether as complex as instituting interventionary initiatives or as simple as taking a child's hand in your own - must be carried out with integrity. In keeping with copious research providing support for the suggestion that interventions, to be applied with integrity, must be useful and acceptable to those implementing said interventionary initiatives or as simple as taking a child's hand in your own - must be carried out with interventions, and in keeping with Elliot's (1988) proposal that more research examining acceptability of interventions needs to be done in naturalistic settings in a consultative context, this researcher seeks to examine the acceptability and utility, or usefulness, of a naturalistic initiative occurring in Nova Scotia schools. In particular, the first wave of teachers trained in one

school board in Nova Scotia will be surveyed, garnering data on the implementation in that area, with the anticipation that it may help inform subsequent implementation in that school board.

### **CHAPTER III: METHOD**

The current research is a cross-sectional survey study. Closed questions were asked; some responses included an extension, i.e., a partially-open “other” alternative to ensure that all options were covered. One qualitative short-answer open-ended question was employed at the end of the questionnaire. The purpose of the qualitative component was to generate depth data and to discover if there were issues not identified in the main questionnaire. The research evaluated components of social validity of a program, Positive and Effective Behavioural Strategies (PEBS), which is currently being implemented in a School Board in Nova Scotia.

The selected Nova Scotia School Board implemented a four-year, staggered training and implementation schedule, beginning in the 2004-2005 year. Teachers were trained in March of 2005 and March of 2006, with two more groups trained in March of 2007 and March of 2008. Approximately one quarter of schools have a “lead” team trained each year. This team returns to the school and trains the remainder of the staff: teachers, administration, secretaries, custodians, librarians, and ideally, even school volunteers. Some schools may then implement PEBS almost immediately; others may chose to prepare and then implement in September, with the beginning of the new school year.

#### **Participants**

The approximately 437 teachers from the eighteen schools that received initial training in the 2004-2005 school year were chosen as the participants for this study. Teachers are the largest single group affecting implementation of PEBS. Teachers also spend the greatest amount of time with the children during school, and therefore have had the

greatest opportunity to evaluate the effects of PEBS. The teachers receiving the earliest training have had more time to implement and evaluate PEBS; as such they were chosen as the group from whom to solicit feedback. The participant list was shortened through contingencies such as a principal declining to have teachers participate, a teacher being unavailable on the date that the questionnaire is distributed, or individual teachers choosing not to participate. No incentives other than personal satisfaction in having a chance to have a voice in the implementation of the PEBS initiative were offered.

### **Materials**

A questionnaire consisting of sixteen questions was developed by the researcher to ascertain teachers' perceptions in relation to the acceptability and utility of the Positive Effective Behaviour Supports initiative. The questionnaire did not record names or schools, to allow for anonymity. Sealable envelopes were provided to ensure that each teacher's responses remained confidential. A letter requesting each teacher's permission was attached, explaining the purpose of the study, as well as parameters of confidentiality and anonymity.

### **Procedure**

Prior to the collection of data, the School Board in this particular district of Nova Scotia was sent a letter explaining the study, providing contact numbers - including the contact number for Mount Saint Vincent University ethics Chair - and requesting permission for schools in the Board to participate. Once permission was obtained, letters were sent out to each of the eighteen early-trained school principals, explaining the study - including measures taken to ensure anonymity - providing the same contact numbers, and requesting individual principal's permission. An appropriate number of questionnaires and envelopes were prepared depending on the teacher complement in the particular school. These were

grouped into the “families”, or groups of schools that are supervised by Family Consultants. The researcher delivered the pre-packaged questionnaires, letters and envelopes to the Board’s Family Consultants during a break in a professional development day in May 2007. At this time, the purpose of the study was explained. As well, the letters and the procedures were reviewed. Consultants had an opportunity to ask questions and were given information to contact the researcher at any time if further clarifications were needed. The Family Consultant then delivered each package of questionnaires to their respective school from which permission had been obtained. They explained the study to the principal, particularly anonymity measures. The principals, in turn, disseminated the information including anonymity to the teachers and invited teachers to participate. Participating teachers filled out the questionnaire at their convenience, inserted it in an envelope provided and sealed it. The questionnaires were returned in various manners between June and September 2007. Some were mailed by the teacher directly to the researcher. Others were collected by the principals and either returned directly to the researcher via mail or via the Family Behavioural Consultant. The researcher picked up the completed, sealed forms from the Behavioural Consultant. Each form was analysed quantitatively and qualitatively.

### **Validity**

Face validity was established through consultation with a panel of three doctoral level consultants with extensive experience in the field of questionnaire design. Feedback was sought and incorporated into the questionnaire to ensure clarity and suitability for the intended audience. A pilot set of approximately six questionnaires was sent to another School Board in Nova Scotia to be filled out and evaluated by teachers to ensure clarity and validity of items.

## **Reliability**

Data was analyzed, comparing the small pilot set of questionnaires to the completed set of questionnaires to ascertain whether the information obtained was consistent. A sample size of 119 was achieved. A sample of this size is generally accepted to reduce standard error of measure. This means that if a second sample were taken, the results would probably produce close to equivalent means. Due to the variations in implementation procedures between districts, the researcher does not claim generalizability to implementations in other school boards. However, the results may inform further inquiry.

## **Data Analysis**

Items within the questionnaire were analysed using both quantitative and qualitative methods. Utilizing SPSS, items were compared to ascertain relationships between variables such as level of teaching and responses on other items, extent of training and responses on other items and amount of involvement and responses on other items. Responses on other items were ratings of acceptability and usefulness as well as degree of culture/climate change. Frequencies were tabulated to describe the sample. Where appropriate, due to nominal data, non-parametric Chi-squares were utilized to test frequency data to determine whether or not relationships between variables were significant. Parametric calculations in the form of correlations were computed where ordinal data permitted. The one brief qualitative question was analysed and coded to determine thematic responses and enrich the data. All short answer questions were transcribed verbatim. The responses were read several times by the researcher and a general sense of the data was generated from these reviews. Significant phrases or sentences were identified and sorted into themes as they emerged from the responses. These themes were used to enhance and expand the

understanding generated from the quantitative review. In keeping with a mixed methods approach (Creswell, 2003), the researcher compiled statistical and text analysis to allow the qualitative information to inform and enrich the qualitative data obtained.

### **Ethical Considerations**

Informed consent was sought from all participants. Letters explaining the research, the right to not participate, and people to whom questions can be raised, were provided to participants. Contact people included the researcher, her supervisor, and the Mount Saint Vincent University Ethics Chair. Confidentiality was ensured through the use of anonymous questionnaires that, once completed, were placed in unmarked, generic brown envelopes. Questionnaires will be kept by the researcher in a locked safe in her home and retrieved solely for review by the researcher and her University supervisors. Questionnaires and data sets may be kept locked up to three years, upon which time all questionnaires will be shredded and computer files erased.

Participants were informed that participating in the study is voluntary and that they may withdraw at any point. They were thanked for their participation and informed of how they are helping to shape an understanding of the PEBS initiative.

A copy of the final thesis will be provided to the School Board and an executive summary will be provided to principals upon request. Participants will have the opportunity to request a copy of the executive summary from their respective principal.

## CHAPTER IV: RESULTS

Overall response rate of returned questionnaires was 30%. One hundred and thirty-three questionnaires were returned. Of these, 119 completed questionnaires were coded for quantitative and qualitative analysis. A further ten questionnaires were filled out by teachers who indicated receiving no training and that the program was not implemented in the school. These were not included in the data analysis but were kept for qualitative and discussion purposes. Four questionnaires were discarded due to incomplete data. Of the 119 complete responders, sixty-six, or 55.5 %, were elementary teachers, fifty-one, or 42.9 %, were middle/junior high teachers, while one did not indicate school level taught and one indicated more than one level taught. These final two were included in analysis where school level taught was not a component.

### QUANTITATIVE ANALYSIS

#### *Research Question 1*

**What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of the adequacy of their education/training to implement a) PEBS throughout the school and b) PEBS in their classrooms?**

Chi-square analyses were conducted to discern the relationships between number of teachers who believed they received adequate training to implement a) PEBS throughout the school (Survey Question 2) and b) PEBS in their classrooms (Survey Question 3). Tables 1 and 2 in Appendix G show the statistically significant chi-square between school level taught and ratings of adequacy of training to implement PEBS throughout the school (Table 1) and

ratings of adequacy of training to implement PEBS in the classroom (Table 2), where elementary school teachers tended to respond “no” (to Survey Questions 2 & 3) and middle/junior school teachers tended to respond “yes” (to Survey Questions 2 & 3).

Sixty-five percent (65%) of elementary teachers and forty-three percent (43%) of middle/junior high teachers responded “no” to the question “did you receive adequate education/training to implement PEBS throughout the school”. Thirty-five percent (35%) of elementary teachers and fifty-seven percent (57%) of middle/junior high teachers responded “yes” to the same question.

Sixty-two percent (62 %) of elementary teachers and thirty-nine percent (39%) of middle/junior high teachers responded “no” to the question “did you receive adequate education/training to implement PEBS in your classroom”. Thirty-eight percent (38 %) of elementary teachers and sixty-one percent (61 %) of middle/junior high teachers responded “yes” to the same question.

In addition to being asked whether or not they believed their training for implementing PEBS was adequate for their school or classroom, and their understanding of PEBS, teachers were also asked to identify specific areas needing more training or support (Survey Question 5). Responses, illustrated in Figure 1 below, indicate that teachers have many areas in which they would like further training.

Eighteen percent (18%) of elementary and forty-one percent (41%) of middle/junior high teachers report a need for more training/support in PEBS as an initiative.

Eight percent (8%) of elementary and twenty-four percent (24%) of middle/junior high teachers report a need for more training/support in research supporting PEBS.

Thirty-six (36%) of elementary and forty-one (41%) of middle/junior high teachers report a need for more classroom support (EA).

Twenty-nine percent (29%) of elementary and sixty (60%) of middle/junior high teachers report a need for more training/support in positive reinforcement.

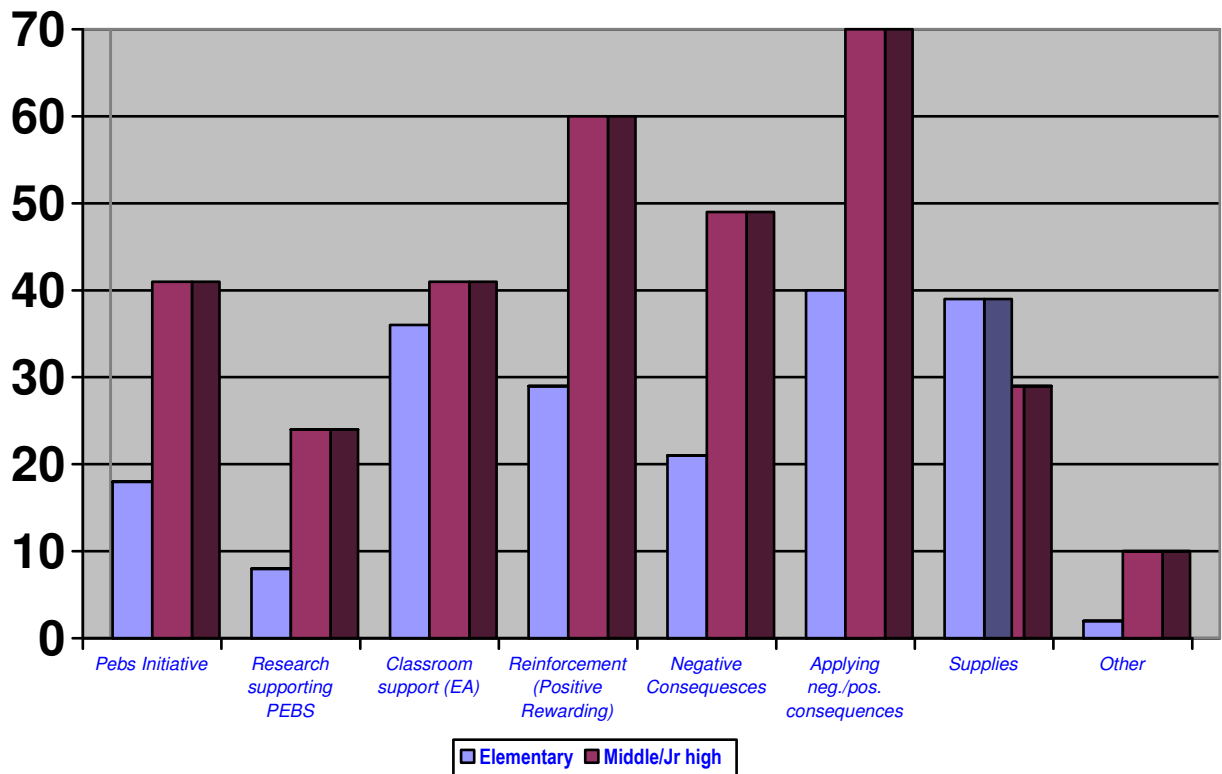
Twenty-one percent (21%) of elementary and forty-nine percent (49%) of middle/junior high teachers report a need for more training/support in negative consequences.

Forty percent (40%) of elementary and seventy percent (70%) of middle/junior high teachers report a need for more training/support in applying positive or negative consequences.

Thirty-nine percent (39%) of elementary and twenty-nine percent (29%) of middle/junior high teachers report a need for more supplies to implement PEBS.

Two percent (2%) of elementary and ten (10%) of middle/junior high teachers report a need for more training/support in other areas.

“Other” responses consisted of: needing more time to do it; needing help in all areas mentioned; needing more consistency; requiring more administrative support and some responded that they did not receive the training despite PEBS being in their school.



**Figure 1 Teacher ratings of areas requiring more training/support**

### *Research Question 2*

**What is the relationship between school level taught (elementary or middle/junior high school) and teachers' understanding of the principles of PEBS?**

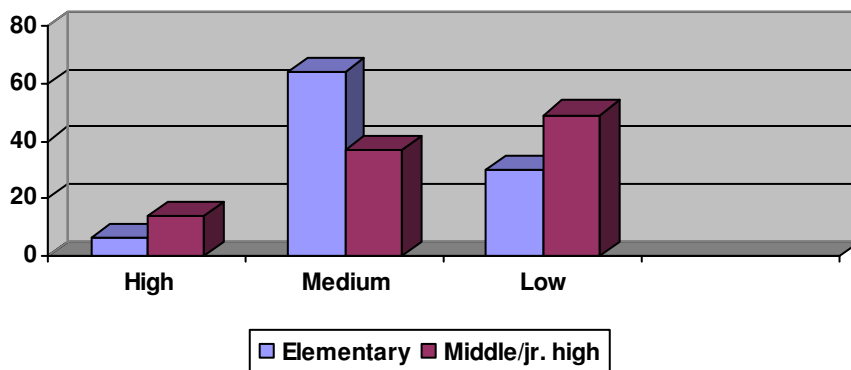
A Chi-square analysis was conducted to discern the relationship between school level taught (elementary and middle/junior high) and teachers' understanding of the principles of PEBS (Survey Question 4). Table 3 in Appendix G shows a non-significant chi-square between school level taught and teachers' understanding of PEBS principles. However, both elementary and middle/junior high teachers answered "no" at a high rate, 86 and 75% respectively, to the survey question "do you feel that you understand the principles of PEBS?"

*Research Question 3*

**What is the relationship between school level taught (elementary or middle/junior high school) and teachers' level of involvement in PEBS?**

A chi-square analysis was conducted to examine the relationship between school level taught and teachers' level of involvement in PEBS. Table 4 shows the statistically significant chi-square between school level taught and ratings of level of involvement in PEBS. It should be noted that one cell in this chi-square had a count less than 5. An expected count less than 5 can distort the chi-square statistic and should be interpreted cautiously.

Six percent (6%) of elementary and fourteen percent (14%) of middle/junior high teachers rated their involvement as "high"; sixty-four (64%) of elementary and thirty-seven (37%) of middle/junior high teachers rated their involvement as "medium"; and thirty percent (30%) of elementary and forty-nine (49%) of middle/junior high teachers rated their involvement as "low". Figure 2 illustrates.

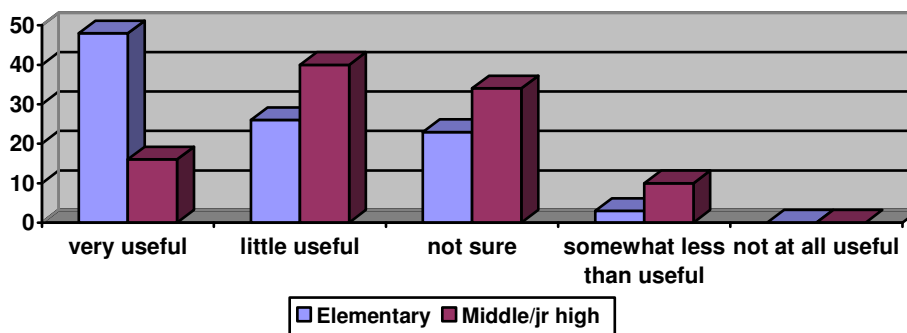


**Figure 2** Teacher ratings of level of involvement in PEBS

*Research Question 4***What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of the usefulness of PEBS in helping to manage children's behaviour in school?**

The fourth research question examined the relationship between elementary (=1) and middle/junior high school (=2) teachers' perceptions of the usefulness of PEBS in helping to manage children's behaviour in school (Survey question 9; 1 = very useful to 5=not at all useful). A Spearman correlation was statistically significant (Table 5 in Appendix G), indicating that elementary school teachers had higher ratings on usefulness than teachers in middle/junior high school. In other words, elementary teachers were more likely than middle/junior high teachers to rate PEBS as useful. Table 30 in Appendix G reports the means and standard deviations.

Elementary teachers mean response was 1.80, in the range of very useful to a little useful. The mean response for middle/junior high teachers was 2.38, in the range of "not sure yet" to "a little useful". Forty-eight percent (48%) of elementary and sixteen percent (16%) of middle/junior high teachers found PEBS to be very useful. Twenty-six percent (26%) of elementary and forty percent (40%) of middle/junior high teachers found PEBS to be a little useful. Twenty-three percent (23%) of elementary and thirty-four percent (34%) of middle/junior high teachers rated themselves as unsure whether PEBS is useful. Three percent (3%) of elementary and ten (10%) of middle/junior high teachers rated PEBS as somewhat less than useful. No teachers chose to rate PEBS as not at all useful. Figure 3 illustrates.



**Figure 3** Teacher ratings of usefulness of PEBS

*Research Question 5*

**What is the relationship between school level taught (elementary or middle/junior high school) and teachers' beliefs that PEBS has been effective in communicating school expectations to children?**

The fifth research question examined the relationship between elementary (=1) and middle/junior high (=2) school teachers and how effective teachers believe PEBS has been in communicating school expectations to children (Survey Question 10; 1 = very effective to 5 =not at all effective). A Spearman correlation was statistically significant (Table 5 in appendix G), indicating that elementary school teachers had higher ratings of efficacy than middle/junior high school teachers. Elementary teachers were more likely than middle/junior high teachers to rate PEBS as effective in communicating school expectations. Table 30 in Appendix G reports the means and standard deviations.

Elementary teachers mean response was 1.68, in the range of “very effective to “a little effective”. Mean response for middle/junior high teachers was 2.65, in the range of “not sure yet” to “a little effective”.

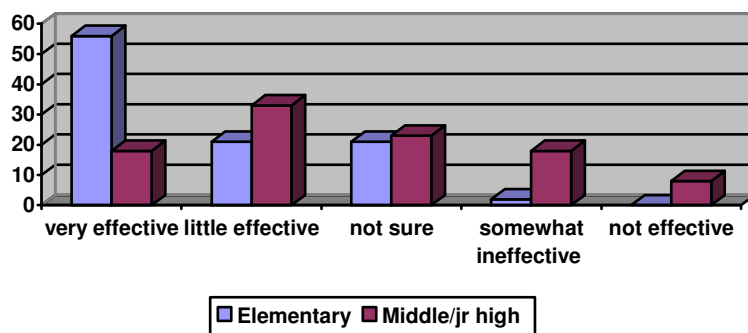
Fifty-six percent (56%) of elementary and eighteen percent (18%) of middle/junior high teachers found PEBS to be very effective in communicating school expectations to children.

Twenty-one percent (21%) of elementary and thirty-three percent (33%) of middle/junior high teachers found PEBS to be a little effective in communicating school expectations to children.

Twenty-one percent (21%) of elementary and twenty-four percent (24%) of middle/junior high teachers rated themselves as unsure whether PEBS is effective in communicating school expectations to children.

Two percent (2 %) of elementary and eighteen percent (18%) of middle/junior high teachers rated PEBS as somewhat ineffective in communicating school expectations to children.

Zero percent (0%) of elementary and eight (8%) of middle/junior high teachers rated PEBS as not effective in communicating school expectations to children. Figure 4 illustrates.



**Figure 4** Teacher ratings of effectiveness of PEBS in communicating school expectations.

*Research Question 6***What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of the acceptability of the PEBS techniques/strategies?**

The sixth research question examined the relationship between elementary and middle/junior high school teachers' perceptions of the acceptability of the PEBS techniques/strategies (Survey question 13; 1 = very acceptable to 5 = not at all acceptable). A Spearman correlation was statistically significant (Table 5 in Appendix G), indicating that elementary school teachers had higher ratings of acceptability of PEBS techniques than middle/junior high school teachers. Table 30 in Appendix G reports the means and standard deviations.

Elementary teachers mean response was 1.58, in the range of “very acceptable” to “somewhat”. Mean response for middle/junior high teachers was 2.37, in the range of “somewhat acceptable” to “no opinion”.

Fifty-six percent (56%) of elementary and twenty-two percent (22%) of middle/junior high teachers found PEBS techniques/strategies to be very acceptable.

Thirty percent (30%) of elementary and thirty-one percent (31%) of middle/junior high teachers found PEBS techniques/strategies to be somewhat acceptable.

Nine percent (9 %) of elementary and thirty-five percent (35%) of middle/junior high teachers expressed having no opinion on PEBS techniques/strategies.

Three percent (3%) of elementary and twelve percent (12%) of middle/junior high teachers rated PEBS techniques/strategies as slightly unacceptable.

Two percent (2%) of elementary and zero percent (0%) of middle/junior high teachers rated PEBS techniques/strategies as not at all acceptable. Figure 5 illustrates.

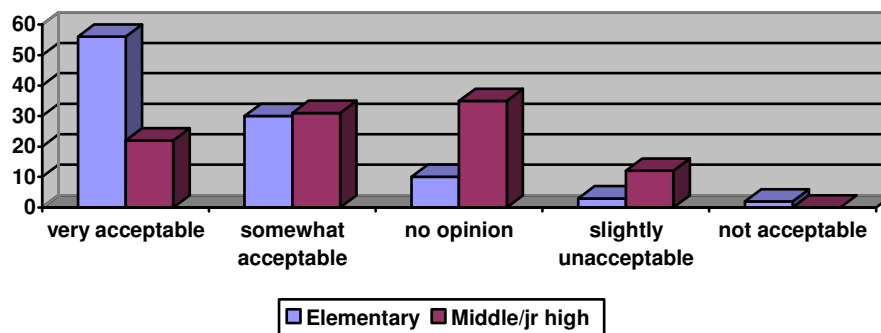


Figure 5 Teacher ratings of acceptability of PEBS techniques/strategies

#### *Research Question 7*

**What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of the adequacy of their training in their classrooms and whether the teacher's involvement was required or volunteer?**

The seventh research question examined the relationship between elementary and middle/junior high school teachers' perceptions of the adequacy of their training in their classrooms (Survey Question 3) and whether the teacher's involvement was required or voluntary (Survey Question 8). Eighty-five percent (85%) of elementary teachers and sixty – six percent (66%) of middle/junior high teachers responded that their participation was required. Tables 6, 7 and 8 in appendix G present the chi-squares, which were not statistically significant. There was no relationship found between teachers' ratings of adequacy of training and whether their involvement in PEBS was required or voluntary.

*Research Question 8*

**What is the relationship between teachers' perceptions of the adequacy of their education/training to implement PEBS a) throughout the school and b) in their classrooms and teacher's perceptions of the acceptability of the PEBS techniques/strategies?**

Spearman correlations were conducted to compare the relationship between teachers' perceptions of the adequacy of their education/training to implement PEBS a) throughout the school (Survey Question 2) and b) in their classrooms (Survey Question 3) and teacher's perceptions of the acceptability of the PEBS techniques/strategies (Survey Question 13).

As indicated in Table 9 of Appendix G, ratings of adequate training and acceptability of techniques were positively correlated. Lower scores on adequacy of training (yes=1; no=2) both throughout the school and in the classroom were related to lower scores on of acceptability (Survey question 13; 1 = very acceptable to 5 = not at all acceptable) indicating teachers who rated receiving adequate training were more likely to rate PEBS techniques/strategies as acceptable. These results were significant at the 0.1 level.

*Research Question 9*

**What is the relationship between the source of teachers' information/training and teachers' perceptions of a) the acceptability and b) the usefulness of PEBS to manage children's behaviour in school?**

Spearman correlations were conducted to compare the relationship between the source of teachers' information (Survey Question 6) and teachers' perceptions of the acceptability (Survey question 13; 1 = very acceptable to 5 = not at all acceptable) and the

usefulness of PEBS to manage children's behaviour in school (Survey Question 9; 1=very useful to 5=not at all useful) Results appear in Table 10 of Appendix G.

Ratings of acceptability of techniques/strategies and ratings of usefulness were positively correlated, indicating that as usefulness scores increased, acceptability scores increased, or alternatively, as acceptability scores increased, usefulness scores increased. Survey Question 13 (acceptability) was negatively correlated with Survey Question 6b (in-service). Due to reverse coding, this finding indicates that higher acceptability scores were related to receiving in-service training.

Survey Question 13 (acceptability) was positively correlated with Survey Question 6e (other research on own) at the 0.5 level of significance. Due to reverse coding on this question, this indicates that lower acceptability ratings were related to participants indicating "other research on my own" as a source of training.

#### *Research Question 10*

**What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of children who are not being adequately served by PEBS?**

The tenth research question examined the relationship between elementary and middle/junior high school teachers' perceptions of children who are not being adequately served by PEBS (Survey Question 11a-i; Tables 11-19). Only Survey Question 11a (Table 11) was significantly related to school level taught, where 71% of teachers in middle/junior high rated "children who already behave well" as not being adequately served by PEBS. A

lesser (40%), but substantial portion of elementary teachers rated children who already behave well as not being adequately served.

Although no significant difference was found between school levels taught, approximately 1/3 of teachers of both levels rated children who do not receive support from home as not being adequately served by PEBS. Qualitative comments from teachers such as “some parent’s don’t care, so kids don’t care about consequences” augment this concern.

Teacher responses to the “other” question reveal that some teachers perceive defiant children, red zone/extreme behaviour students, and children with Fetal Alcohol Syndrome (FAS) as not being served by PEBS.

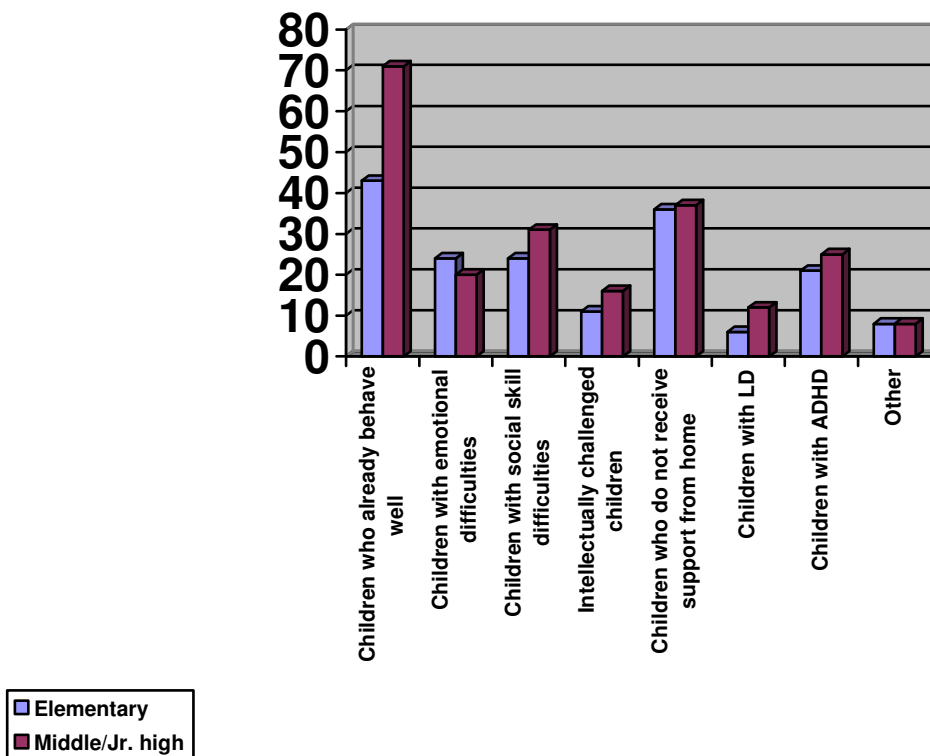


Figure 6 Teacher ratings of children not being adequately served

*Research Question 11***What is the relationship between school level taught (elementary or middle/junior high school) and teachers' ratings of children who are being adequately served?**

The eleventh research question examined the relationship between elementary and middle/junior high school teachers' ratings of children who are being adequately served (Survey Question 12a-i; Tables 20-28). A significant relationship was found with Survey Question 12a – children who already behave well (Table 20 in Appendix G), where elementary teachers tended to endorse “yes” more frequently than middle/junior high teachers.

Twelve percent (12%) of middle/junior high teachers and thirty-two percent (32%) of elementary teachers rated “children who already behave well” as adequately served.

Fifty-two percent (52%) and forty-five percent (45%) of elementary and middle/junior high teachers, respectively, rated “behaviourally challenged” children as adequately served by PEBS.

Fifteen percent (15%) and twenty-seven percent (27%) of elementary and middle/junior high teachers, respectively, rated “children with emotional difficulties” children as adequately served by PEBS.

Twenty-nine percent (29%) of both elementary and middle/junior high teachers rated “children with social skill difficulties” children as adequately served by PEBS.

Eleven percent (11%) and fourteen percent (14%) of elementary and middle/junior high teachers, respectively, rated “intellectually challenged” children as adequately served by PEBS.

Thirty percent (30%) and twenty-four percent (24%) of elementary and middle/junior high teachers, respectively, rated “children who do not receive support from home” as adequately served by PEBS.

Twenty-one (21%) and twenty percent (20%) of elementary and middle/junior high teachers, respectively, rated “children with learning disabilities” as adequately served by PEBS.

Twenty percent (20%) and eighteen percent (18%) of elementary and middle/junior high teachers, respectively, rated “children with ADHD” as adequately served by PEBS.

Three percent (3%) and five (5%) elementary and middle/junior high teachers selected “other” as being adequately served by PEBS. “Other” responses consisted of: “Children who are not intrinsically motivated” and “all children” are benefiting from PEBS. Refer to Figure 7 below.

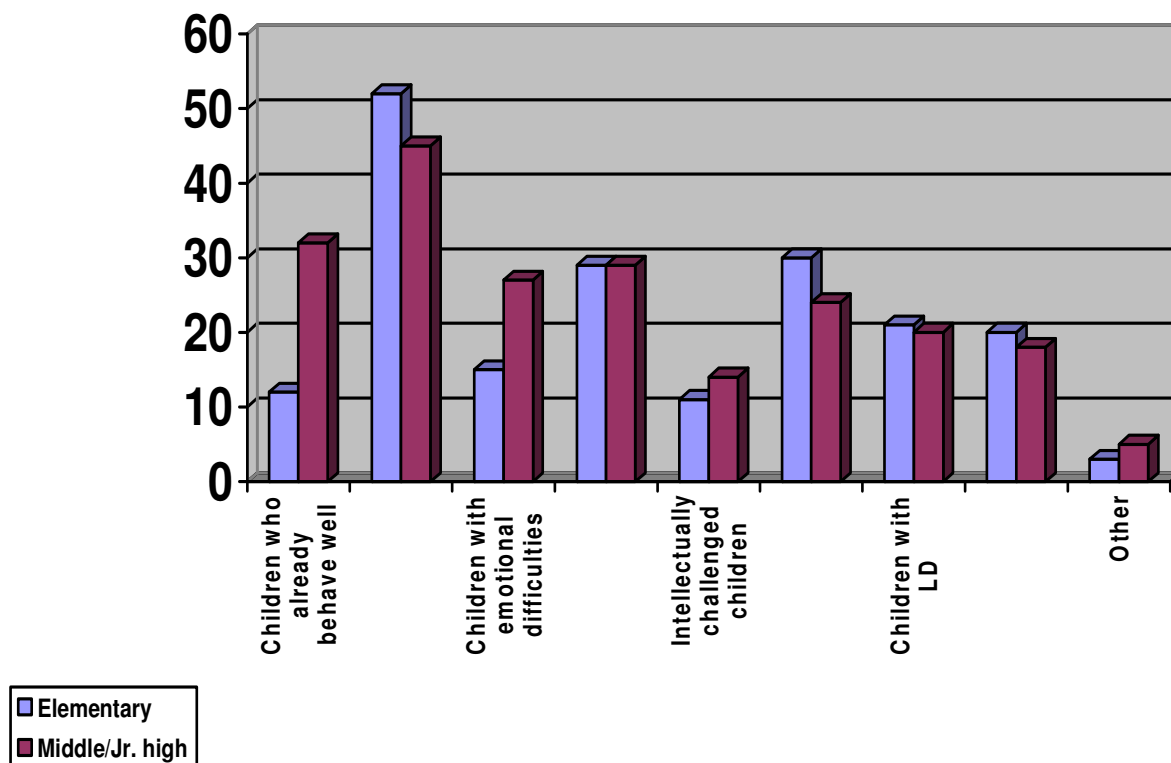


Figure 7 Teacher ratings of children being adequately served

*Research Question 12*

**What is the relationship between school level taught (elementary or middle/junior high school) and teachers' perceptions of how PEBS has changed a) classroom management style/climate and b) school/classroom culture/climate?**

The twelfth research question examined the relationship between elementary (=1) and middle/junior high (=2) school teachers' perceptions of how PEBS has changed school/classroom culture/climate (Survey Question 14; 1 = for the better to 5 = worse) and classroom management style/climate (Survey Question 15; 1 = for the better to 5 = worse).

Both Spearman correlations were statistically significant (Table 29). Elementary school teachers were more likely than middle/junior high teachers to endorse that PEBS changed the school/classroom culture/climate for the better. Elementary teachers were also more likely than middle/junior high teachers to endorse that PEBS influenced classroom management style for the better. Table 30 in Appendix G provides the mean responses.

Elementary teachers' mean response to the question "to what degree has PEBS changed the school/classroom culture/climate" was 1.61, in the range from "for the better" to "slightly better". Middle/junior high teachers' mean response to the question "to what degree has PEBS changed the school/classroom culture/climate" was 2.26, in the range from "slightly better" to "no change".

Elementary teachers' mean response to the question "to what degree has PEBS influenced your classroom management style/climate" was 1.75, in the range from "for the better" to "slightly better". Middle/junior high teachers' mean response to the question "to what degree has PEBS influenced your classroom management style/climate" was 2.33, in the range from "slightly better" to "no change".

## QUALITATIVE ANALYSIS

### *Research Question 13*

#### **What themes are raised regarding teachers' perceptions of the usefulness of PEBS?**

The final research question sought to elicit participants' responses to an open-ended question regarding what they considered was useful or not useful with PEBS. Eighty-seven out of one hundred and twenty-nine participants (67%) chose to share their perceptions of the utility of PEBS in this manner. These short answer responses required qualitative analysis. First, all responses were transcribed verbatim. Then they were read carefully and thoughtfully several times by the researcher to obtain a general sense of the experiences related by the teachers. After the researcher was familiar with the data, the responses were sorted manually into themes to identify recurrent patterns. It is worth noting that some experiences were related comparably. For example, all teachers commenting on rewards/reinforcers articulated the usefulness of this component. However, other teachers' comments reflected disparate experiences. For example, some teachers experienced consistency in their schools and rated it as useful. Other teachers related inconsistency in their school negatively impacting the implementation of PEBS. Prior to review of the themes it should be noted that emphases in the text of responses reflect the teachers' emphasis, not the researcher's. The themes are identified as follows:

### *Themes of PEBS Being Useful*

#### **Rewards/Reinforcers/Positive Consequences**

The most common remark reflected agreement with, and appreciation for, the positive reinforcement component of PEBS. Sixteen teachers expressed comments reflecting this theme, a sampling of which is supplied here:

*Focus has shifted towards recognizing positive behaviour and this has been good for both students who behave respectfully and those who need to work more in this area.*

*Positive feedback is important. Reward system is effective.*

Teachers voiced that token reinforcers such as “Gotcha’s”, as well as reward stores, and weekly draws are useful. They shared that it helps children to focus on goals, gives them something to strive for, and helps teachers to celebrate good behaviour rather than focussing on “bad” behaviour. Some teachers expressed a liking for daily, weekly and monthly rewards/awards; expressing that both the children who struggle with managing behaviour and those who do not struggle, find it motivating and rewarding.

#### **Matrices/School-wide Rules/Clear Expectations**

All nine teachers commenting in terms of matrices or clear school-wide expectations of behaviour articulated perceptions of the usefulness of this component of PEBS. Matrices consist of short descriptions of expected behaviours arrayed in rows and columns. These rows and columns outline the settings (i.e. classroom, halls, playground, etc.) and expected behaviours (i.e. use an indoor voice, place litter in garbage receptacles, etc.). Some comments were:

*The rules and expectations are not complicated and easy to follow.*

*The school wide rules and supports can benefit behaviourally challenged students (mostly) but can also have a positive effect with all the other categories [of children].*

Teachers expressed that PEBS has improved the overall school climate and attribute much of this to the matrices of behaviour expectations and clearly laid out rewards and consequences. They held that matrices get everyone on the same page and help teachers to keep rules/expectations consistent.

### **Consequences/Accountability for behaviour**

All seven teachers commenting on consequences and accountability for behaviour as laid out in PEBS conveyed a perception of this component as useful. A sampling of remarks is as follows:

*PEBS has improved the overall climate of our school and has greatly reduced discipline issues. The “respect 4” grid and clearly laid out consequences for majors and minors attribute to this.*

*It helps me to ensure that I have put thought behind my actions and that consequences are logical and anticipated.*

*Accentuates the positives, however, children need to be accountable for their actions – respectfully. I fully agree with PEBS.*

Teachers’ observations reflected perceptions that PEBS conveys to children the rules of the school and what is to be expected if the rules are not followed. This leaves teachers with more time to teach, as one teacher put it, “because negative behaviours can be quickly, quietly and respectfully dealt with”. Teachers value that they are not as distracted trying to think up appropriate consequences, as they are already clearly laid out in the matrices. They appear to appreciate that children can know what to expect and that teachers know what consequences to apply when necessary. The logic and predictability of consequences as well

as a reduction of arbitrary punishment seem to be attractive to many teachers. One teacher stated, “What is predictable is preventable”.

### **Tracking**

Two teachers commented that tracking helps to monitor children. One example:

*Helps to keep track of children who could become behaviour problems.*

It appears that these teachers like that the tracking system helps to keep them aware of children’s real behaviour as documented and relies less on ephemeral memories. It is possible that it may help to track children who may otherwise “fly under the radar”.

### **Consistency**

Consistency of application of PEBS principles, strategies and techniques, as mentioned in the preamble to this section, is an area that is being experienced as a boon when done well. Some of the six teachers reflecting on the benefits of consistency in their schools commented:

*Everyone is working with the same rules and same expectations. Consistency! No surprises for the children.*

*PEBS has made the school very consistent in all areas (classroom, gym, halls). The students know the rules and know what consequences to expect no matter where they are or who is with them.*

*If it is applied properly/consistently, more time is given to actually teaching the curriculum and not so much time is spent disciplining chronic rule breakers.*

It seems clear that teachers like the consistency that PEBS can offer a school when well-implemented. They like the predictability that it can provide both to children and to teachers.

### **Skills/Focus groups**

Few teachers commented on focus groups. Focus groups consist of small groups gathered to discuss and learn about a specific skill or skill set. For example, children who are demonstrating difficulties sharing on the playground may attend a focus group which concentrates on learning about sharing and practicing how to share. This centres the focus on learning the necessary skills rather than punishment for the absence of skills (or absence of knowledge of the importance of the particular skill). The one comment made by a teacher who perceived skills/focus groups as useful:

*Focus groups provide children with some coping skills instead of acting out.*

It would appear that skills/focus groups are not a large concern for teachers, given the few who raised the topic. However, focus groups have been mentioned as useful. It is unclear why focus groups were not mentioned more. Many speculations could be made; however, each school may best be served by holding conversations with staff to determine the value of them in each particular school. A cautionary note: a school finding focus groups ineffective may be better served by adjusting the groups rather than discarding them.

### **Training/Communication**

Most teachers who chose to comment on training and communication expressed dissatisfaction with how this is panning out in the schools. However, a small subset of two commented that PEBS has provided them with a shared language and has improved communications between teachers in the school as well as between school and home.

## **Supports**

Only one teacher commented on the usefulness of the supports:

*The family support has been exceptionally helpful in the BEST (researcher note: BEST is a name given to some already established programs in this school board that have a PEBS-like blueprint; it is considered the elementary version of PEBS in these schools) program. Many children with problem behaviours have homes that need support to help the children.*

Clearly, with such a dearth of comments on the usefulness of supports, it is impossible for the researcher to make inferences on this topic here. This topic is revisited in the paragraphs below, as other teachers commented on difficulties with lack of supports.

## **Target children**

Three teachers mentioned the usefulness of PEBS for a “target” group of children; however, only one of those teachers specified the target group for whom he or she perceived to be benefiting from PEBS. This one teacher identified PEBS is useful to help students who are not intrinsically motivated.

## **Climate**

Four teachers discussed the effect of PEBS on their school climate. One comment is shared here:

*I believe PEBS to be very useful. I think with proper implementation, PEBS can only brighten the climate of our entire school.*

It appears that PEBS is being embraced as very useful by some teachers who notice an improvement in the climate of the school.

### **Themes of PEBS Not Being Useful**

#### **Rewards/Reinforcers/Positive consequences**

In contrast to the positive comments about rewards and reinforcers mentioned above, six teachers shared a less positive experience. A sampling is shared here:

*The lack of positive consequences on a regular basis leaves many well-meaning teachers without appropriate ways to reward/recognize proper behaviours.*

*It is not helpful when the same children get rewarded every week.*

These teachers also expressed a need for some sort of token reinforcers, such as Gotcha's. As well, they shared their difficulty trying to come up with meaningful and affordable rewards.

#### **Tracking**

In comparison to the two teachers who found tracking to be useful, two teachers commented that tracking causes extra work. One comment follows:

*It is difficult, time consuming, to keep on top of the positive and negative tracking of students.*

While two teachers may seem a small sub-set, it is important to remember that they likely represent a sector and that every teacher is responsible for at least one class which represents a large number of children. Therefore even one teacher needing support with tracking may be important to the consistency and effectiveness of the program for those children.

## **Consistency**

As mentioned above, in schools where teachers experienced school-wide consistency of PEBS principles, strategies and techniques, it was noted as a useful component. In contrast, other teachers noted that lack of consistency is a problem. Six teachers commented upon the experience of inconsistency being a shortcoming. Interestingly, although perhaps inconsequentially, this response was equal to the number of teachers who commented on the benefits of consistency. A sampling of these teachers' comments follows:

*Great program, however, without support - (EA!) and consistency within the school, it is not effective.*

*PEBS has been "watered down"; and inconsistency within the school (for a variety of reasons) has made it ineffective.*

*PEBS success depends upon each teacher following it daily.*

It seems clear that some teachers are working in schools where they perceive that PEBS is not being applied consistently, to the detriment of the program. The third example above highlights that teachers understand that consistency must come from teachers. Nevertheless, the second example serves to highlight that inconsistency may develop for a variety of reasons, although the author of that remark did not delineate his or her perceived reasons for inconsistency.

## **Skills/Focus groups**

As mentioned above, few teachers commented on skills or focus groups. Of those finding them less than useful, one was because the teacher did not see them as effective and the other two commented on the lack of skills/focus groups as an inadequacy in the program. An example follows:

*We need social skills taught to behavioural challenged students (here the researcher took the liberty of placing this under groups, as this is how they are usually run, although the teacher may well have intended on a one-to-one format)*

### **Training/Communication**

Nine teachers chose to express a variety of difficulties with training and communication of the PEBS initiative. Some new teachers, or those who missed the training for other reasons, are expected to implement it without any training. One comment was:

*My biggest concern was lack of communication to me about the program when I was in my first year at the school.*

*Possibly helpful for some but I missed the training.*

Other teachers expressed dissatisfaction with the training or the follow-up to training.

Some of them mentioned:

*The staff implementation did not go well, not enough time spent to understand it. Just do it!*

*The whole thing would be so much better if staff (sic) were trained and expectations were communicated better. It's a great program, but we're not applying it correctly.*

Two comments, when contrasted against each other, outline confusion that some teachers seem to be experiencing in the schools. Consider:

*PEBS needs universal implementation to be effective, but frequently is only applied to those with behavioural issues.*

And

*Teachers are using it as a general discipline format for all rather than targeting individuals.*

It seems possible that neither of these teachers understands the three-tier (green/yellow/red zone) format of PEBS. It could be that missed training, lack of communication - resulting in misunderstanding, or incomplete application of PEBS may be

impinging on effectiveness of the program in some schools. Alternatively, these teachers may be noticing ineffective implementation in their schools.

Teachers also mention desire to have more support from the school psychologist and the importance that support and consultative staff have sufficient training and skills.

### **Supports**

One teacher commented on the usefulness of the home support. However, it would appear that other schools do not have this support. Five teachers chose to elaborate on difficulties with supports affecting the implementation of PEBS in their schools. A sampling of their shared observations follows:

*The home interventionist was an amazing support. This was taken away from us and things are not clicking together.*

*Not enough supports. Just as learning difficulties are best caught early – also need to catch children with behavioural challenges early and put in proper support - may need out of school supports.*

*Pulling of funds last year really killed this program for us.*

*More financial support to see that the program continues is critical. Great program, but without support, it is not effective.*

It seems that some teachers are finding that a lack of support or funds is seriously affecting the effectiveness of this program. The tone of their comments reflects a buy-in with the program, but a deflated expectation of its usefulness due to lack of supports. These teachers do not appear to only be saying “I need money to buy rewards”. Rather, their comments reveal a genuine concern that the program may not be meeting its promise due to lack of supports; and this is not only money but other professional supports such as a home interventionist or out-of-school supports.

### **Unfairness for Some Children**

Six teacher's responses reflected a concern that PEBS is not implemented uniformly for all children and therefore, in their perception, seems unfair to children who already behave well. A sampling of these comments is as follows:

*Those who are already great students get nothing.*

*I find the children who are misbehaving get so much attention – which is great but the ones who always follow rules are rarely celebrated.*

*Focus needs to be positive – reward the well-behaved, focused students.*

Some teachers find it difficult to see children with behaviour difficulties be rewarded for their behaviour, while children who always behave well get less attention. They would like to see children who regularly behave well get rewarded more.

### **Red Zone Children**

Some teachers identified concerns in relation to the efficacy of PEBS for red zone, or chronically or severely behaviourally challenged children. In fact, only concerns were expressed for red zone children. No teacher commented on PEBS being useful for these children experiencing behavioural difficulty. Some concerns shared were:

*We need a next step for those kids who just refuse to change.*

*We're making more red zone kids. Yellow zone moving up instead of red zone going down.*

*PEBS is not as useful for the 2-5% of chronic behavioural problems.*

### **Management of Program**

Five teachers shared concerns that what they consider mismanagement or abuse of the program is making it not useful. Some thoughts they shared are:

*Not well managed – students manipulate the program to their advantage.*

*Some use PEBS as an excuse to not be in the room – especially at the beginning and end of day (“I need to get my card signed”).*

*Some PEBS students look at it as a period off when they are often enrolled in more hands-on learning.*

### **Not Implemented Yet**

Ten teachers either reported that their school had not implemented the program yet or in the case of one responder, the school implemented it but the program fizzled out. This individual said:

*We didn't go anywhere with it. We just did Matrices of Expectations then expected it to “happen”. It didn't. I think the PEBS initiative is awesome. It is my hope that they re-visit it.*

This result was surprising, as questionnaires were only sent out to schools which had received the first available year of training (2004-2005). It appears that the initiative has not made it to the implementation phase in some of these schools. However, a number of teachers mention that their school is slated to begin the implementation in 2007. One wonders how fresh the training will be – will the school take measures to refresh the training?

## CHAPTER V: DISCUSSION

The purpose of the current research has been to examine components of the social validity of a positive effective behaviour program implemented within a school board in Nova Scotia. A substantial body of research beginning with Kazdin (1977) and Wolf (1978) demonstrate the influence that consumer perceptions can have on the application and potential outcomes of a treatment (Elliot, 1988). Current researchers continue to recognize the influence and importance that these constructs have on bridging the research-to-practice divide. No amount of data or scientific research will ensure effective implementation of a program without the acceptance of those who actually implement it (Grim, 2006).

This thesis focused on the acceptability and usefulness of the behavioural program PEBS. In this discussion, the results of the research study are summarized and tied to the research questions and the research literature. Results are discussed in relation to school level taught, child and adolescent development, teacher training, as well as school culture and climate. Limitations of this study and suggestions for future research directions are addressed. Finally, recommendations are formulated in light of the information garnered from teachers' responses. Within this discussion, as has been the practice throughout this thesis, the common behavioural term "reinforcer" is replaced with the term "reward" as this is the term generally used and understood by teachers in this school board.

### **Usefulness, Effectiveness and Acceptability of PEBS**

Overall, most teachers surveyed found PEBS useful. Forty-eight percent of elementary and sixteen percent of middle/junior high teachers found PEBS to be very useful, while twenty-six percent of elementary and forty percent of middle/junior high teachers

found PEBS to be a little useful. Elementary teachers were more likely to find PEBS useful than those teaching middle or junior high.

In particular, teachers tended to regard the focus on positive reinforcement to be useful. Although some teachers considered it difficult to devise or supply rewards (reinforcers), generally, they valued the emphasis on looking for good behaviours and rewarding these rather than supplying attention for negative behaviours. It appears that the provision of rewards may not be consistently accessible across schools; it may be that teachers are being variously left more or less on their own for the provision and dispersion of rewards. It requires little insight to recognize that teachers for whom rewards are provided and reward systems set up will likely be more consistent overall than teachers for whom the provision of rewards are time and thought consuming as well as personally expensive.

In terms of effectiveness, findings were similar. Overall, most teachers found PEBS effective. Elementary teachers were more likely to find PEBS effective in communicating school expectations to children than did middle/junior high teachers.

Teachers found matrices of expected behaviour with clear, predictable, and respectful consequences for violations useful for communicating expectations. They liked that the program removed the onus from them to decide which behaviours to address. As well, they seemed to appreciate the consistency that matrices can offer. Teachers reported a reduction in the application of personal and varying standards for behaviour. One of the benefits of a school-wide matrix for behaviour appears to be the ease with which consistency of expectations, rewards, and consequences can be achieved.

However, it appears consistency is being achieved variously across the school board. In schools where consistency is being realized, it is reported by teachers to be helpful in

managing school-wide behaviour. However, in other schools, consistency is not being achieved and this inconsistency appears to be undermining the program. Teachers in these schools comment that without consistency the program is ineffective. Clearly, the program itself does not ensure consistency. This appears to be an area requiring further study. What are the impediments to consistency in particular schools? Is it possible that the school culture may be impeding the adoption of the practices and principles of PEBS? Is leadership different in these schools? Has the training been disseminated adequately to teachers in these schools? Do teachers need booster sessions or refreshers? Are the new or transferring teachers receiving the training required to implement PEBS? Are supplies and supports wanting in these schools? Open lines of sincere and candid communication will be invaluable in seeking answers to these and other questions.

Findings in relation to perceptions of acceptability revealed that elementary teachers tended to find PEBS techniques and strategies more acceptable than did middle/junior high teachers. Teachers who rated their training as adequate were more likely to find PEBS techniques and strategies acceptable. In addition, teachers who received in-servicing were more likely to rate PEBS techniques as acceptable, while those who did their research on their own were less likely to rate PEBS techniques acceptable. It seems that in-servicing may be a means in getting teachers on board with the initiative.

### **Differences between Elementary and Middle/Junior High Teachers**

Some differences were noted between elementary and middle/junior high teachers. In particular, middle/junior high school teachers tended to find PEBS less useful and less effective than elementary teachers. They were also less likely to find PEBS techniques acceptable. This is worthy of attention. While there is no doubt that all teachers have

challenging roles, middle/junior high teacher have some unique challenges. As noted previously, adolescent development is distinctly different than child development in the early school years. The study by Larson et al (2002) reminds us that early adolescents show a downward trend in emotional states. Adolescents are at a time in their lives when they tend to seek more self-determination. Thomsen (2004) engaged us to hear the voice of the child, and to empower children to actively contribute in school. One wonders if children in middle/junior high are engaged in the process or if PEBS is being implemented “to” them rather than “with’ them? Middle/junior high school efforts to educate children can not be limited to the academic, but must also strive to develop emotional literacy skills and a sense of community. It is fundamental that efforts to engage children at these stages show respect and appreciation for the struggles and the developmental needs that are unique to these ages. In particular, adolescents may benefit from being included in the development of the matrices that affect them as opposed to having the matrices imposed on them. Are middle/junior high teachers receiving training in PEBS that reflects the special professional challenges that they experience on a daily basis due to the developmental stages of the children with whom they work? Or is PEBS training being delivered as one-size-fits-all? These questions and others need to be asked and middle/junior high teachers need to be engaged in dialogue to establish where it is they feel PEBS is not working for them. While behavioural techniques may remain common between school levels, the delivery would differ substantially. Possibly, middle/junior high teachers’ training needs are not being met in this area.

Along with the unique challenges that middle/junior school teachers experience, it may be worthy to explore how PEBS fits in with teachers’ sense of purpose. While elementary teachers may find PEBS fits in with the provision of socio-emotional caring as a

component of their sense of purpose, does PEBS fit in with secondary school teachers' sense of purpose? Not only do teachers have a curriculum to cover, but many teachers at this level tend to value the transmission of subject knowledge as a large component of their sense of purpose. Do middle/junior high teachers sense that the attainment of socio-emotional and behavioural goals is a purpose of elementary teachers? It may be that for PEBS to be more successful at the secondary level this question will have to be addressed.

Several middle/junior high teachers expressed a sense that some children are manipulating PEBS. For example, some mentioned children who use the program to escape the classroom, claiming to need a card signed. One can see why teachers may not find a program effective or useful if they feel it is being manipulated. Are children manipulating the program? The development of manipulation skills would be counter-productive to the goals of the program. Do these teachers need more training, perhaps in methods to address "manipulation" or in understanding the needs of the child? Does the teacher have someone with whom to confer safely without blame being laid on the teacher? Does the teacher have adequate access to the school psychologist for consultation? It is possible that other interpretations are possible for the behaviour being termed as "manipulative". Generally, people do not try to escape when they are part of a climate that helps them to feel good about where they are and who they are. Questions could be asked that do not blame teacher or student, but that seek to open dialogue and problem-solve. Adolescents and teachers both can benefit from having a voice in the programs that affect them.

Middle/junior high teachers were more likely to mention that children who already behave well are not being served by PEBS. This occurred at such a rate that it may deserve further examination. Does this mean that children who behave well are reversing in their

behavioural growth? Or does it mean that teachers do not perceive it to be “fair” that children who struggle with behaviour get their good behaviour noticed more and their “bad” behaviour noticed less, while children who generally behave well get noticed at a similar or even lesser rate? From some of the qualitative comments, the latter seems to possibly be the case. Two lessons can perhaps be taken from this.

First of all, for effective implementation, and particularly in primary prevention, all children get noticed for good behaviour, not just those who struggle with behaviour. It may be that some schools are not implementing the program with this in mind. This may serve as a reminder for school administration to ensure that this component is incorporated into their programming.

Secondly, there may be a training issue and this is twofold: First, are teachers trained to understand that children who struggle do need some care to ensure that adults are looking to teach and recognize their good behaviour? This can be easy to overlook when desired behaviour is sandwiched between unacceptable behaviour. One wonders also if teachers are receiving adequate training in child psychology to understand that all children receive rewards for their behaviour. Some children respond to those more intrinsic, intangible rewards. This might be pride or responding to an approving glance from a teacher, or a sense of fulfilling one’s identity (when a child has had the opportunity to develop an identity that responds to this). However, other children are not as aware of, or responsive to, these types of rewards. They may need more tangible rewards to know that they are on the right track or to give them encouragement. Teachers commented that they would like to give positive rewards to children who are more focussed. It would seem imperative that to get middle/junior high teachers to implement PEBS as planned they must feel that it is fair to all

children. This will mean that the implementation cannot devise to reward only children with challenges, but must ensure that all children see the benefits of PEBS. Some remarks made by teachers indicate that there may be some confusion over the population for whom the program is to be implemented. Conflicting responses indicated that some teachers thought that PEBS was a program for all children and others perceived the program to only be for children with behavioural issues. It would seem beneficial that all teachers understand the three-tier component of the program and have a sense of how it is to be implemented consistently in their particular school.

One of the most curious findings from the survey was that a substantial measure of teachers indicated a lack of understanding of the principles of PEBS. However, middle/junior high teachers were more likely than elementary teachers to deem their training adequate. One wonders: how can fifty-seven to sixty-one percent of teachers find their training adequate, yet at the same time indicate a lack of understanding to such a high degree? These findings also seem at odds to the findings of usefulness and effectiveness. However, other interpretations are possible. It may be that elementary teachers, who seem to find PEBS more useful and effective, are therefore more interested in receiving additional training. However, another paradoxical finding occurred in the data. Despite middle/junior high teachers' greater ratings of adequacy of training, they were much more likely than elementary teachers to indicate areas where they need more training or support. In fact, they indicated the need for training/support to a greater extent in all areas except supplies. Of particular note, seventy percent indicated a need for training in applying positive and negative consequences properly. These seemingly contradictory findings may indicate experiences with middle/junior high teachers that warrant further attention. It could be

interpreted that middle/junior high teachers are finding PEBS less useful and effective, but may be open and willing to acquire more training in hopes of improved results. It could also be that they have a greater need for sustained training and support due to challenges inherent in teaching these grade levels.

Finally, both levels of teachers perceived PEBS to have improved their school/classroom culture/climate and classroom management style; however, middle/junior high teachers endorsed this to a lesser degree. Middle/junior high schools are quite different than elementary schools. Children change teachers to a greater extent, timetable scheduling is very different and classes are larger. Do these different conditions, if not taken into consideration, contribute to the overall effectiveness and usefulness at this level? Addressing the concerns that may be unique to this level may be conducive to improved results. Conversely, however, it remains in question if school culture is substantively different in middle/junior highs, with a consequent experience in terms of acceptance of techniques, usefulness, and efficacy of PEBS.

### **Limitations and Suggestions for Further Research**

All research has limitations and the following limitations should be considered when interpreting the results in this study. First, due to the nature of survey design, the answers teachers can provide are limited in depth. An attempt was made to ameliorate this situation by employing a short answer qualitative question to generate depth and to uncover issues. However, it is important to recognize that the depth and breadth of teachers' experiences far surpass the sensitivity of the instruments employed.

Another limitation is the self-report methodology that a survey utilizes. This requires subjective reporting, which raises the possibility of response bias. One must keep in mind

that the participants may respond to items in a socially appealing manner. Further studies could improve on this by diversifying methodologies, for example, adding in an observational instrument which is generally considered more objective. As well, it is important to keep in mind that those who responded to the survey could be different than those who did not respond to the survey. They could have a greater interest in the topic; they could have had better or worse experiences with the implementation of PEBS, and so on. It is prudent to keep this in mind when reviewing results.

A further limitation to this study is that the researcher was not personally present for the delivery of instructions to the teachers, and as such, cannot guarantee that the delivery was the same for each group of teachers. This limitation was minimized through the provision of a standard letter for delivery of instructions as well as the provision of contact numbers for questions.

As well, the current research gathered the perceptions of only one group – teachers - affected by the implementation of PEBS and, as such, can only reflect their experience. Other studies may seek the perceptions of children, and/or of parents, instead of or along with those of teachers. Of particular interest might be to survey the perceptions of children to see if there are any differences of experiences amongst varying groups of children. For instance, do children with learning difficulties or behavioural challenges have different experiences of PEBS than children who experience greater academic or behavioural ease? Do children in elementary have different perceptions of PEBS than middle/junior high children?

Another limitation was alluded to in the current research. A number of schools in Nova Scotia are implementing only the primary (or preventative) level of PEBS. However,

there are some schools implementing varying levels of primary, secondary and tertiary intervention levels. These schools were not identified in this study. It is quite possible that there may be differences amongst schools relating to their degree of implementation of PEBS.

Additionally, questions were asked of the participants without defining terms. Specifically, school culture and climate were not defined. Whatever assumptions participants make about the parameters of these constructs are unknown. Future research may want to more closely define this and look at the impact of a program on these constructs to inform knowledge of interactions amongst them. As well, in this study, the effects of PEBS on school culture and climate were surveyed. In a converse manner, future research may be useful to examine the effects of these constructs on PEBS.

The findings of this study demonstrate relationships or lack of relationships within the group studied. The variables examined could not be manipulated, therefore, correlational and non-parametrical data were utilized to determine relationships and proportionality. No determination of causality has been or should be inferred.

This study unveiled some interesting results in terms of school level taught, but did not look at years of teacher experience. It could be interesting to see if there are any relationships related to years of teacher experience.

The final limitation of this study is in terms of generalizability. The results are informative for this particular study and not generalizable to other school boards or implementations. It is hoped that the results may help to guide thoughtfulness amongst other implementations, but are not intended to be informative elsewhere in terms of results.

## **Recommendations**

Closing the research-to-practice gap requires careful attention to findings from previous research but also, and most importantly, listening to the voices of those involved. This study sought to hear the voices of the teachers in one school board in Nova Scotia reflect their experiences with a positive behavioural approach to discipline and behaviour management.

The primary recommendation to emerge from this study is the provision of in-servicing and follow-up support. Teachers who received in-servicing were more likely to find their training adequate to implement PEBS. An emergent discovery was that a great number of teachers, despite reports of adequate training, reported a need for support/training in many areas. New and transferred teachers need to receive training early or prior to the school year. Communication and training were often cited as the biggest difficulty experienced by teachers.

Secondly, there appears to be a need to gain a better understanding of the experiences of middle/junior high school teachers. These teachers report PEBS less useful and effective in meeting the diverse needs of their students. It is suggested that training and support in developmentally aware behavioural programming may be useful to explore. It is possible that the needs of students at this level for self-determination may provide special challenges to teachers at this level. As well, effective training and support for middle/junior high teachers will address their sense of purpose for teaching and facilitate teachers' achievements of these goals. For middle/junior high teachers to support and engage actively in PEBS, it cannot sacrifice or ignore their sense of purpose, but must facilitate their achievement of these goals.

For those schools that indicated they had not implemented PEBS, it is recommended that measures be taken to ensure that training is adequate, as a gap has occurred between the in-servicing of lead teams and the implementation of the initiative.

Difficulties with consistency appear to be affecting the implementation of PEBS in some schools. Teachers reported wanting other teachers to be consistent. It is suggested that schools experiencing difficulties with consistency seek out and address the causes in timely manner. Clearly, the provision of initial adequate training is essential. It would be interesting to see if the provision of refreshers, mentors, pairing of teachers, or low ratio sessions with the school psychologist or a lead team member could have an impact on consistency as well.

In conclusion, PEBS in this particular school board in Nova Scotia is effective to varying degrees in the development of a school climate that encourages positive student behaviour. Experiences vary between elementary and middle/junior high schools, with elementary schools generally finding PEBS more useful and effective. Qualitative research demonstrates that experiences of usefulness and effectiveness may vary between schools and that training and consistency may be factors affecting these experiences. In terms of social validity, elementary teachers, finding PEBS more useful and effective, may be more likely to buy-in and co-operate in delivering the program than middle/junior high teachers who are not finding it as effective in meeting the diverse developmental needs of their students.

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## Appendices

### Appendix A: Questionnaire

1. I teach:
 

<input type="checkbox"/> Elementary	<input type="checkbox"/> Middle/Junior High
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2. In your opinion, did you receive adequate education/training to implement PEBS (Positive Effective Behavioural Supports) throughout the school?
 

YES	NO
-----	----
  
3. In your opinion, did you receive adequate education/training to implement PEBS in your classroom?
 

YES	NO
-----	----
  
4. Do you feel that you understand the principles of PEBS?
 

YES	NO
-----	----
  
5. What areas, if any, do you feel you need more training/support?
 

<input type="checkbox"/> PEBS as an initiative	<input type="checkbox"/> Applying positive or negative consequences properly
<input type="checkbox"/> Research supporting PEBS	<input type="checkbox"/> Supplies
<input type="checkbox"/> Classroom support (EA)	<input type="checkbox"/> Other _____
<input type="checkbox"/> Reinforcement (Positively rewarding)	
<input type="checkbox"/> Negative consequences	
  
6. Where have you received your information/training about PEBS? Select all that apply.
 

<input type="checkbox"/> Department of Education Creating Safe and Caring Learning Environments Teacher/Professional Development resources	<input type="checkbox"/> In-service (Tom Shimmer) <input type="checkbox"/> Trained by lead team <input type="checkbox"/> PBIS website <input type="checkbox"/> Other research on my own
--	--

7. Some people may have extensive involvement in PEBS, such as being part of a lead team, as well as training others, or being very involved at the school level, while other people may have less involvement, for example, involved in one aspect, such as supporting the school-wide implementation. How would you rate your involvement?
- High (e.g. Lead team or trained others)
  - Medium (e.g. Classroom or school-wide implementation)
  - Low (e.g. implemented for some children with behavioural issues; just know it is being done, haven't really implemented anything yet)
8. Was your level of involvement required or did you volunteer?
- Required
  - Volunteer
9. How useful is PEBS in helping to manage children's behaviour in school?
- Very useful
  - Somewhat less than useful
  - A little useful
  - Not at all useful
  - Not sure yet, have to wait and see
10. How effective do you think the PEBS initiative has been in communicating school expectations to children?
- Very effective
  - Somewhat ineffective
  - A little effective
  - Not at all effective
  - Not sure, don't know
11. While PEBS is intended to communicate behavioural expectations and meet the needs of all children, are there children in your school/classroom who **are not** being adequately served by PEBS? Select all that apply:

- |  |  |
|--|--|
| <input type="checkbox"/> Children who already behave well        | <input type="checkbox"/> Children who do not receive support from home |
| <input type="checkbox"/> Behaviourally challenged children       | <input type="checkbox"/> Children with learning disabilities           |
| <input type="checkbox"/> Children with emotional difficulties    | <input type="checkbox"/> Children with ADHD                            |
| <input type="checkbox"/> Children with social skill difficulties | <input type="checkbox"/> Other_____                                    |
| <input type="checkbox"/> Intellectually challenged children      |  |

12. While PEBS is intended to communicate the behavioural expectations and meet the needs of all children, are there children in your school/classroom who **are** benefiting from PEBS? Select all that apply:

- |  |  |
|--|--|
| <input type="checkbox"/> Children who already behave well        | <input type="checkbox"/> Children who do not receive support from home |
| <input type="checkbox"/> Behaviourally challenged children       | <input type="checkbox"/> Children with learning disabilities           |
| <input type="checkbox"/> Children with emotional difficulties    | <input type="checkbox"/> Children with ADHD                            |
| <input type="checkbox"/> Children with social skill difficulties | <input type="checkbox"/> Other_____                                    |
| <input type="checkbox"/> Intellectually challenged children      |  |

13. How acceptable are the PEBS techniques/strategies that you/your school are applying?

- |  |  |
|--|--|
| <input type="checkbox"/> Very acceptable     | <input type="checkbox"/> Slightly unacceptable |
| <input type="checkbox"/> Somewhat acceptable | <input type="checkbox"/> Not at all acceptable |
| <input type="checkbox"/> No opinion          |  |

14. To what degree has PEBS changed the school/classroom culture/climate...?

- |   |  |
|---|--|
| <input type="checkbox"/> For the better.  | <input type="checkbox"/> Slightly worse. |
| <input type="checkbox"/> Slightly better. | <input type="checkbox"/> Worse.          |
| <input type="checkbox"/> No change.       |  |

15. To what degree has PEBS influenced your classroom management style/climate?

- |  |   |
|--|---|
| <input type="checkbox"/> For the better. | <input type="checkbox"/> Slightly better. |
|--|---|

No change.

Worse.

Slightly worse.

16. In a brief paragraph, tell me what is useful or is not useful with PEBS.

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## Appendix B: Letter of Introduction/School Board Consent

Dear \_\_\_\_\_,

I would like to introduce myself. My name is Mary Miffen and I am a School Psychology Graduate Student at Mount Saint Vincent University. To meet one of the requirements of the Masters of Arts in School Psychology, I am completing a graduate thesis. My thesis research centres on teachers' perceptions of the utility and acceptability of the new Department of Education initiative, PEBS (Positive Effective Behavioural Supports).

As a mother, a former foster parent, and as a Youth Worker working with at-risk youth, I have developed a great interest in how supportive climates can help foster resiliency and successful functioning in children.

PEBS, or alternatively, positive behaviour interventions and supports (PBIS), effective behaviour supports (EBS), and positive behaviour supports (PBS), has had a generous amount of research support. Because this model is based on the assumption that pro-social behaviour should be taught and reinforced rather than presumed, that a positive school climate can effect change in all children, particularly at-risk youth, and that all interventions should be child-centered, data-driven, and evaluated, the model appeals to an intuitive sense of appropriateness. However, although a model may seem sound, it must stand up to evaluation whenever it is implemented, to ensure integrity and effectiveness. The model must be acceptable to those who are affected by it and it must be effective.

Given that two important factors affecting treatment effectiveness are the acceptability and utility of an intervention, I plan to distribute anonymous questionnaires to teachers who have received training in the 2004-2005 school year, and have been implementing PEBS in the \_\_\_\_\_ School Board. The earliest trained teachers will have the most experience with which to evaluate PEBS. Items such as the level of schooling taught (i.e. elementary, middle school, junior high) will be identified, but the particular school will not. Once filled out and sent back to me, neither I, nor anyone else will know which teacher or from which school the questionnaire came. Teachers will be asked questions to ascertain the type of training received, gain some insight into their level of commitment and to discern how useful and effective they consider PEBS.

Your board has had a clear implementation plan for this initiative and has had a large number of personnel trained, making it an ideal board from which to draw information. It is my hope that this research may inform future implementation efforts. The board will not be referred to by name in the study, rather, it will be referred to as "a Nova Scotia School Board" or "a School Board in Nova Scotia".

Questionnaires will be distributed only to those who sign the consent form; said forms will be distributed and stored separately from the questionnaires, to ensure participant anonymity. Teachers who participate may refuse to answer any question and may withdraw from the study at any time.

Data resulting from the study will be kept in a locked safe in my residence for up to three years after the completion of the study, at which time it will be shredded and computer data files erased. A completed copy of my thesis will be made available to the Board and an executive summary will be provided to principals, upon request.

A Mount Saint Vincent University ethics review board have reviewed and approved the research. Please contact me at [REDACTED] if you have any questions. You may contact my research supervisor, Dr. Mike Foley, at 457-6732. If you have questions about how this study is being conducted and wish to speak with someone who is not directly involved in the study, you may contact the Chair of the University Research Ethics Board (UREB) c/o MSVU Research and International Office, at 457-6350 or via e-mail at [research@msvu.ca](mailto:research@msvu.ca).

Thank you in advance for your consideration.

Cordially,

Mary Miffen, BA  
Student, Faculty of Graduate Education, School Psychology  
Mount Saint Vincent University

Cc: Superintendent of Schools  
Student Services Supervisor

### **School Board Consent Form**

I, Regional School Board, grant permission for applicable schools to participate in the research being conducted by Mary Miffen on the PEBS initiative. I know that this entails teachers filling out a questionnaire. I am aware that principals at each school will be invited to grant or decline permission at their respective schools. I understand that the questionnaire is voluntary, anonymous and no identifying information will be collected or published.

Date \_\_\_\_\_

Signature \_\_\_\_\_

## Appendix C: Letter of Introduction/School Consent

Dear Principal,

I would like to introduce myself. My name is Mary Miffen and I am a School Psychology Graduate Student at Mount Saint Vincent University. In accordance with one of the requirements of the Masters of Arts in School Psychology, I am completing a graduate thesis. My thesis research centres on teacher's perceptions of the utility and acceptability of the new Department of Education initiative, PEBS (Positive Effective Behavioural Supports).

PEBS, or alternatively, positive behaviour interventions and supports (PBIS), effective behaviour supports (EBS), and positive behaviour supports (PBS), has had a generous amount of research support. Because this model is based on the assumption that pro-social behaviour should be taught and reinforced rather than presumed, that a positive school climate can effect change in all children, particularly at-risk youth, and that all interventions should be child-centered, data-driven, and evaluated, it appeals to an intuitive sense of appropriateness. However, although a model may seem sound, it must stand up to evaluation whenever it is implemented, to ensure integrity and effectiveness. It must be acceptable to those who are affected by it and it must be effective.

Given that two important factors in treatment effectiveness are the acceptability and utility of an intervention, I plan to distribute anonymous questionnaires to teachers whom have received training in the 2004-2005 school year, and have been implementing PEBS in the \_\_\_\_\_ Regional School Board. The earliest trained teachers will have the most experience with which to evaluate PEBS. Items such as the level of schooling taught (i.e. elementary, middle school, junior high) will be identified, but the particular school will not. Once filled out and sent back to me, neither I, nor anyone else will know which teacher or which school the questionnaire came from. Teachers will be asked questions to: ascertain the type of training received, gain some insight into their level of commitment and to discern how useful and effective they consider PEBS.

I am requesting your assistance. I would like the teachers in your school to complete this questionnaire. The questionnaire is short and consists of questions in a yes or no format, tick the answers that apply, and one question entailing a short answer. I anticipate most of your teachers can fill out the questionnaire in 10 minutes. I would appreciate it if you could permit and encourage your teachers to fill out the questionnaires. It is my hope that these questionnaire will inform future implementation of PEBS, given the acceptability and utility determined from teachers' responses. An executive summary of the results of the research will be made available to you, upon your request. Data resulting from the study will be kept in a locked safe in my residence for up to three years after completion of the study, at which time it will be shredded and computer data files erased.

A Mount Saint Vincent University ethics review board has reviewed and approved the research. Please contact me at [REDACTED] if you have any questions. You may contact my research supervisor, Dr. Mike Foley, at 457-6732. If you have questions about how this study is being conducted and wish to speak with someone who is not directly involved in the study, you may contact the Chair of the University Research Ethics Board (UREB) c/o MSVU Research and International Office, at 457-6350 or via e-mail at [research@msvu.ca](mailto:research@msvu.ca).

Thank you in advance for your consideration.

Cordially,

Mary Miffen, BA  
 Student, Faculty of Graduate Education, School Psychology  
 Mount Saint Vincent University

#### Principal Consent Form

I, \_\_\_\_\_, Principal, \_\_\_\_\_ School, grant permission for teachers to participate in the research being conducted by Mary Miffen on the PEBS initiative. I know that this entails filling out a questionnaire. I understand that the questionnaire is voluntary, anonymous, and no identifying information will be collected or published.

Date \_\_\_\_\_

Signature \_\_\_\_\_

I wish to receive a copy of the executive summary of the study when it becomes available.

Mailing or e-mail address:

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## Appendix D: Letter of Introduction/Request to Participate

Dear Teacher,

I would like to introduce myself. My name is Mary Miffen and I am a School Psychology Graduate Student at Mount Saint Vincent University. To meet one of the requirements of the Masters of Arts in School Psychology, I am completing a graduate thesis. My thesis research centres on evaluating the new Department of Education initiative, PEBS (Positive Effective Behavioural Supports).

Of great interest to me is how supportive climates can help foster resiliency and successful functioning in children. You received training in PEBS the 2004-2005 school year and as such, can provide important feedback on the utility and acceptability of PEBS in your experience. Your contribution in this endeavour may help shape our understanding of how PEBS is working. This provides you with an opportunity to have a voice in the implementation of this initiative.

Your confidentiality and anonymity are assured. No identifying information is requested and a sealable envelope is provided to conceal the questionnaire before it is returned to me. Your signed consent forms will be collected separately from the questionnaires and as a result ensure your anonymity. I anticipate that you can complete the questionnaire in about 10 minutes. Your participation is voluntary; you may decline to answer any item in the questionnaire and you may withdraw at any point. The questionnaire may be kept, without identifying information, in a locked storage safe for up to three years upon completion of the study.

A Mount Saint Vincent University ethics review board has reviewed and approved the research. Please contact me at [REDACTED] if you have any questions. You may contact my research supervisor, Dr. Mike Foley, at 457-6732. If you have questions about how this study is being conducted and wish to speak with someone who is not directly involved in the study, you may contact the Chair of the University Research Ethics Board (UREB) c/o MSVU Research and International Office, at 457-6350 or via e-mail at [research@msvu.ca](mailto:research@msvu.ca).

Thank you in advance for your time and effort assisting me to evaluate what teachers think of PEBS.

Cordially,

Mary Miffen, BA  
Student, Faculty of Graduate Education, School Psychology  
Mount Saint Vincent University

**Teacher Consent Form**

I, \_\_\_\_\_, Teacher, voluntarily consent to participate in the research being conducted by Mary Miffen. I know that this entails filling out a questionnaire. I understand that the questionnaire is completely anonymous and no identifying information will be collected or published.

Date\_\_\_\_\_

Signature\_\_\_\_\_

## Appendix E: Family Consultant Introductory Statement

Dear Consultant,

Your assistance in conducting this research is greatly appreciated. It is hoped that the following information will make this task as easy as possible for you:

Please distribute the questionnaires and consents in their packages to the appropriate principal as named on the outside of the package. Each package is made up according to the estimated numbers required by each school.

Please ask each Principal to return the completed questionnaires, each in an envelope sealed by the teacher who filled it out, and the consent forms, as one package for the whole school, to \_\_\_\_\_, Consultant, \_\_\_\_\_ Regional School Board. \_\_\_\_\_ has generously consented to act as a liaison for me. I will pick up the forms from him. Alternatively, the principal can contact me, at \_\_\_\_\_ or \_\_\_\_\_ and I will collect the materials myself from the school.

Thank you once again for your help. If you have any questions, please feel free to contact me in the above mentioned manner.

Cordially,

Mary Miffen, BA  
Student, Faculty of Graduate Education, School Psychology  
Mount Saint Vincent University

## Appendix F: PEBS Survey Introductory Statement

Dear Principal,

Please read the statement below prior to distribution of the PEBS survey questionnaires and attached papers:

**You are invited to take part in a survey about the PEBS initiative underway in our region. This survey will give you an opportunity to express your experiences and opinions about PEBS. The survey is a questionnaire and will take approximately 10 minutes to complete.**

**Your participation in this survey is voluntary, and your privacy is assured. Please read the Letter of Introduction/Request to Participate provided by the researcher with your questionnaire for a full explanation. For ethical purposes, those willing to participate are asked to sign an Informed Consent form. However, these forms will be collected and stored separately from the PEBS surveys themselves, so please ensure that you turn in your Informed Consent forms (indicate location) and your completed questionnaire in a sealed envelope separately (indicate separate location). Your replies on the surveys will remain completely confidential and are designed to be absolutely untraceable. *Please do not put your name or any identifying information anywhere on the survey.***

**The results of the survey will be reported in a thesis. Should you be interested in the researcher's findings, an executive summary will be provided upon request and available to you through your Principal.**

**Thank you for your participation.**

## Appendix G: Tables

**Table 1**

*Chi-Square between school level taught [Survey Question (Q) 1] and adequacy of training to implement PEBS throughout the school [Survey Question (Q) 2]*

Q 2	School level taught	
	Elementary	Middle /Junior
No	43	22
Yes	23	29

*Note.*  $X^2(1) = 5.65, p < .05$ .

**Table 2**

*Chi-Square between School level taught [Survey Question (Q) 1] and adequacy of training to implement PEBS in the classroom [Survey Question 3]*

Q 3	<i>School level taught</i>	
	Elementary	Middle /Junior
No	41	20
Yes	25	31

*Note.*  $X^2(1) = 6.05, p < .05$ .

**Table 3**

*Chi-Square between school level taught [Survey Question (Q) 1] and understanding of the principles of PEBS [Survey Question (Q) 4]*

Q 4	<i>school level taught</i>	
	Elementary	Middle /Junior
No	54	38
Yes	9	13

*Note.*  $X^2(1) = 2.27, p = .132$ .

**Table 4**

*Chi-Square between School level taught [Survey Question (Q) 1] and level of involvement [Survey Question (Q) 8]*

Q 8	<i>school level taught</i>	
	Elementary	Middle /Junior
High	4	7
Medium	41	18
Low	19	24

*Note.*  $X^2(2) = 8.525, p < .05$ .

*Note.* One cell has an expected count less than 5. An expected count less than 5 can distort the chi-square statistic and should be interpreted cautiously.

**Table 5**

*Spearman Correlations between school level taught (Survey Question 1) with Survey Questions (Q) 9 -usefulness to manage children's behaviour in school, (Q) 10 – efficacy of PEBS in communicating school expectations to children, and (Q) 13 – ratings of acceptability of PEBS techniques*

	<i>School level taught</i>
useman Q9	.313***
N	116
effexp Q10	.418***
N	117
acctech Q13	.412***
N	117

*Note.* \*\*\* $p < .001$ .

**Table 6**

*Chi-Square between adequate training in classrooms (Survey Question (Q) 3) and whether involvement was required or volunteer (Survey Question (Q) 8) - All teachers*

All teachers		
Q 3	Q8	
	Required	Volunteer
Yes	45	17
No	41	13

*Note.*  $X^2(1) = .168, p = .681.$

**Table 7**

*Chi-Square between adequate training in classrooms (Survey Question (Q) 3) and whether involvement was required or volunteer (Survey Question (Q) 8) Elementary Teachers Only*

Elementary Teachers Only		
Q 3	Q8	
	Required	Volunteer
Yes	31	9
No	21	4

*Note.*  $X^2(1) = .406, p = .524$ .

**Table 8**

*Chi-Square between adequate training in classrooms (Survey Question (Q) 3) and whether involvement was required or volunteer (Survey Question (Q) 8) Middle/Jr. high teachers only*

Middle/Jr. high teachers only		
Q 3	Q8	
	Required	Volunteer
Yes	12	8
No	21	9

*Note.*  $X^2(1) = .535, p = .465.$

**Table 9**

*Spearman correlations between teachers' perceptions of adequacy of training to implement PEBS throughout the school [Survey Question (Q) 2] and in the classroom [Survey Question (Q) 3] with ratings of acceptability of PEBS techniques/strategies [Survey Question (Q) 13]*

	<i>Acceptability of techniques Q13</i>
trainschool Q2	.524**
trainclass Q3	.542**

*Note.* N=119, \*\* $p < .01$ .

**Table 10**

*Spearman Correlations between acceptability of techniques [Survey Question (Q) 13] with usefulness to manage children's behaviour in school [Survey Question (Q) 9], and source of training [Survey Questions (Q) 6a-e]*

	acctech Q13
useman Q9	.646***
N	118
locinfa (Dept of Ed resources) Q6a	-.157
N	119
locinfb (In-service) Q6b	-.272**
N	119
locinfc (Trained by lead team) Q6c	.002
N	119
locinfd (PBIS website) Q6d	.121
N	119
locinfe (Other research on own) Q6e	.192*
N	119

*Note.* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Table 11**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11a] – Children who already behave well*

Q 11a	<i>School level taught</i>	
	Elementary	Middle /Junior
No	37	15
Yes	29	36

*Note.*  $X^2(1) = 8.27, p < .01$ .

**Table 12**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11b] –behaviourally challenged children*

Q 11b	<i>School level taught</i>	
	Elementary	Middle /Junior
No	49	36
Yes	16	15

*Note.*  $X^2(1) = 0.34, p = .562.$

**Table 13**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11c] – Children with emotional difficulties*

Q 11c	School level taught	
	Elementary	Middle /Junior
No	50	41
Yes	16	10

*Note.*  $X^2(1) = 0.36, p = .550$ .

**Table 14**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11d] – Children with social skill difficulties*

Q 11d	School level taught	
	Elementary	Middle /Junior
No	50	35
Yes	16	16

*Note.*  $X^2(1) = 0.736, p = .391$ .

**Table 15**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11e] – Intellectually challenged children*

Q 11e	<i>School level taught</i>	
	Elementary	Middle /Junior
No	59	43
Yes	7	8

*Note.*  $X^2(1) = 0.66, p = .415$ .

**Table 16**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11f] – Children who do not receive support from home*

Q 11f	<i>School level taught</i>	
	Elementary	Middle /Junior
No	42	32
Yes	24	19

*Note.*  $X^2(1) = 0.01, p = .921$ .

**Table 17**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11g] – Children with learning difficulties*

Q 11g	School level taught	
	Elementary	Middle /Junior
No	62	45
Yes	4	6

*Note.*  $X^2(1) = 1.20, p = .274$ .

*Note.* One cell has an expected count less than 5. An expected count less than 5 can distort the chi-square statistic.

**Table 18**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11h] –Children with ADHD*

Q 11h	<i>School level taught</i>	
	Elementary	Middle /Junior
No	52	38
Yes	14	13

*Note.*  $X^2(1) = 0.30, p = .586$ .

**Table 19**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are not being adequately served [Survey Question (Q) 11i] – Other*

Q 11i	<i>School level taught</i>	
	Elementary	Middle /Junior
No	61	47
Yes	5	4

*Note.*  $X^2(1) = 0.00, p = .957$ .

*Note.* One cell has an expected count less than 5. An expected count less than 5 can distort the chi-square statistic.

**Table 20**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12a] -- Children who already behave well*

Q 12a	School level taught	
	Elementary	Middle /Junior
No	45	45
Yes	21	6

*Note.*  $X^2(1) = 6.52, p < .05$ .

**Table 21**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12b] - Behaviourally challenged children*

Q 12b	School level taught	
	Elementary	Middle /Junior
No	32	28
Yes	34	23

*Note.*  $X^2(1) = 0.47, p = .491$ .

**Table 22**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12c] – Children with emotional difficulties*

Q 12c	School level taught	
	Elementary	Middle /Junior
No	56	37
Yes	10	14

*Note.*  $X^2(1) = 2.67, p = .102$ .

**Table 23**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12d] – Children with social skill difficulties*

Q 12d	School level taught	
	Elementary	Middle /Junior
No	47	36
Yes	19	15

*Note.*  $X^2(1) = 0.01, p = .941$

**Table 24**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12e] – Intellectually challenged children*

Q 12e	<i>School level taught</i>	
	Elementary	Middle /Junior
No	59	44
Yes	7	7

*Note.*  $X^2(1) = 0.27, p = .606$ .

**Table 25**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12f] – Children who do not receive support from home*

Q 12f	<i>School level taught</i>	
	Elementary	Middle /Junior
No	46	39
Yes	20	12

*Note.*  $X^2(1) = 0.66, p = .415$ .

**Table 26**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12g] – Children with learning difficulties*

Q 12g	School level taught	
	Elementary	Middle /Junior
No	52	41
Yes	14	10

*Note.*  $X^2(1) = 0.04, p < .831$ .

**Table 27**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12h] –Children with ADHD*

Q 12h	School level taught	
	Elementary	Middle /Junior
No	53	42
Yes	13	9

*Note.*  $X^2(1) = 0.08, p = .778$ .

**Table 28**

*Chi-Square between School level taught [Survey Question (Q) 1] and children who are being adequately served [Survey Question (Q) 12i] - Other*

Q 12i	School level taught	
	Elementary	Middle /Junior
No	64	48
Yes	2	3

*Note.*  $X^2(1) = 0.57, p = .449$ .

*Note.* Two cells have an expected count less than 5. The minimum expected count is 2. An expected count less than 5 can distort the chi-square statistic.

**Table 29**

*Spearman Correlations between School level taught [Survey Question (Q) 1] with degree that PEBS has changed school/classroom culture/climate [Survey Question Q14] and degree that PEBS has changed classroom management style [Survey Question Q15]*

	<i>School level taught</i>
culclim Q14	.343**
clasman Q15	.328**

*Note.* N=116, \*\* $p < .01$ .

**Table 30**

Means and standard deviations

Survey Question (Q)	Survey Question (Q)1			
	1.00 elem		2.00 m/j	
	Mean	Std Deviation	Mean	Std Deviation
Q9 useman	1.80	.90	2.38	.88
Q10 effexp	1.68	.86	2.65	1.20
Q13 acctech	1.58	.95	2.37	.96
Q14 culclim	1.61	.82	2.26	.99
Q15 clasman	1.75	.92	2.33	.74