



**Atlantic Evaluation and
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INTERMEDIATE PROGRAM REVIEW

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Literature Review

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Schools and the Young Adolescent Learner

The Nature of the Adolescent Learner

Early adolescence is a time of great changes. In trying to define this distinctively transitional stage of development, Eichhorn coined the term “transescence” to describe the passage from early childhood to adolescence (Bowers, 1995). Others have used terms such as “pubescence” and “emergent adolescence”, but “early or young adolescence” appear to be the most common terminology gleaned from the literature (Knowles & Brown, 2000).

Young adolescents between the ages of 10 and 14 years have specific, unique, developmental characteristics. The National Middle School Association (2003) and others (Allen, Splittgerber & Manning, 1993; Eccles & Wigfield, 1997; Jackson & Davis, 2000; Romano & Georgiady, 1994; Turning Points, n.d.; Wiles & Bondi, 1993) outline important characteristics of young adolescents in the physical, cognitive, moral, social-emotional and psychological dimensions of development. While most adolescents will exhibit these characteristics to some degree, they will vary depending on the young adolescent. The National Middle School Association (2003) maintains these characteristics are intertwined, each one affecting the other and are affected by other factors such as gender, race, social economic status, and qualities of the community.

There are more biological changes in young adolescents than any other age group, with the exception of children in their first three years of life (Wiles and Bondi, 1993). Furthermore, studies in the rates of puberty show that today's youth mature much earlier than in previous generations (Romano & Georgiady, 1994). Growth spurts generally begin for girls at approximately age ten and age twelve for boys, and weight gains can equal as much as ten pounds per year (Walker & Lirgg, 1995). Knowles & Brown (2000) conclude skeletal and muscular changes often result in “the awkward stage” characterized by adolescents with long legs, underdeveloped muscles, huge feet and long hands. As a result of this rapid physical growth, adolescents often get tired more easily, require frequent periods of rest and eat more (Romano & Georgiady, 1994). It is also during this transitional period that adolescents develop primary and secondary sexual characteristics. In addition to sex hormones, other hormonal secretions occur which can cause lethargy if under-active and extreme energy if over-active (Knowles & Brown, 2000). Some researchers have studied the effects of hormonal changes in young adolescents on behaviour and have

found direct links to behaviours such as aggression and mood swings (Eccles & Wigfield, 1997).

Understanding young adolescents' physical development leads to several teaching and learning considerations (Allen, Splittberger & Manning, 1993). Wiles and Bondi (1993) maintain that providing a health curriculum that emphasizes self-understanding about body changes is essential. Moreover, due to the pre-occupation of many adolescents with their bodies and subsequent issues of self-esteem that may result, teachers and guidance counsellors can help students work through these feelings (Wiles & Bondi, 1993). Furthermore, students should be allowed to move around frequently in classes and long periods of inactive work should be avoided (Knowles & Brown, 2000). Wormeli (2006) suggests that effective middle grade instruction should incorporate physical movement every ten to fifteen minutes, for example, getting students to walk across the room to submit their papers and rotating group activities around the room.

Variations in intellectual development have significant implications for instruction. The literature affirms that middle school teachers can support the intellectual development of young adolescents by differentiating instruction; providing cooperative learning opportunities; encouraging students to pursue their own interests; giving one-on-one feedback through regular student-teacher conferences and focusing on complex thinking skills that encourage students to apply their knowledge and skills to tasks (Romano & Georgiady, 1994; Turning Points, n.d.; Wiles & Bondi, 1993).

In attempting to explore moral development, Gilligan and colleagues (as cited in Bowers, 1995) suggest that humans tend to construct a moral perspective in one of two ways. Firstly, individuals may focus "on a justice perspective that is concerned with inequality, unfairness, and individual rights" (p. 101). Secondly, individuals may focus "on a care perspective that views moral questions in terms of disconnection and abandonment, the importance of relationships with others, and being responsive to one another's concerns" (Gilligan, as cited in Bowers, 1995, p. 102). Johnson (as cited in Bowers, 1995) concludes that young adolescents employ either of the two while discerning moral questions, however, individuals do tend to favour one over the other. Males are more likely to emphasize a justice perspective while females tend to favour a caring perspective (Johnson, as cited in Bowers, 1995). Adolescents can sometimes experience uncertainty and anxiety as a result of their moral development since in adolescence they begin to develop their own views which may be in conflict with previously held standards or values (Romano & Georgiady, 1994).

Gaining an understanding of the nature of young adolescents also necessitates an examination of their social-emotional development. Adolescence is a time when young adolescents are “looking at and relating to others in new ways (social development) and becoming aware of their feelings at a much deeper level than before (emotional development)” (Bowers, 1995, p. 79). In their attempt to move from dependence to independence, adolescents begin to broaden social affiliations “with allegiance split between the family and the peer group” (Knowles & Brown, 2000, p. 23). This move to greater independence is often characterized by a rejection of adult authority (Romano & Georgiady, 1994). Interestingly though, according to Knowles and Brown (2000), despite the adolescents’ apparent rejection of parental authority, “parents continue to play a primary role in the young adolescent’s life” (p. 24), with adolescents almost universally identifying their parents as the most important people in their lives.

Due to the importance of social acceptance during this period, adolescents’ conformity to their peers peaks during early adolescence (Eccles & Wigfield, 1997). The peer group becomes “the primary source of new standards and models of behaviour” (Knowles & Brown, 2000, p. 25). In fact, Harter (as cited in Eccles & Wigfield, 1997) maintains that “young adolescents’ confidence in their physical appearance and social acceptance is often a more important predictor of self-esteem than confidence in their cognitive/academic competence” (p. 19).

Knowles and Brown (2000) claim that “in addition to the need for successful peer interaction comes an increased awareness of the broader social world with an accompanying concern for social justice” (p. 26). While parents may seem to have less influence in the lives of their children, these young adolescents will listen to and model other adult influences whether they are teachers, community members or parents of friends. The mass media (television, movies, music, internet) also has a huge impact on the adolescents’ social development. The Carnegie Council (as cited in Knowles & Brown, 2000) concludes that “these electronic conduits for programming and advertising have become strong competitors to the traditional societal institutions in shaping young people’s attitudes and values” (p. 27).

Family, peer groups, community and media all play a role in helping the young adolescent develop a sense of self (Knowles & Brown, 2000). This search for identity is one of the defining characteristics of young adolescents (Eccles & Wigfield, 1997). Identity development can prove especially difficult for minorities since cultural values may vary from societal norms (Gay, as cited in Knowles & Brown, 2000). Knowles and Brown (2000) contend that “teachers

must deliberately create learning environments that attend to cultural, ethnic and racial issues” (p. 30).

In summary, young adolescent learners have specific developmental characteristics including biological, cognitive, moral, social-emotional and psychological dimensions of development. A comprehensive understanding of these characteristics is essential to middle school educators.

Grade Configurations: Do They Matter?

The literature on school configuration is full of debates about the most appropriate combination of school organization, particularly as it relates to the adolescent learner (Dickinson, 2001; McEwin, Dickinson & Jacobson, 2005; Mizell, 2005; Weller, 2004). An examination of school systems in the United States in the last century reveals a history of variations in grade configurations for young adolescents. Efforts to restructure grades into the best configuration is part of what Mac Iver and Epstein (cited in Weiss & Kipnes, 2006) have called “the longest-running debate in middle level educational research” (p. 240).

The emergence of the junior high school by 1910 has a two-part history: educational reform and social invention (Beane, 2001). The first junior high schools were largely a response to an increased demand for secondary education and better preparation in the basic skills needed for the high school (Weller, 2004). Furthermore, there was a recognition by educators of the day such as Hall, Eliot and Dewey that “early adolescents were neither children nor fully mature adolescents and, therefore should be educated separately to accommodate their uniqueness as well as to prevent that age group from being negatively influenced by older adolescents, and, in turn, negatively influencing younger children” (Beane, 2001, p. xv). The junior high school model recognized the special adolescent age group and called for a curriculum which was aware of the uniqueness of the learners and engaged the students (Wiles & Bondi, 1993). From a social point of view, the development of junior high schools also helped to alleviate crowding which was prevalent in post war times due to the large population boom (Mizell, 2005). By the 1940s, junior high schools of grades seven to nine had become the dominant organizational grouping for ten to fourteen year olds. However, by the 1960s many practitioners and administrators questioned whether or not the junior high school was the best answer to adolescent education. Some suggested that the model did not work because it attempted to impose a senior high model on the junior high students, unable “to shake off the traditional content-focused curriculum that defined school success by courses mastered and carried out

through a high school-like departmentalization of teachers and schedule” (Wiles & Bondi, 1993, p. 7).

A shift began to occur in the 1960s with junior high schools being replaced with middle schools comprised of either fifth or sixth to eighth grade. Growing out of the work of Eichhorn, the middle school was built on “the educational concept that the adolescent learner needs a special learning environment that is developmentally responsive to the unique needs of ten to fourteen year olds as they develop into adolescence at different cognitive, emotional, social and physical growth rates” (Weller, 2004, p. 1). Knowles and Brown (2000) suggest that perhaps Eichhorn’s biggest achievement was his willingness to question the existing traditional structure of the junior high school. The argument that young adolescents experience unique developmental challenges was not terribly different from the early literature of the junior high school movement, but the further argument that the middle school concept provided a framework for addressing these issues seemed most promising (Coladarci & Hancock, 2002; Romano & Georgiady, 1994; Wiles & Bondi, 1993). Coupled with this argument were the demographic influences of the time. School boards saw middle schools as the solution to the shifting student populations. By moving ninth graders to empty rooms in the high schools and moving sixth and sometimes fifth graders into the junior high, space issues were resolved (Knowles & Brown, 2000). Yet by the late 1980s difficulties began to emerge with the middle schools. For example, in analyzing middle school success, Lipsitz, Mizell, Jackson and Austin (cited in Mizell, 2005) conclude, “we have not seen the widespread dramatic improvement in academic outcomes we had hoped for” (p. 15).

Research has attempted to address the question of the alleged shortcomings of the middle school model. Some researchers maintain that the concept is sound and that it has been the implementation of the model that has gone wrong (Dickinson, 2001; Erb, 2007; Weller, 2004). Proponents of the concept suggest that implementation has failed since many middle schools have been in name only and have not incorporated “many of the basic tenets of the middle school philosophy or the organizational structure envisioned by early middle school reformers” (Weller, 2004, p. 16). Lipsitz et al. (cited in Main & Bryer, 2007) concur that reforming schools have generally focused their attention on the physical changes needed to create a middle school, (e.g. structural reform, teaching teams and block schedules), which are easy to establish. Many middle schools have stopped short of creating a middle school culture that enables students to achieve academically and develop emotionally, socially and physically.

In a national American survey of K-8 and 6-8 administrators, McEwin, Dickinson and Jacobsen (cited in Elovitz, 2007) revealed the majority of respondents favoured the middle school as “the best organizational structure for young adolescents” (p. 29). In fact, only sixteen percent of K-8 administrators preferred the K-8 schools. The main reasons cited for a 5-8 or 6-8 configuration included the different social, intellectual and social needs of adolescents; the different philosophies of elementary and middle schools and the belief that middle schools prepare adolescents better for high school.

Opponents to the middle school model focus their attentions on identified negative aspects associated with middle schools. A number of studies have documented some of the difficulties experienced by middle school students such as low self-esteem, low grades, and behavioural issues (Weiss & Kipnes, 2006). Reddy, Rhodes and Mulhall (2003) document a significant decline in students’ self-esteem between sixth and eighth grades. Anderman (2002) demonstrates that students who attended K-8 or K-12 schools had a greater sense of belonging than students who attended middle schools. Research has also documented differences in school safety. Anderman (2002) found that students in K-8 or K-12 structures were less likely to report feeling unsafe or victimized and were less likely to get into trouble than students in the middle school.

In recent years, some school systems have focused on changing yet again the grade configurations. Byrnes and Ruby (2007) suggest that “one of the more popular reforms currently sweeping across the educational landscape is a policy of converting middle schools into K-8 schools, with the belief that the latter are more effective at nurturing student achievement” (p. 102). What makes this reform interesting is that it is not some new innovation, but rather a return to an old configuration. The K-8 model predominated education in the United States at the end of the nineteenth century and into the twentieth century only to be replaced by the junior high school in the early 1900s.

In comparing middle schools and K-8 schools some researchers (McEwin, Dickinson & Jacobson, 2005; Weiss & Kipnes, 2006) have found no significant difference in student outcomes by the type of school attended, whereas, other studies have shown that students at K-8 schools have higher levels of academic achievement (Coladarci & Hancock, 2002; Offenber, 2001). Students attending K-8 schools have also been found to have higher rates of attendance (Coladarci & Hancock, 2002), lower suspension rates (Arcia, 2007) and better results in terms of self-esteem and attitudes toward school (Weiss & Kipnes, 2006). Moreover, research has noted parental support of K-8 schools

due to the greater sense of community that they feel exists between students, teachers and parents (Herman, 2004; Pardini, 2002).

Some proponents of the middle school philosophy have attempted to explain these differences found in the K-8 schools studied. Credited with coining the term “elemiddle” to refer to K-8 schools that are implementing best middle level practices in the upper grades, Hough (2005) maintains “K-8 elemiddles are the ones buying into this philosophy most fully and completely, and that’s why their test scores are higher, their attendance rates improved, discipline referrals reduced and dropout rates lowered” (p. 3). Hough (2005) believes “schools more fully implementing the middle-level concept are the ones outperforming those that are not” (p. 2).

Other researchers (e.g., Elovitz, 2007) conclude that the middle school debate is contingent on the community context. A desirable grade span in one community may not be as advantageous in another community. DeYoung, Howley and Theobald (cited in Elovitz, 2007) argue that middle schools in rural communities could lead to a loss of the neighbourhood school and a decline in parent involvement. Middle schools in urban settings though could be welcomed to help alleviate crowding in elementary schools.

The research comparing K-8 and middle school configurations include important caveats (Beane & Lipka, 2006). Firstly, while achievement results would appear to favour K-8 configurations in urban districts, scores were still less than state and national averages and the K-8 advantage seems to disappear in the ninth grade (Abella, 2005). Secondly, one of the key differences of the two configurations is that the K-8 schools seem to have smaller populations thereby allowing the development of better relationships between teachers, students and parents. Thirdly, K-8 schools do not necessarily outperform middle schools in high-poverty locals.

There appears to be no consensus in the literature as to what grade configuration(s) may be best for serving the educational needs of our adolescent students. In the 1960s we saw the shift from junior high schools to middle schools. In recent years, the pendulum has swung yet again and there seems to be an increasing momentum to move from middle schools towards K-8 schools. What does seem to be emerging from the literature is that those schools that are implementing best middle school practices (i.e. learner-centered approach, etc.), no matter what the grade configuration, are attaining better results.

Transition Issues

A further issue for consideration in the grade configuration debate is the transition years. Research suggests the transition years, those years that students move from one configuration to another configuration, can have a negative effect on student academic achievement (Abella, 2005). Abella (2005) shows short-term gains in achievement for students who did not experience a school transition after grade five, remaining in a K-8 setting as opposed to moving to a 6-8 configuration. These gains diminished, however, over the course of three years after the grade 8 to grade 9 transition. Also, many middle school learners making the transition to senior high experience a drop in grades as well as attendance (Barone et al., cited in Mizelle & Mullins, 1997; Reyes, Gillock & Kobus, cited in Mizelle & Mullins, 1997).

Transition from one school to another can be an exciting yet apprehensive time for students. A number of suggestions have been outlined in the literature to assist schools in bridging the gap between elementary and middle school as well as middle school to senior high school. (e.g. shadow days, parent involvement and guidance counsellor intervention). A popular strategy for making successful transitions, is to organize “shadow days” in which one student from one school shadows a student from their new school (Mizelle & Mullins, 1997). By having students participate in actual classes, students are able to experience what actually goes on in classes at their new school and hopefully gain confidence that they will be able to cope at the next level. Moreover, they further contend that this “shadow” concept is a very useful strategy for teachers as well since it allows teachers to meet students and gain a better understanding of the nature of the younger learner. Mizelle and Mullins (1997) also advocate for including parents in the transition activities because it can introduce them to their child’s new school.

In summary, research suggests that the transition years can have a negative effect on student academic achievement. To reduce these effects, even if they are short lived, schools need to develop and implement strategies that make sense in the local context.

Curriculum Design for the Adolescent

For centuries a debate has persisted over whether student-centred or subject-based curriculum should prevail in schools (Beane, 1993). Dewey and others,

taking a constructivist approach to learning, have argued that the two are not mutually exclusive and that it is possible to design a curriculum that appeals to the interests of students and also helps them to become knowledgeable and skilled (Beane, 1993; Henson, 2004). In fact, young adolescents' questions and concerns about their world offer a broad-based context for the acquisition of this knowledge. Constructivists hold that individuals make sense of new information by connecting it to previously acquired understanding (National Research Council, 2000). Students' quality of life in school is also of paramount importance. As Dewey (cited in Henson, 2004) suggests, "the most important attitude that can be formed is that of desire to go on learning" (p. 12).

Proponents of the middle school philosophy maintain that the nature and needs of the learner should be the primary concern of the middle school curriculum (Bintz, Moore, Hayhurst, Jones & Tuttle, 2006; Caskey, 2006; Weller, 2004). Beane (cited in Knowles & Brown, 2000) advocates "developing a curriculum that has meaning to adolescents by focusing on their lives to design themes for study" (p. 85). Various terms have been used in the literature to refer to such a student-centred, problem-based curriculum including: core curriculum, common learnings, general education and most recently curriculum integration (Caskey, 2006).

Curriculum integration is one of the seven design elements of middle schools found in *Turning Points 2000* (Jackson & Davis, 2000), and is an essential program characteristic of successful middle level schools in *This We Believe: Successful Schools for Young Adolescents* (National Middle School Association, 2003) and *This We Believe in Action* (Erb, 2005). By blending courses, subject boundaries dissipate and themes are explored across the curriculum (Knowles & Brown, 2000).

Interdisciplinary teaming is essential to the development of an integrative curriculum (Ames & Miller, 1994; Arhar, 1997; Clark & Clark, 2006; Vars, 1997; Wiles & Bondi, 1993). George and Alexander (cited in Arhar, 1997) explain that interdisciplinary team organization is "a way of organizing the faculty so that a group of teachers share: (1) the same group of students; (2) the responsibility for planning, teaching and evaluating curriculum and instruction in more than one academic area; (3) the same schedule; and (4) the same area of the building" (p. 50). Such an approach affords teacher teams the ability to "weave together a variety of subjects into creative patterns of instruction" (Weller, 2004, p. 174). Interdisciplinary teams can also help facilitate the growth of professional learning communities and the cultivation of a culture of inquiry in middle schools (Mednick, 2002a; Mednick, 2004; Patterson, 2006; Wheelock, 2000). Such teams foster "collaborative relationships that encourage teachers

to interact with each other and to engage in professional dialogue about teaching and learning” (Patterson, 2006, p. 24). Seed (2006) concludes that interdisciplinary teaming is a very useful practice in promoting collaboration in schools.

There is research evidence to support the use of student-centred curriculum integration designs for the middle grades (Beane, 1997; Caskey, 2006; Dowden, 2007; Jackson & Davis, 2000; Weller, 2004; Witschonke, 2006; Wood, Soares & Watson, 2006). Vars (cited in Dowden, 2007), in a review of more than 100 studies of curriculum integration, concludes that students in interdisciplinary programs “do as well as or often better than students in conventional single-subject programmes” (p. 54). Pate, Homestead and McGinnis among others (cited in Dowden, 2007) have shown that student-centred designs for curriculum integration respond well to the developmental needs of adolescent learners.

Further research has shown that schools implementing the middle school philosophy of the National Middle School Association, specifically the integrated curriculum, have: achieved statistically better student outcomes in the areas of language arts, mathematics, social studies and science; out-performed students in traditional classes on national standardized tests; and shown statistically larger student growth (Anfara & Lipka, 2003; Mertens & Flowers, 2003). In New Zealand, Nolan and McKinnon, (cited in Dowden, 2007) purport that a five year longitudinal study in that country “demonstrated that student-centred integrated programmes generated achievement effects in the order of one standard deviation above the norm in National School Certificate results for English, Mathematics, and Science” (p. 54).

While there is research to support an integrated curriculum, it is not without its opponents. With the pressures of accountability and raising academic standards, there has been a “cry for back to the basics” and therefore an increased emphasis in education on direct basic skills instruction to prepare students for standardized tests (Weller, 2004). The integrated curriculum is viewed by some as breaking away from “the traditions so many adults have come to know, and which are far easier to keep than to change, no matter how undesirable they may be” (Beane, 1993, p. x). As a result, conventional departmentalized approaches to curriculum have continued to dominate in many of the school systems (Caskey, 2006).

Another barrier to the integrated model is the fact that intermediate/secondary teachers have been traditionally educated in a particular subject. Some teachers view curriculum integration “as a weakening or watering down of their

subject fields” (Weller, 2004, p. 172). Coupled with these sentiments of subject matter being “watered down”, they often feel they do not have sufficient time to plan for and implement the integrated curriculum. Providing adequate planning time for teachers is an essential element of successful middle schools (Weller, 2004).

In summary, it appears as though there is support for the use of interdisciplinary teaching at the intermediate grade level and there is some support that, over time, these students achieve as well as students in traditional programs. However, with the insecurity created by the press to meet educational outcomes and to perform well on academic achievement tests, combined with the traditional discipline approach to training teachers in the intermediate-secondary programs, there is a lot of resistance to the adoption of this model.

Effective Teaching Strategies for Middle Schools

The National Middle School Association’s *This We Believe: Successful Schools for Young Adolescents* (2003) identifies “multiple learning and teaching approaches that respond to student diversity” (p. 7) as one of the critical program characteristics in effective middle schools. According to this document, the distinct learning characteristics of young adolescents provide the foundation for determining teaching strategies, just as they should determine the design of the curriculum. Knowles and Brown (2000) conclude that “instructional practices in middle schools should focus on what we know about the learning needs of young adolescents coupled with what we know about how learning occurs” (p. 108).

Following a constructivist model for learning, middle school teachers can “set up an environment that promotes active learning through providing authentic hands-on and minds-on learning experiences within a social context” (Knowles & Brown, 2000, p. 110). This meaningful instruction links content to students’ lives (Davies, 1995; Franzak, 2006; Lawrence, 2007; Tomlinson & George, 2004; Virtue, 2007). In so doing, students are mentally engaged and build their own understandings (Anderman, Patrick & Ryan, 2004). As Mednick (2003a) concludes, “when young adolescents find their voice and take ownership of their learning, they become engaged on an individual, classroom, and school-wide levels” (p. 1).

Developing critical literacy in today’s adolescents is seen by many as an important part of the middle school curriculum (Wood, Soares & Watson, 2006). The goal of critical literacy is to raise the critical and social consciousness of

students. Teachers who practice critical pedagogy can build student-centered learning environments in which students are encouraged to question their mental models. Real-world discussions are highlighted to explore potentially contentious issues such as race, gender, class and politics.

Virtue (2007) delineates this constructivist approach by outlining how real-world experiences can provide curriculum that is relevant, challenging, integrative and exploratory. Ecologically responsive teachers add a much needed global perspective to the middle school curriculum orienting students in a broader social, political, and natural environmental contexts (Hudson, 2007; Virtue, 2007). These teachers recognize that “significant problems or issues that connect the school curriculum with the larger world are the organizing centers of an integrative curriculum” (Virtue, 2007, p. 17). Moore (2007), building on this approach, suggests that middle school educators can create powerful lessons that engage students through the use of popular music which has wide appeal to adolescents.

The diversity of adolescent learners naturally suggests a diversification in instruction to produce more interactive learning (Mednick, 2003a). A variety of teaching strategies create lifelike experiences for young adolescents including: the use of artifacts; role plays; service learning projects and immersion projects (Davies, 1995).

The use of technology in middle school grades can also have a positive effect on student learning (Guerrero, Walker & Dugdale, 2004; Marklin & Wood, 2007). Guerrero et al. (2004) assert that technology when used well in middle grade mathematics, “can have positive effects on students’ attitudes toward learning, confidence in their ability to do mathematics (for example), engagement with the subject matter, and mathematical achievement and conceptual understanding” (p. 5). The success rate of this technology integration is linked to teacher skill in integrating the technology in the math instruction.

Effective middle school teachers take advantage of the socialization needs of young adolescents by designing collaborative student learning experiences (Ex: writing workshops, literature circles and group projects). Willis (2007) maintains that cooperative groups generate more participation and in fact stimulate multiple brain regions. In fact, “when students participate in engaging learning activities in well-designed, supportive cooperative groups,...brain scans show facilitated passage of information from the intake areas into the memory storage regions of the brain” (Willis, 2007, p. 5). To ensure success, teachers and students need adequate time to develop the necessary interpersonal skills needed to work in such collaborative settings. When structured appropriately,

collaborative learning enhances achievement, improves self-esteem and improves relationships (Slavin, as cited in Knowles & Brown, 2000).

Wheelock (2001) concludes that “the challenge of every school is to build school-wide learning communities around the practices in these classrooms so that teachers can build on their strengths, their own and those of their students, to provide young adolescents with meaningful opportunities to learn every day in every school” (p. 11). Carpenter, Flowers, Mertens and Mulhall (2004) add that teachers and students must hold high expectations for each other in this learning partnership.

In summary, the literature seems to support the notion of designing middle grade classrooms to be active and interactive learning centers where there are many resources and plenty of opportunities for movement and collaboration. It is also necessary in such environments that teachers have adequate time to plan and teach collaboratively.

Assessment that Promotes Active Learning

The National Research Council (2000) and others (Parkay, Hardcastle Stanford, Vaillancourt & Stephens, 2005; Shepard, Hammerness, Darling-Hammond & Rust, 2005) maintain effectively designed learning environments must be assessment-centered in addition to being learner-centered as assessment of student learning is an integral part of the learning process. As the National Research Council (2000) asserts “the key principles of assessment are that they should provide opportunities for feedback and revision and that what is assessed must be congruent with one’s learning goals” (pp. 139-140).

It is necessary to distinguish between two major uses of assessment. The first, formative assessment, is “defined as assessment carried out during the instructional process for the purpose of improving teaching or learning” (Shepard et al., 2005, p. 275). Formative assessment is closely linked to instructional scaffolding (Shepard et al., 2005). The second, summative assessment, “measures what students have learned at the end of some set of learning activities” (National Research Council, 2000, p. 140). In summarizing these two types of assessment, Shepard et al. (2005) maintain, the first enables learning while the second documents achievement.

Using formative assessment to discover what a student understands can be a powerful teaching tool to target instruction and propel learning (Kaftan, Buck & Haack, 2006; Shepard et al., 2005). Feedback is an integral part of this

learning process and as such, should be continuous (Shepard et al., 2005; National Research Council, 2000). For that reason, teachers and students should have a common understanding of the purpose of feedback i.e. to facilitate learning (Shepard et al., 2005). Moreover, “teachers must establish a climate of trust and develop classroom norms that enable constructive criticism” (Shepard et al., 2005, p. 288). As the National Research Council (2000) maintains “feedback is most valuable when students have the opportunity to use it to revise their thinking as they are working on a unit or a project” (p. 141). Furthermore, “feedback is most effective when it focuses on particular qualities of a student’s work in relation to established criteria, identifies strengths as well as weaknesses, and provides guidance about what to do to improve” (Shepard et al., 2005, p. 288).

Effective teachers also foster student self-assessment skills (National Research Council, 2000). As Shepard et al. (2005) explain, teachers “must convey to students the importance of students themselves taking responsibility for reflecting on and monitoring their own learning process” (p. 276). By learning to assess their own work and the work of their peers, students play a very important role in the learning process.

Shepard et al. (2005) assert that “to be mutually supportive, formative and summative assessments must be conceptually aligned” (p. 297). However, these authors caution that the summative assessment should not just be a repeat of formative tasks. Summative assessment should be an opportunity for students to exhibit their mastery and extend their understanding of what has come before.

Research suggests that authentic assessment is a useful means of assessing middle school students (Mednick, 2002b; Parkay et al., 2005). In contrast to traditional assessment in which students select an answer or recall information, authentic assessment asks students to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills (Mednick, 2002b). Other common names for authentic assessment are performance-based assessment, alternative assessment and direct assessment. Performance-based assessment is so called because students perform meaningful tasks; alternative assessment provides an alternative to traditional assessment and direct assessment provides more direct evidence of meaningful application of the knowledge and skills. Mednick (2002b) maintains that “reflection is a critical component of authentic assessment as students are asked to reflect on their own learning and thinking” (p. 2).

Portfolios are a meaningful authentic assessment tool for middle school teachers (Thompson & Homestead, 2004). Schurr (as cited in Knowles & Brown, 2000) describes portfolio assessment as “a systematic, integrated, and meaningful collection of a student’s day-to-day work showing that student’s efforts, progress, or achievement in one or more subjects” (p. 138). Portfolios allow students to discuss their achievements and their difficulties with teachers, parents and classmates throughout the year. If implemented properly, portfolios provide students with valuable information about their progress over time (National Research Council, 2000).

Teachers and students need to have a shared understanding of the goals for learning (Shepard et al., 2005). Frederiksen and Collins (cited in Shepard et al., 2000) use the term transparency to indicate that students must have a clear understanding of the criteria by which their work will be assessed. The use of rubrics is one effective means to achieve this goal (Stowell & McDaniel, 1997; Thompson & Homestead, 2004). Rubrics provide scoring guidelines that offer a scale and a set of descriptors to determine varying levels of performance. Rubrics are particularly useful for student self-assessment when given to them prior to the commencement of projects (Knowles & Brown, 2000).

In summary, for assessment to be effective, it is clear that both formative and summative assessment practices are required. Meaningful assessment focuses on learning as a process instead of a single performance. There needs to be a clear link between outcomes, instruction and assessment. Outcomes must be clearly identified; appropriate assessment tasks to assess learning outcomes must be designed; and suitable learning opportunities to get students ready for the assessment tasks must be developed. Feedback is an integral part of assessment and as such should be continuous.

Class Size and Composition

Dibbon (2004) and Sheppard (2006), two local researchers, have previously reviewed the literature on class size and composition. Dibbon (2004) maintains most educational research has confirmed that small classes yield significant benefits for students, particularly in the early primary grades (K-3). Furthermore, it appears that achievement gains are greater when classes contain fewer than 20 students, and that students whose classes are small in the primary grades retain their gains in elementary, middle and high school (Dibbon, 2004). While small classes benefit all types of students, much research has shown that the benefits are greatest for disadvantaged students from low SES neighbourhoods (Dibbon, 2004).

Sheppard (2006) also reviewed a similar body of literature and concludes the evidence related to the value of small classes at the primary grades cannot be contested. Sheppard (2006) highlights further that “the most compelling evidence suggests that the long-term impact on student learning is maximized when students have the opportunity to begin their formal schooling in classes where class-size (not pupil-teacher ratio) is approximately 15 students per teacher and when these class sizes are maintained from kindergarten to grade 4 inclusive” (pp. 41-42). With respect to class-size at other grade levels, Sheppard (2006) asserts that various studies have found that smaller classes positively impact student achievement, however, due to the fact that the majority of studies in recent years have focused on primary grades, the research is somewhat inconclusive at the other grade levels. For instance, Sheppard (2006) maintains that “while Betts and ShloInik (1999) and Rice (1999) report that small classes led to improvements in instructional practices and student engagement at the middle and high school level, Gilstrap (2003) found that class size at the middle school level did not directly impact classroom practices” (p. 42). Sheppard (2006) explains that class-size is one of a number of factors that have been identified to influence student learning, and as such caution must be exercised in interpreting the results of research focused on just class size.

In summary, it appears as if class size is a factor in student achievement and learning at the primary-elementary grade level and it is reasonable to think that small class sizes at the intermediate level will have a similar effect.

Middle School Scheduling

The literature suggests that rather than traditional 40-50 minute periods, block scheduling is preferred in middle schools particularly those who use interdisciplinary approaches to teaching. (Erb, 2002; Smith, 2002; Thompson & Homestead, 2004). Block scheduling refers to extended blocks of time in which teachers and students can delve more deeply into course content. Some middle schools also extend their traditional five minute homeroom period into longer periods of time that facilitate advisory/exploratory guidance sessions (Mednick, 2003a) These sessions include a variety of activities that allow students to explore many relevant topics, and they embrace the middle school philosophy of exploration. They also help teachers get to know a small group of students. Scheduling middle schools in such a manner is thought to contribute to relationship building and the creation of trust.

Attempting to achieve such a schedule is not without its obstacles. Increased emphasis on time on task and academic accountability are two trends that have resulted in a negative image for block scheduling, (Thompson & Homestead, 2004). Erb (2002), in discussing the trend for some schools to move away from block scheduling and interdisciplinary teaming, cautions that “when pressed for the database that would support these proposals and provide counter evidence to the Carnegie studies that have shown the viability of the recommendations for middle grades reform, advocates for a return to traditional junior highs have no research to present” (p. 4).

Research further suggests that middle schools can help foster student-teacher relationships by utilizing a strategy known as looping (Coash & Watkins, 2005; McCown & Sherman, 2002; Peterson, 2001). Looping occurs when teachers progress with the same students through two or more grades (e.g., grades 7 and 8). Coash and Watkins (2005) posit the connections created through looping have a strong positive impact. Peterson (2001) acknowledges that schools in the United States have been slow to catch on to using looping compared to other countries (e.g. Australia), but those schools where looping is being used have reported positive results in building a sense of community among teachers, students and parents.

In summary, it appears the organization of the middle school can play an important role in supporting adolescent student learning. Block scheduling and looping are two strategies identified in the literature that can build student-teacher relationships and facilitate learning.

Consideration of Gender Differences

The debate on how gender affects achievement has persisted for many years. There are those that espouse that gender has no or little effect (Hyde, 2005; Hyde, 2006; Jaffee & Hyde, 2000; Kling, Hyde, Showers & Buswell, 1999) as well as those who are adamant that gender differences have a large and measurable effect (American Association of University Women, 1992; Clewell, 2002; Gurian, 2002; Kindlon & Thompson, 2002; Kommer, 2006; Newkirk, 2002; Sadker & Sadker, 2002; Sax, 2005).

Hyde (2005) proposes a theory of gender similarities where she argues males and females are much more alike than different when it comes to learning. She suggests a few notable exceptions such as some motor behaviors (e.g., throwing distance), some aspects of sexuality and aggression. Researchers in this camp believe that the claims of gender differences have been overinflated

suggesting that advocates of the gender difference debate have selectively chosen to report on the few differences as opposed to the multitude of similarities (Hyde, 2005).

Those in the gender differences camp maintain that gender does have an effect on how males and females learn and indeed they believe that males and females learn differently (Gurian, 2002; Gurian & Stevens, 2004; King & Gurian, 2006). With advancements in medical technology that allow researchers to study the brains of boys and girls, supporters of these claims assert that structural and functional differences between males and females exist that “profoundly affect human learning” (Gurian & Stevens, 2004, p. 1). Some authors such as Kommer (2006) suggests that in “trying to teach them [boys and girls] equally instead of equitably, we may be doing a disservice to both” (p. 43). If one subscribes to gender differences beliefs then what appears clear from the literature is that middle school teachers, like their colleagues at other grade levels, must give careful consideration to gender differences among their students.

Sax (2005) and others (Gurian, 2002; Gurian & Stevens, 2004; King & Gurian, 2006), in describing some of these differences, explain that male and female brains are “wired” differently. As a result, females can hear better than males; females are better able to deal with feelings and emotions; females are better able to pay attention (boys’ brains go into a neural rest state many times each day); males tend to enjoy risk-taking more than females; males are better at spatial-relationships than girls and both sexes communicate differently. Other differences include: early development of language in girls (1-2 years); differences in literary likes; and a slower development of impulse control among males (Gurian, 2002; Kindlon & Thompson, 2002; King & Gurian, 2006). Furthermore, King and Gurian (2006) explain that since boys tend to lateralize and compartmentalize brain activity, boys take more time than girls to transition between tasks. Moreover, Kommer (2006) adds that differences in socialization forces among genders have implications for teachers. Sax (2005) concludes “there are no differences in what girls and boys can learn. But there are big differences in the best way to teach them” (p. 106). Kommer (2006) suggests that “better awareness of gender issues can lead to purposeful selection of strategies that meet the strengths of the learners while also finding ways to strengthen their weaker areas” (p. 44).

For many years the focus was on how girls were short changed in the classroom (for example see AAUW Report, 1992), but recently a number of researchers and authors note that the way the curriculum is designed can be a learning obstacle for male students (for example see Pollack, 1998 & 2002;

Kindlon & Thompson, 2002). Pollack (1998) speaks specifically about the failure of schools to address the needs of male students.

Our schools in general are not sufficiently hospitable environments for boys and are not doing what they could to address boys' unique social, academic and emotional needs. Today's typical co-educational schools have teachers and administrators who, though they don't intend it, are often not particularly emphatic to boys; they use curricula, classroom materials and teaching methods that do not respond to how boys learn; and many of these schools are hardly places where boys long to spend time. Put simply I believe most of our schools are failing our boys (p. 231).

Kindlon and Thompson (2002) conclude that "when normal boy activity levels and developmental patterns are accommodated in the design of schools, curricula, classrooms and instructional styles, an entire stratum of "boy problems" drop from sight" (Kindlon & Thompson, 2002, p.176). They further maintain that a more boy-friendly school environment can be created at any school where educators want it to happen. From their research they assert boys respond to a full range of academic, athletic and extracurricular activities when the school culture supports their involvement, and that boys can exert a higher standard of self control and discipline in an environment that allows them significant freedom to be physically active. They also found that boys benefit from the presence of male teachers and authority figures who act as positive role models.

Sadker and Sadker (2002) following in this line of thinking identify a dichotomy between the expectations of boys and their teachers and the schools they attend. Seeing boys as active, aggressive and independent people who enter schools that seem to want them to be quiet, passive and conforming, is an uneasy compromise and they claim that "many walk the tightrope between compliance and rebellion" (p. 183). While many boys do begin by trying to be compliant and raising their hand, they are so in need of attention that if the teacher does not call on them, the more assertive literally call on themselves and blurt out the answer, sometimes even interrupting the teacher in mid sentence.

Differences between male and female performance, and differences along gender lines have been noted in many school subject related areas (Hoff Summers, 2002; Kindlon & Thompson, 2002; Sax, 2005). These authors and

others suggest that there are conditions that may limit the performance of all children, but it is widely acknowledged that biological differences in the early years place males at a developmental disadvantage when it come to reading and writing (see Pollack, 1998 & 2002; Kindlon & Thompson, 2002; and Hoff Summers, 2002). For example, a consistent finding in educational research is that boys and girls like to read different things. Most girls like to read fiction (short stories and novels), while boys prefer non-fiction (descriptions of real events or how things work) (Sax, 2005). As a result, these authors call for teachers to take note of the differences and to develop innovative teaching strategies that will encourage various types of reading (Kindlon & Thompson, 2002).

Research suggests that in schools where innovative teaching technologies have been implemented, remarkable results with respect to the gender gap have been produced (Gurian & Stevens, 2004; King & Gurian, 2006). Gurian and Stevens (2004) maintain that “if teachers were trained in the differences in learning styles between boys and girls, they could profoundly improve education for all students” (p. 4). Proponents of gender differences conclude that gender considerations must become an integral part of the planning and delivery of effective instruction.

With the increased attention being accorded to differences in learning styles of males and females and a heightened focus on achievement issues among school-aged males, interest in single-sex schools and classrooms has begun to increase. Research has emerged focusing on organizing schools and classrooms along gender lines.

The research community appears to be split over this question as there are advocates promoting a return to single-sex environments and there are others who are cautious about such a move. Leading the movement towards the establishment of co-educational environments are researchers like Hoff Sommers (2002) who uses the British school system as a model for others to follow. She claims that the British were quick to move on the male underachievement problem and began to experiment with single sex schools and classrooms a decade ago. Hoff Sommers also provides some examples of private schools where segregation by sex appears to be working. Furthermore, Pollack (1998) advocates for the use of single sex environments as a response to the underachievement of males. He asserts we must take what we know about male education in single sex schools and apply it to co-educational schools. He cites research by Hulse (1997) in two private schools as compelling initial evidence that at least for some boys, being in an all boys school has some merit.

Others researchers like Hagg (2002) and Campbell and Wahl (2002), claim that the body of research base on single sex environments is too small and too limited to make informed policy decisions, and they advocate caution in moving towards single-sex learning environments. Hagg (2002) claims that the structure of a single-sex educational environment does not in and of itself ensure any particular outcomes, positive or negative, because it has multiple inspirations and forms. She further explains that while experimental programs in single-sex classrooms have resulted in increases in self-confidence, they did not translate into increased achievement. Campbell and Wahl (2002) wonder how we can try to answer such complex questions with such simplistic answers as single-sex environments. Put simply, they purport it is impossible to answer whether single sex co-educational classrooms are better unless one studies the multiple factors that influence what goes on in the classroom.

As with almost all of the questions surrounding gender equity, the debate over the advantages and disadvantages of single-sex and co-educational schooling is not easily reduced to a few simple answers. Whatever the answer, the likelihood of society returning to single-sex classrooms and schools is not high, therefore, educators must be cognizant of the latest research on how males and females learn best.

Central to the issues raised by the proponents of gender differences is that educators possess an in-depth understanding of the process of gender construction. Good teachers understand that there are developmental differences between males and females and use this knowledge in deciding what teaching strategies to incorporate and when (e.g, single-gender grouping within the class for certain activities). For them, this is crucial if schools and systems are to work for equitable educational experiences for girls and boys.

In summary, when considering the nature of the adolescent learner, it is important to consider gender affects on achievement. The literature appears divided on this issue with one group purporting gender has little or no affect while another group maintains that gender differences have a large and measurable effect. An examination of these findings is essential to the middle school educator.

Teacher Education for the Middle School

Research suggests that one of the principal failures of the middle school has been the lack of training for middle school teachers in the theory and philosophy

underlying the middle school concept (Bishop & Pflaum, 2005; Dickinson, 2001; McEwin & Dickinson, 1997; National Middle School Association, 2003, 2006; Pendergast, Whitehead, DeJong, Newhouse-Maiden & Bahr, 2007; Weller, 2004; Whitehead, 2005). Due to lack of specific knowledge related to the middle school learner by many teachers, school systems and middle schools themselves, often take up the education of their own teachers about the middle school philosophical framework. As Whitehead (2005) suggests, “the vast majority of American and Australian teachers and administrators have had no introduction to middle schooling theory during their training and, therefore, teacher professional development is focused on the middle school and the developmental needs of young adolescents” (p. 42). Other middle schools ignore the importance of these concepts and do not provide any staff development in middle school philosophy (Weller, 2004), and this is often the difference between a successful and unsuccessful middle school. . The National Middle School Association (2006) outlines a number of essential elements of middle school teacher preparation programs. These elements include:

- study of middle school philosophy and organization
- study of adolescent development and needs
- study of middle school curriculum which emphasizes interdisciplinary and integrative approaches (adolescent interests are the starting point for planning)
- study of planning, teaching and assessment
- collaboration with school-based staffs in teacher preparation which provide early and continuing field experiences in middle school environments
- broad academic background including a concentration in at least 2 teaching fields
- opportunities for pre-service teachers to understand the collaborative role of middle school teachers

In Australia, where there is large support for specialized middle school teacher preparation programs, researchers have used these essential features to guide their work in the field (De Jong & Chadbourne, 2005; DeJong & Chadbourne, 2007). In the preliminary findings of an Australian longitudinal study of students participating in a middle school teacher education pre-service program, the emergence of a middle school teacher identity was clear (Pendergast et al., 2007).

In summary, research suggests that middle school teachers need specific training in the middle school concept. A number of essential elements of middle school teacher preparation programs have been highlighted in the literature.

Middle School Leadership

The effects of principal leadership on school effectiveness are well-known (Hallinger & Heck, 1996; 1998; Heck, 2000; Hoy & Miskel, 2005; Leithwood, 2001; Leithwood & Jantzi, 1990; Leithwood, Louis, Anderson & Wahlstrom, 2004; Waters, Marzano & McNulty, 2003; Weller, 2004). In fact, Leithwood et al. (2004) conclude that “much of the existing research actually underestimates its effects” (p. 5), claiming that “the total (direct and indirect) effects of leadership on student learning account for about a quarter of total school effects” (p. 5). In light of this research, it is not surprising that the NMSA (2003) and others (Angelle & Anfara, 2006; Weller, 2004) maintain that middle school principals play a central role in developing successful schools for adolescents.

Proponents of the middle school philosophy advocate that middle school principals require formal training in leading such an organization (Clark & Clark, 2007; Dickinson, 2001; Weller, 2004; Whitehead, 2005). Commitment to the middle school concept (“a totally integrated organizational, curricular, instructional, relational, developmental concept”) and its ecology are key (Dickinson, 2001). The National Association of Secondary School Principals’ National Study of Leadership in Middle Level Schools supports the importance of commitment to the middle school concept (Valentine, Clark, Hackmann & Petzko, as cited in Clark & Clark, 2007). Principals of highly successful middle schools in that study demonstrated an increased knowledge about middle level practices and young adolescent development.

Erb (2006) reiterates that “implementing middle grade reform-reforms at any level really-requires going beyond new structures to change how people communicate, make decisions, deliver instruction, relate to students, and coordinate their work” (p. 6). As the NMSA (2003) state, middle level leaders “strive to educate colleagues, parents, policy-makers, and community members about middle school philosophy and proven practices in order to build support for long-term, continuous school improvement” (p. 10). Erb (2006) further adds “getting the team to function coherently and energetically requires leaders who have a sound understanding of the middle school concept, of how to create and maintain healthy organizations and how to energize the people who have been recruited to do the work expected of the schools” (p. 6). Inspiring teacher leadership within the middle school is an important part of the principal’s work

(Angelle, 2007). Jackson and Davis, cited in Mednick (2003b), conclude “a middle grades school principal must be the principal change agent, setting the intellectual and interpersonal tone of the school and shaping the organizational conditions under which the school community works” (p. 3).

In summary, it appears from the literature that middle school principals need to be very knowledgeable about middle level practices and young adolescent development. Furthermore, proponents of the middle school philosophy maintain that middle school principals should receive formal training before they are hired to lead such organizations.

Safe School Climate

Armstrong (2006) purports “the most important factor in meeting the needs of young adolescents in school is a safe school climate” (p. 122). To that end, schools can take effective action against bullying. Researchers concur that establishing an anti-bullying policy is an essential ingredient for successful intervention (Eslea & Smith, 1998; Glover, Cartwright, Gough & Johnson, 1997; Griffiths, cited in Pollock, 2006; Hillsberg & Spak, 2006; Rigby, 1998; Sharp & Smith, 1994; Smith & Sharp, 1994; Sherman, 1999; Sullivan, 2000). In fact, Johnstone, Munn and Edwards (cited in Smith & Sharp, 1994) state that “the single most important thing a school can do to prevent bullying is have a clear policy to which staff, pupils and parents are committed” (p. 57). The policy itself is a statement of intent that guides action within the school (Sharp & Thompson, cited in Sharp & Smith, 1994).

In the Newfoundland Labrador context, in response to a growing concern about safety in schools and as a part of the Violence Prevention Initiative, the Department of Education launched its Safe and Caring Schools Initiative in the fall of 2001. “This initiative has been proactive in developing curriculum and programs aimed at early intervention and education on violence prevention” (Government of Newfoundland Labrador, 2006, p. 3). In 2006, the Government of Newfoundland Labrador began the implementation of its provincial Safe and Caring Schools policy. As the document indicates “the goal of the Safe and Caring Schools policy is to provide a framework for the development and implementation of provincial, district and school level policies and action plans to ensure that learning and teaching can take place in a safe learning environment” (Government of Newfoundland Labrador, 2006, p. 4). Since that time, districts and schools across the province have been engaged in the development and implementation of Safe and Caring Schools policies.

The implementation of such policies gives rise to a number of considerations about school violence. The literature suggests that consideration of the physical environment of the school is a first step in fostering an anti-bullying culture (Olweus, 1993; Rigby, 1998; Sullivan, 2000). Researchers suggest that there are two major ways of tackling bullying in the school environment: by extending control over areas where bullying is likely to occur and by creating an enjoyable school environment (Olweus, 1993; Rigby, 1998; Sullivan, 2000). Olweus (cited in Rigby, 1998) argues “staff surveillance is the most effective single means of reducing bullying in schools” (p. 64). Of course, this should be treated as a short-term measure with the eventual goal being the creation of an anti-bullying school ethos. With respect to creating a stimulating school environment, much can be accomplished by engaging student interest through diverse extracurricular activities such as clubs, sports, leadership groups and the like (Rigby, 1998). The value of such extracurricular activities cannot be overstated. Similarly, school beautification projects and enhanced sports equipment have positive impacts helping to avert bullying behaviour (Nesbit, 1999).

Research indicates that another way of tackling bullying is with a well thought out curriculum (Cowie & Sharp, cited in Smith & Sharp, 1994; Rigby, 1998; Sharp & Smith, 1994; Sullivan, 2000). Cowie and Sharp (cited in Smith & Sharp, 1994) argue that a curriculum rooted in cooperative values can create the kind of context where bullying is unlikely to flourish. A survey conducted by Rigby and Cox (cited in Rigby, 1998) confirms that those identified as bullies were significantly less cooperative in their attitudes. Fundamental to the cooperative curriculum is a commitment to the values of trust and respect that help students develop an understanding of self and others. As Cowie and Sharp (cited in Smith and Sharp, 1994) maintain “proponents of the cooperative curriculum aim to create a positive climate of goodwill in the classroom which will give pupils a secure base for solving problems, for confronting controversial issues, for facing difficulties in their social relationships and for developing a sense of ownership of their class and school community” (p. 86).

An excellent segue in the bullying prevention formula is the use of drama, role-play, videos and literature to foster social skill development and a sense of empathy (Milsom & Gallo, 2006; Nesbit, 1999). Drama can create a context in which students can explore bullying within the safety of a role-play situation. Through drama, students learn to express feelings of hurt, rejection and fear while in role and thereby understand how people feel when they are victims of different forms of bullying. Furthermore, it affords students the opportunity to rehearse responses to bullying behaviour. Rigby (1998) contends that videos can also be an excellent stimulus for sparking dialogue on bullying. Literature

can be a very powerful tool in raising school awareness about bullying (Hillsberg & Spak, 2006; Nesbit, 1999; Rigby, 1998). By choosing age-appropriate stories with bullying themes, teachers can establish a forum in which students can talk openly about the injustice and violence displayed in bullying acts. In this way, such engagement could help both the victim and the bully. The victim may derive comfort or coping strategies from reading about another in a similar situation while the bully might begin to identify with a fictional victim, leading to empathy and the possibility for change (Pikas, as cited in Hillsberg & Spak, 2006).

The literature indicates that the potential for using the peer group in combating violence is enormous (Nesbit, 1999; Rigby, 1998; Smith & Sharp, 1994; Sullivan, 2000). Pikas (cited in Sullivan, 2000) argues that the peer group is not comfortable watching bullying, but feels powerless to do anything about it. If these students are provided with a way of stopping bullying then they are more likely to respond positively. If the culture of the school rejects bullying and supports students who tell, then the war on bullying can be won. Some suggested ways a school can create this culture is through the adoption of peer support strategies such as peer partnering, peer mentoring, peer counselling and peer mediation (Sullivan, 2000).

In summary, an examination of the literature suggests that the most important factor in meeting the needs of young adolescents in school is providing a safe school environment. To that end, researchers agree that establishing anti-bullying policies and creating cooperative school environments can create the kind of environment conducive to learning.

Parent and Community Involvement

Clark and Clark (2005) maintain that there are many advantages to building strong parental, community and school relationships. Research indicates that a student's school achievement is directly related to the degree of family support and involvement they have in their child's education (National Middle School Association, 2003). There has been strong advocacy for parent and community involvement in schools from organizations such as the National Middle School Association and the Carnegie Council on Adolescent Development. *This We Believe, Turning Points* and other research studies have called for increased collaboration between the school and community to promote middle school student success (Ruebel, 2001).

Despite this research, parent and community involvement is still an underused resource in middle schools (Valentine, Clark, Hackmann & Petzko, cited in Clark & Clark, 2005). As children progress from elementary to middle school, it is commonly noted that parents become less involved in their child's school (Epstein, as cited in Ruebel, 2001). Suggested barriers to involvement noted in the literature include: the increasing complexity of school subjects at the middle school level; adolescents' desire for autonomy and possible scepticism and resistance on the part of school personnel to recruit parental and community representatives (Clark & Clark, 2005).

For middle schools to reach their full potential of fostering school, parent and community partnerships, Clark and Clark (2005) claim that "significant effort is required by school leaders to address the often cited perceptions of parents who see schools as unwelcoming and of educators who characterize parents as uninterested" (p. 55). Epstein (cited in Clark & Clark, 2005) concludes that "these perceptions, which often do not represent reality, are major roadblocks to successful parent and community involvement programs" (p. 55).

The key to building those relationships is mutual understanding on the part of parents, community members and educators about each other's expectations (Clark & Clark, 2005). For the most part, these expectations are based on student success. Additional expectations on the part of parents may include the provision of a safe learning environment for their children and teachers who understand the students' needs and who act to meet those needs. Likewise, additional educator expectations might include parents who are actively involved in their child's education and who are willing to get involved in school activities.

In summary, parental and community involvement is identified in the literature as having a very powerful effect on learners. Unfortunately, it is a much underused strategy in middle schools. Researchers maintain that programs should be put in place to foster parental and community partnerships with middle schools.

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