

DEVELOPMENTAL ASSETS AND EDUCATIONAL ACHIEVEMENT

THE RESEARCH

More and more research is adding empirical evidence to what we know in our hearts: that the most effective learning takes place in safe, nurturing environments with caring teachers and a student sense of participation and belonging. The elements of *how*, *where*, *when* and *from whom* students learn are significant companions to *what* they learn. This document highlights the wealth of research that illustrates how important relationships, environments, and activities can be on student outcomes, and what asset-building schools are doing to increase academic achievement.

DEVELOPMENTAL ASSETS

In the world of youth development, several frameworks have been created to assist communities in fostering resilience and promoting healthy development in young people. One of the most widely used frameworks (and the one used by Alaska ICE) is the 40 Developmental Assets, a paradigm created from the research of the Search Institute. Based on their extensive knowledge of the literature on resilience, prevention, and adolescent development, the Search Institute devised a survey to measure the protective factors – or “assets” – present in the lives of American adolescents (6th-12th graders). The 40 Assets framework reflects their findings on the support factors necessary to promote positive youth development¹.

ASSETS AND ACADEMICS – A FOUNDATION OF EVIDENCE

We’ve known that assets help youth development in general – it has been well documented that the more assets young people have, the more likely they are to successfully navigate difficult situations and make healthy choices for themselves². But what you may not know as well is that the presence of these assets has been correlated with how well students do in school. A recent longitudinal study from Search Institute shows a positive relationship between the number of assets a student has and his GPA³. In *Great Places to Learn* (1999)⁴, Search Institute identifies 13 of the 40 assets that schools can most directly influence: Parent Involvement in Schooling, Other Adult Relationships, Peer Influence, Interpersonal Competence, High Expectations, Caring School Climate, School Boundaries, School Engagement, Bonding to School, Academic Motivation, Homework, Reading for Pleasure, and Youth Programs.

While Search Institute offers supportive evidence based on their survey results, they present outcomes on a wide spectrum of youth development, including reduction in problem behaviors and an increase in positive attitudes and behaviors. There are

¹ See a full list of the Developmental Assets online at www.alaskaice.org/resources/assets/assets.php.

² See Benson, P.L. (1997). *All kids are our kids: What communities must do to raise caring and responsible children and adolescents*. San Francisco: Jossey-Bass. Also, for an extensive review on the positive outcomes associated with assets, see Scales, P.C. & Leffert, N. (1999). *Developmental assets: A synthesis of the scientific research on adolescent development*. Minneapolis: Search Institute.

³ See Scales, P.C. & Roehlkepartain, E.C. (2003). Boosting student achievement: New research on the power of developmental assets. *Search Institute Insights & Evidence*, 1(1), 1-10. Available online at <http://www.search-institute.org/research/Insights>

⁴ Starkman, N., Scales, P.C., & Roberts, C. (1999). *Great places to learn: How asset-building schools can help students succeed*. Minneapolis: Search Institute.

numerous other scholars and practitioners contributing to this growing body of research and focusing specifically on the positive correlation between building assets and improving student success in schools. In a recent literature analysis, Alaska ICE staff collected 129 research study reports, program evaluations, and literature reviews that explore the relationship between assets and academic success. Fifty-six of these documents met the criteria we had established for our review –

- The document focused on middle school and high school students.
- The document included some evidence of improved grades and/or test scores (some additional positive academic behaviors have also been included in our report).
- The document was published between 1990 and 2004 (with the exception of four studies from the 1980s).

This report presents a summary of our review and provides a foundation of evidence for how those assets specifically impact a young person’s achievement in the classroom.

ORGANIZATION OF THIS PUBLICATION

As we reviewed the literature, we saw there were essentially three influential areas that can impact a student’s desire to be in school and their motivation and ability to do well: the type and consistency of their **relationships**, the nurturing and encouragement they receive from their **school environments**, and the type of after-school and extracurricular **activities** in which they are engaged. We clustered the assets in groups according to these categories in order to discuss them more broadly.

In addition to the 13 assets identified above, we found two additional categories kept appearing as significant to student achievement: teacher behaviors/characteristics and cultural awareness/inclusion. We have added our findings in these areas to the list of assets.

Furthermore, in *Great Places to Learn*, Search Institute suggests the following five areas where schools can intentionally focus their efforts and academically benefit from asset-building strategies: curriculum/instruction, organization of building and school day, co-curricular activities, community partnerships, and support services.

Therefore, based on all these factors, in the following pages you will find the discussion of results from our literature review, which has been organized in the following manner:

1. Assets
 - a. Relationships: parents, other adults, teachers, peers, interpersonal competence
 - b. Schools Environments: high expectations, caring school climate, school boundaries, school engagement, bonding to school, academic motivation, cultural awareness/inclusion
 - c. Activities: homework, reading for pleasure, youth programs
2. How Schools Can Help: curriculum/instruction, organization of school building and day, co-curricular activities, community partnerships, and support services.
3. Other Helpful Resources
4. Annotated Bibliography and Other Related Sources

ADDITIONAL NOTES

Because most of the studies reviewed in this report were not designed to be associated with specific assets, there is some overlap among the assets and how they are identified in the research. For example, it is somewhat difficult to distinguish between Caring Adults and Caring School Climate – in many of the studies a caring school climate is partly

determined by the presence of caring adults in the school. In some cases a similar reference is listed in two places as it applies to both assets.

Other related sources

Included with the discussion of each asset is a section titled “other related sources.” Many of the studies we reviewed provided references to other studies as evidence of a relationship between that asset and academic achievement. Despite the fact that we did not directly review these articles, we have included these citations in an attempt to provide a broader picture of the wealth of research that has been conducted in this area. While this is a less traditional format for a literature review, we feel it presents a broader lens for future reference. A list of all sources cited in these sections can be found at the end of the annotated bibliography.

Most notably among the “other related sources”, we have included references to Search Institute’s in-depth literature review as published in *Developmental Assets* (Scales & Leffert, 1999). The empirical evidence included in Scales & Leffert’s review is broadly focused on *all* benefits assets have for youth development. We have noted the support they found for academic achievement here; however, their criteria included elementary school students and positive academic behaviors beyond improved test scores and grades, which is broader than the scope of our study.

Specifically focused on American Indian/Alaska Native students

Many of Alaska’s schools have significant populations of Alaska Native students. For this reason, we have included a specific category to highlight the findings from studies focused on this unique population. Many of the references are taken from major literature reviews – as in the “other related sources” category, we have included the original source in these citations as well.

We make no claims that this is an exhaustive study. There is undoubtedly more research out there, and more being produced all the time. Our intention was primarily to present a collection of evidence as a tool to promote the importance of intentional asset building as an integrated part of our schools.

DEVELOPMENTAL ASSETS

Search Institute and Alaska ICE have promoted the concept of Developmental Assets as the “building blocks” of positive youth development. The full list of Developmental Assets includes 40 building blocks, which encompasses a wide range of developmental tasks and outcomes. Thirteen of these assets have been identified by Search Institute as particularly relevant to school settings and student achievement. The following section discusses these thirteen assets and provides research-based evidence that they do, in fact, correlate positively with improved grades, test scores, and student attitudes about learning.

In addition to the thirteen assets highlighted by Search Institute, our review revealed significant support for two other important factors: teacher attitudes and behaviors, and cultural awareness, especially with Native populations. These factors have been included in our discussion of the research below.

RELATIONSHIPS

The quality and consistency of relationships in a student’s life has a significant influence on how motivated he is and how well he performs in school. The people that are important to that student are arguably the strongest persuasions on whether he values his school experience or not. Parents, other family members, teachers, mentors, other adults in the community, and peers all impact a student’s academic achievement, and research provides the following evidence for those influences.

Parent Involvement in Schooling

Parental support is one of the key influences on a student’s school success (Finn & Rock, 1997; Henderson & Mapp, 2002; Miller, 2003; Scales, Benson, Leffert, & Blyth, 2000). In our review, we found correlations between student achievement and parental involvement in schools through school activities, helping with homework, involvement with school decision-making, or having strong communication with the school. Parents also provide their children with encouragement to stay in school and be motivated about their studies. Specific associations we found include the following:

- Middle school students involved in a specific parent-involved homework program showed improved language arts grades (Epstein, 1997) and science grades (VanVoorhis, 2001).
- Among New Brunswick high schools, those where parents felt they received sufficient information from the schools also reported higher examination scores (Grobe & Bishop, 2001).
- African-American middle school students who reported both parent support and school support had higher average grades than students who had only one or neither of these supports (Gutman & Midgley, 2000).
- A longitudinal study of secondary schools found that “restructuring” (non-traditional) schools that intentionally incorporated parent volunteers as one of their strategies show students making bigger advancements in math, science, history, and reading than more traditionally-structured schools (Lee, Smith, & Croninger, 1996).
- Students who perceive high levels of parental support also exhibit higher levels of achievement motivation (Maya, 2001).
- A retrospective comparison of parent involvement and student grades showed that students whose parents had been involved in more school-related activities had consistently performed better in elementary and middle school (Miedel & Reynolds, 1999).
- Parental encouragement was the strongest influence on at-risk students’ decisions to stay in school (Miller-Cribs, Cronen, Davis, & Johnson, 2002).

Other related sources⁵

- In the research synthesis conducted by Scales and Leffert (1999)⁶, Search Institute cites these additional studies that provide evidence of parental support being associated with one or more of the following: “higher school engagement, motivation, aspirations, attendance, personal responsibility for achievement, more hours spend on homework, higher grades, and higher standardized test scores: Astone & McLanahan, 1991; Bisnaire, Firestone, & Rynard, 1990; Bogenschneider, Small, & Tsay, 1997; Cauce, Felner, & Primavera, 1982; Chavkin & Gonzalez, 1995; Christenson, Rounds, & Gorney, 1992; Cotton & Savard, 1982; Davey, 1993; Eccles, Early, Fraser, Belansky, & McCarthy, 1997; Epstein, 1987; Feldman & Wentzel, 1990; Glaser, Larsen, & Salem Nichols, 1992; Glasgow, Dornbusch, Troyer, Steinberg, & Ritter, 1997; Grolnick & Slowiaczek, 1994; Harnisch, 1985; Henderson & Berla, 1994; Keith, Reimers, Fehrman, Pottebaum, & Aubey, 1986; Kurdek, Fine & Sinclair, 1995; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Marjoribanks, 1990; Masselam, Marcus, & Stunkard, 1990; McDonald & Sayger, 1996; Otto & Atkinson, 1997; Palmer, Dakof, & Liddle, 1993; Paulson, 1994; Rosenthal & Feldman, 1991; Ryan, Stiller, & Lynch, 1994; Scott & Scott, 1989; Steinberg, Elmen, & Mounts, 1989; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994; Steinberg, Lamborn, Dornbusch, & Darling, 1992; Steinberg, Mounts, Lamborn & Dornbusch, 1991; Stevenson & Baker, 1987; Swick, 1988; Taylor, Phillip, Hinton, & Wilson, 1992; Visser, 1987; Wang, Fitzhugh, Westerfield, & Eddy, 1995; Wentzel, 1994; Yap & Enoki, 1994” (p. 25).

Specifically focused on American Indian/Alaska Native students:

- Schools with high rates of successful American Indian/Alaska Native students had strong parent-teacher connections (From Strand & Peacock, 2002: Blum & Rinehart, 1997).
- Support of family members is found as significant reason for students to be motivated and stay in school (Coburn & Nelson, 1987; Silverman & Demmert, 1986) and their ability to do well in school (From Demmert, 2001: McInerney, Roche, McInerney, & Marsh, 1997).
- In a study of Ojibwa families, boys whose fathers spent more time involved in child rearing had better academics (From Demmert, 2001: Williams, Radin, & Coggins, 1996).
- Parental involvement in design and implementation of school programs was strongly associated with improved student achievement (Leveque, 1994).
- Student performance has improved in Alaska schools where parents are involved in the schools and have some part in the decision-making (From McDowell Group, Inc., 2001: Kushman, 1999; Reyhner, 2000; Yazzie, 2000).

Other Adult Relationships

Caring adults outside the student’s family, such as teachers and mentors, can have a significant influence on a young person’s performance in school. In this review of the literature, 9 studies provided evidence of a caring adult’s influence on improved grades and/or standardized test scores. In addition, 8 studies illustrate how other adults can encourage positive student attitudes, school satisfaction, academic motivation, decisions to remain in school, academic engagement, lower levels of behavior problems, and easier transitions into middle schools.

- In reviews of after-school programming, mentoring programs (such as Big Brothers/Big Sisters) were shown to have positive correlations with improved test scores and/or grades (Harvard Family Research Project, 2003; Miller, 2003).
- In a study of reasons that at-risk students stayed in school, the intervention programs most likely to influence them were mentoring/role model programs (Miller-Cribbs, Cronen, Davis & Johnson, 2002).
- Students involved in mentoring programs had better school attendance, better attitudes toward school, greater likelihood of pursuing higher education, and some gains in GPA (Jekielek, Moore, Hair, & Scarupa, 2002).

⁵ The references listed here were cited in the studies and reports we reviewed as other evidence of a relationship between this asset and academic achievement. However, we did not review these articles directly, and therefore cannot claim knowledge of the subjects, methods or results. A full list of these sources can be found in the appendix.

⁶ Scales and Leffert’s review included a broader spectrum of considerations; i.e. these studies may include elementary aged subject groups and a wider definition of academic achievement.

- Students who report caring and supportive interpersonal relationships in school have more positive attitudes, greater school satisfaction and higher engagement in academic work (Connell & Wellborn, 1991).
- Students who reported having support from people at school in combination with parent support had easier transitions into middle school and higher grades than students who reported support from only parents or school or neither (Gutman & Midgley, 2000).
- A longitudinal study of CA high schools comparing achievement test scores with student behaviors and student perceptions of school climate found that schools with a greater increase of test scores over time also had students reporting higher levels of caring relationships at school and meaningful involvement in the community (Hanson & Austin, 2003).
- An extensive literature review conducted by Haynes, Emmons, & Ben-Avie (1997) arrives at a convincing overall conclusion that students do better in schools with positive school climates, specifically those with positive interpersonal relations.
- Henderson & Mapp (2002) provide a review of 51 articles related to parent/community involvement in school, including several that highlight the positive influence other community members have on student achievement.
- Students who perceived strong teacher/school support exhibited higher levels of achievement motivation (Maya, 2001).
- Opportunities for shared student/staff activities has been linked to high student achievement (Schaps, 2003).

Other related sources⁷

- Students who report caring and supportive interpersonal relationships in school have more positive attitudes and greater school satisfaction (From Klem & Connell, 2003: Battistich, Solomon, Kim, Watson & Schaps, 1996; Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997; Shouse, 1996) and higher academic engagement (Solomon, Battistich, Watson, Schaps, & Lewis, 2000).
- Schools that provide necessary support for students to meet expectations have high rates of academic success (From Benard, 1991: Brook, Nomuram, & Cohen, 1989; Edmonds, 1986; Levin, 1989; O'Neil, 1991; Rutter, 1979; Slavin, Karweit, & Madden, 1989).
- In their extensive review of the literature, Scales & Leffert (1999) cite these additional studies that show an association between support provided by other adults and “higher grades, more liking of school, higher IQ score, higher school completion rates, and higher math test scores: Cochran & Bø, 1989; Coon, Carey, & Fulker, 1992; Duncan, 1994; Entwisle, Alexander, & Olson, 1994; Wenz-Gross, Siperstein, Untch, & Widaman, 1997; Werner, 1993” (p. 27).

Specifically focused on American Indian/Alaska Native students:

- Native students are more likely to do better in school when they feel connected to their parents, communities, and teachers (From Strand & Peacock, 2002: Bergstrom, Cleary, & Peacock, 2003; Whitbeck, Hoyt, Stubben, & LaFromboise, 2001).
- Support of community members and teachers motivates Native students and keeps them in school (Coburn & Nelson, 1987; Silverman & Demmert, 1986).

Teacher Behaviors/Characteristics

Teachers have a remarkably important role in student asset building and achievement. As the primary “other adult” at school, their influence is indeed significant, and for our purposes should be distinguished from the Other Caring Adults asset. Teachers appear to be most effective when students feel their teachers care about them and support them, are fair and consistent, establish clear rules, procedures and consequences, exhibit positive attitudes about students and teaching, and provide students with opportunities for participation and active learning. The following teacher behaviors and characteristics were found to be associated with academic improvements/achievement:

- Middle school students with high levels of teacher support are almost three times as likely to have high levels of school engagement (Klem & Connell, 2003).

⁷ See footnote on page 5.

- High schools in New Brunswick where students reported having understanding and helpful teachers also exhibited higher achievement scores (Grobe & Bishop, 2001).
- Specific teacher behaviors highlighted as related to school improvements include strong guidance, clear rules and procedures established with the consent of students, positive and negative consequences for student behavior, clear learning goals and feedback, student participation in goal-setting, taking a personal interest in students, exhibiting positive classroom behaviors toward students, and awareness and attentiveness to high-needs students (Marzano & Marzano, 2003).
- Comparing student grades to a variety of student relationships at school showed the student-teacher relationship was significantly related to GPA (Niebuhr & Niebuhr, 1999).
- Students have higher scores on standardized tests when they spent at least 15 hours per week in learning activities with teachers (in combination with other factors) (Clark, 2002).
- Academic improvements and achievements were found to be associated with teachers who build trust with their students and make personal connections with them (Schaps, 2003), show flexibility, fairness, and consistency (Cleary & Peacock, 1998), are warm, supportive, and caring (Reyhner, 1992; Schaps, 2003), and demonstrate positive attitudes about their students (Yagi, 1985).

*Other related sources*⁸

- Overall student-teacher closeness in middle school contributed to higher academic achievement and lower levels of behavior problems (From Scales & Gibbons, 1996; Felner, 1992).
- Teachers who had high-quality relationships with their students had 31 percent fewer discipline problems, rule violations, and related problems (From Marzano & Marzano, 2003; Marzano, 2003).
- Data from the National Longitudinal Study on Adolescent Health suggests that, in general, adolescents tend to do better in school when they feel teachers treat students fairly and they get along with their teachers (From Strand & Peacock, 2002; Resnick, Bearman, Blum, Bauman, Harris, Jones, Tabor, Behring, Sieving, Shew, Ireland, Bearinger, & Udry, 1997).

Peer Influence

Positive peer relationships (including peer tutoring) are associated with academic competence in two studies, while negative peer associations were related to high school dropout and difficulty adjusting to middle school in another two studies. Peer tutoring has also been found to be a positive influence on student achievement.

- A student's relationship to his peers proved to be significantly related to his GPA (Niebuhr & Niebuhr, 1999).
- Association with anti-social peers increased the likelihood of high school dropout (Battin-Pearson, Abbott, Hill, Catalano, Hawkins, & Newcomb, 2000).
- Negative peer relationships contributed to absenteeism and difficulty adjusting to middle school; peer acceptance and friendships contributed to academic competence (Ladd, 1999).
- Peer tutoring has been shown as a positive influence on student achievement (Yagi, 1985).

Other related sources

- Hallinan & Williams (1990) demonstrated that "peers have considerable influence over the academic achievement of their peers" (As cited in Battin-Pearson, Abbott, Hill, Catalano, Hawkins, & Newcomb, 2000).
- Martens (1992) presents evidence that peer tutoring positively influences student achievement (From Demmert, 2001).
- An additional 5 studies were found by Scales & Leffert (1999) to show an association between positive peer influence and "higher academic achievement (Chen & Stevenson, 1995), higher math achievement (Hanson & Ginsburg, 1988), better grades (Mounts & Steinberg, 1995), and increased school competence (Cauce, 1986)" (p. 80).

⁸ See footnote on page 5.

Interpersonal Competence

The importance of interpersonal competence, or a student's ability to effectively interact socially, is rapidly gaining attention, especially through Social and Emotional Learning (SEL) strategies. Zins, Bloodworth, Weissberg, & Walberg (2004) published an entire book focused on the benefits of incorporating SEL into the daily curriculum. Many of the positive outcomes are aligned with improved academic behaviors and practices. The studies reviewed here include associations between interpersonal competence and higher test scores, positive academic attitudes, and academic engagement.

- Peer acceptance and the ability to maintain friendships is correlated with academic competence (Ladd, 1999).
- Students who report getting along with their peers and teachers tend to do better in school (Strand & Peacock, 2002).

Other related sources⁹

- “Students who report caring and supportive interpersonal relationships in school have more positive academic attitudes and are more satisfied with school (From Klem & Connell, 2003; Battistich, Solomon, Kim, Watson, & Schaps, 1996; Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997; Shouse, 1996); they are also more engaged in academic work” (Solomon, Battistich, Watson, Schaps, & Lewis, 2000).
- “Prosocial behavior in the classroom is predictive of performance on standardized achievement tests” (From Zins, Bloodworth, Weissberg, & Walberg, 2004; Malecki & Elliott, 2002; Welsh, Park, Widaman, & O’Neil, 2001);
- Social competence with peers and adults is linked to school success (From Miller, 2003; Wentzel, 1991; 1993).
- Scales & Leffert (1999) cite two additional studies that show an association between interpersonal competence and increased academic achievement¹⁰ (Arroyo & Zigler, 1995; Chen, Rubin, & Li, 1997).

⁹ See footnote on page 5.

¹⁰ Scales & Leffert combine Interpersonal Competence with Cultural Competence – these studies may address either or both assets.

SCHOOL ENVIRONMENTS

The perception students have of their school environment provides a notably important influence on student achievement rates. Schools that establish a positive, caring, and safe learning environment with fair and consistent boundaries while also nurturing an enthusiasm for learning are more likely to have higher performing students.

Communicating high expectations, providing the support to meet learning goals, and creating opportunities for active student participation are also successful strategies. In addition, schools with Native student populations also benefit from devoting attention to students' cultural backgrounds and heeding the learning traditions of their pupils. See Section 2 of this report ("How Schools Can Help") for more discussion on school structuring strategies.

High Expectations

Students who report that their teachers, schools, and families have high expectations for their success, give them challenging curriculum, and provide them the support necessary to achieve these expectations are more likely to have higher grades and test scores and go on to pursue higher education. Conversely, one study indicates that low expectations negatively influence student outcomes.

- High school classes presenting college core curriculum have a higher percentage of graduates go on to higher education (California Department of Education, 1990).
- Communicating low expectations has an impact on limiting student achievement (Cotton, 1990).
- Schools in California with students reporting high expectations at school exhibited greater gains in standardized test scores over time than other schools (Hanson & Austin, 2003).
- Middle school students who experience high, clear, and fair expectations are more likely to be engaged in school and therefore are likely to demonstrate higher success rates (Klem & Connell, 2003).
- High school students who perceive high teacher and parental expectations are more likely to be academically motivated (Maya, 2001).
- Schools that established a climate of high expectations and challenging curricula demonstrated gains in mathematics achievement (Phillips, 1997).
- Common characteristics of high-performing schools indicate that all students benefit from rigorous coursework (U.S. Department of Education, 2000).
- Demanding curriculum is associated with academic benefits in numerous studies (Southern Regional Education Board, 2002).

Other related sources¹¹

- "Research has identified that schools that establish high expectations for kids – and give them the support necessary to achieve them – have incredibly high rates of academic success (From Benard, 1991; Brook, Nomuram, & Cohen, 1989; Edmonds, 1986; Levin, 1988; O'Neil, 1991; Rutter, 1979; Slavin, Karweit, & Madden, 1989)."
- Scales & Leffert (1999) also present 6 studies in their review where high expectations were associated with "positive academic performance (Christenson, Rounds & Gorney, 1992), academic achievement (Achor & Morales, 1990; Chen & Stevenson, 1995; Reynolds & Gill, 1994; Rosenthal & Feldman, 1991)...and short-term improvement in grades and school attendance among student in high-risk situations (Wienstein, Soulé, Collins, Cone, Mehlhorn, & Simontacchi, 1991)" (p. 81).

Specifically focused on American Indian/Alaska Native students:

- Native high school students enrolled in an intensive academic summer program produced higher abilities in math and reading, and 65% of these students enrolled in four-year college programs after high school (Kleinfeld, 1992).

¹¹ See footnote on page 5.

Caring School Climate

School climate refers to the overall sense of support and belongingness a student feels as a result of interpersonal interactions at school. We found a wealth of research illustrating that students achieve higher grades when they feel peers and adults at their school are supportive and accepting, and they feel physically, emotionally, and psychologically safe. In addition to performance results, students in caring school climates report having more positive attitudes about school and increased school attachment and satisfaction.

- Students reporting a combination of parent and school support had higher average grades than those who reported only one or neither of these supports (Gutman & Midgley, 2000).
- There was a greater increase over time in school-wide test scores for schools that had students reporting high levels of caring relationships at school; lower test scores where students reported high levels of harassment, theft, vandalism, fighting, and feeling unsafe at school (Hanson & Austin, 2003).
- Strong correlations were found between positive school culture and academic motivation/engagement, pleasant staff/environment and high student achievement, and perceived teacher caring and higher math proficiency (among at-risk students) (Schaps, 2003).
- A safe and caring learning community increases student attachment to school, thereby positively affecting student outcomes (Osterman, 2000).

Other related sources¹²

- Haynes, Emmons, & Ben-Avie (1997) cite nine studies to support the following statement: “We have observed that students achieve academically and develop well in communities in which collaborative interpersonal relations ensure the successful implementation of policies and programs that focus on the students’ academic and social growth” (Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1977; Brookover & Lezotte, 1979; Edmonds, 1979; Gottfredson & Gottfredson, 1989; Maduas, Airasian, & Kellaghan, 1980; Rutter, 1983; Rutter, Maughan, Mortimore, & Ouston, 1979; Shipman, 1981; Teddlie, Falkowski, Stringfield, Desselle, & Garvue, 1984).
- “Students who report caring and supportive interpersonal relationships in school have more positive academic attitudes and are more satisfied with school” (From Klem & Connell, 2003; Battistich, Solomon, Kim, Watson, & Schaps, 1996; Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997; Shouse, 1996).
- A follow-up study of the Child Development Project showed increased student attachment in schools that offer a safe and caring environment (From Klem & Connell, 2003; Solomon, Battistich, Watson, Schaps, & Lewis, 2000).
- Schools where students report high expectations along with the support to achieve have high rates of academic success (From Benard, 1991; Brook, Nomuram, & Cohen, 1989; Edmonds, 1986; Levin, 1988; O’Neil, 1991; Rutter, 1979; Slavin, Karweit, & Madden, 1989).
- A longitudinal study of the School Transition Environment Project provided positive academic achievement outcomes based on increased student attachment to schools with a safe and caring learning environment (From CASEL, n.d.: Felner, Brand, Adan, Mulhall, Flowers, Sartain, & DuBois, 1993).
- In their extensive review of the literature supporting assets, Scales & Leffert (1999) found 20 studies that show an association between a caring school climate and “higher grades, engagement, attendance, expectations and aspirations, sense of scholastic competence, fewer school suspensions, and undelayed progression through grades (Davis & Jordan, 1994; DuBois, Felner, Meares, & Krier, 1994; Eccles & Harold, 1993; Eccles, Lord, Roeser, Barber, & Jozefowicz, 1997; Felner, Ginter, & Primavera, 1982; Goodenow, 1993a, 1993b; Gottfredson & Gottfredson, 1989; Graham, Updegraff, Tomascik, & McHale, 1997; Grossman & Garry, 1997; Hawkins & Lam, 1987; Hayward & Tallmadge, 1995; Lunenburg & Schmidt, 1989; Marjoribanks, 1990; Maryland State Department of Education, 1990; Noguera, 1995; Patrick, Hicks, & Ryan, 1997; Roeser, Midgley, & Urdan, 1996; Rutter, 1983; Ryan, Stiller & Lynch, 1994)” (p. 26).

¹² See footnote on page 5.

Specifically focused on American Indian/Alaska Native students:

- The National Longitudinal Study of Adolescent Health found that adolescents in general tend to do better in school when they feel teachers treat students fairly, they feel close to people at school, get along with their teachers, and feel that other students are not prejudiced (From Strand & Peacock, 2002; Resnick, Bearman, Blum, Bauman, Harris, Jones, Tabor, Behring, Sieving, Shew, Ireland, Bearinger, & Udry, 1997).

School Boundaries

Three studies we reviewed provided a negative correlation between student achievement and presence of violence, behavior issues, and safety threats. In other words, there is evidence of higher test scores in schools where there were lower levels of theft, vandalism, weapons possession, discipline problems, and students feeling unsafe at school.

- New Brunswick schools reported higher test scores in middle schools where teachers reported having established guidelines for student behavior and fewer problems with class disruption, and high schools where students, teachers and parents reported fewer discipline problems (Grobe & Bishop, 2001).
- Students made smaller improvements on test scores in California schools where students reported high levels of theft, vandalism, and weapon possession on school grounds, and higher levels of feeling unsafe at school (Hanson & Austin, 2003).
- Students in schools with high violence had lower math scores; student offenses (serious and non-serious) were negatively correlated with achievement gains (United States Department of Education, 2000).

Other related sources¹³

- Scales & Leffert (1999) also cite one additional study showing an association between school boundaries and increased student achievement (Lee & Bryk, 1989).

School Engagement

School engagement behaviors, such as school attendance, class preparation, homework completion, student efforts to succeed, and avoiding classroom disruption, were positively correlated with higher school success rates in the following studies we reviewed.

- In a study of resilient at-risk high school students, Finn & Rock (1997) found that school engagement behaviors, such as school attendance, class preparation, homework completion, and avoiding classroom disruption were positively correlated with higher success rates.
- School engagement contributed meaningfully to school success (as self-reported by students on the Search Institute Attitudes and Behaviors survey) (Scales, Benson, Leffert, & Blyth, 2000).
- Schaps (2003) reports strong correlations between school connectedness and increased GPA, student positions of responsibility in school and higher achievement, and feelings of “belongingness” and academic motivation.
- Wentzel (1989) found GPA scores were positively correlated with efforts to be a successful student, do one’s very best, and get things done on time.
- In their study comparing student engagement with levels of achievement, Klem & Connell (2003) found that middle school students who were highly engaged in school (i.e. working hard on schoolwork, being prepared, and paying attention in class) were 75% more likely to do well on an achievement and attendance index and 23% less likely to do poorly on this index.

¹³ See footnote on page 5.

Other related sources

- In their review of the literature, Klem & Connell (2003) write “student engagement has been found to be one of the most robust predictors of student achievement (Arhar & Kromrey, 1993; Bryk & Driscoll, 1988; Connell, Spencer, & Aber, 1994; Connell & Wellborn, 1991; Finn, 1989; 1993; Finn & Rock, 1997; Hallinger & Murphy, 1986; Kim & Others, 1995; Lamborn, Brown, Mounts, & Steinberg, 1992; Mounts & Steinberg, 1995; Voelkl, 1995), specifically with regard to achieving higher grades (Goodenow, 1993; Willingham, Pollack, & Lewis, 2002) and test scores (Lee & Smith, 1993, 1995; Roderick & Engel, 2001; Willingham, Pollack, & Lewis, 2002).”

Bonding to School

A student’s feelings of attachment and connection to school were found to be associated with increased GPAs and academic engagement in three studies. In addition, students who feel more attachment to school are less likely to engage in problem behaviors, such as skipping school, negative social encounters, and drug/alcohol use.

- Students who feel more attachment to school are less likely to engage in problem behaviors, such as skipping school, negative social encounters, and drug/alcohol use (CASEL, n.d.).
- Strong correlations were found between school connectedness and increased GPA (Schaps, 2003).

Other related studies:

- In a review of the Child Development Project, students with greater attachment to school were more likely to be engaged in their academic work (From CASEL, n.d.: Solomon, Battistich, Watson, Schaps, & Lewis, 2000).

Achievement Motivation

Students who report high levels of motivation and demonstrate this motivation through efforts to succeed also exhibit higher grades and test scores, as supported by four studies in this review.

- Achievement motivation was found to contribute meaningfully to school success (as self-reported by students on Attitudes and Behaviors survey) (Scales, Benson, Leffert, & Blyth, 2000).
- In a study of out-of-school time, students that spent 8-15 hours a week engaged in learning activities and knew how to study, plan, and complete projects were more likely to have higher standardized test scores (Clark, 2002).
- Among middle school students, self-regulated motivation was positively correlated with student GPAs (Pajares, 2001).
- Higher GPAs were related to student efforts to understand things, do one’s best, and be a successful student (Wentzel, 1989).

*Other related studies*¹⁴

- In a Search Institute review of the literature, Scales & Leffert (1999) found an additional 7 studies that show an association between achievement motivation and “increased high school completion, increased enrollment in college, increased reading and math achievement test scores, and higher grades (Brooks-Gunn, Guo, & Furstenberg, 1993; Hahn, Leavitt, & Aaron, 1994; Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995; Paulson, Coombs, & Richardson, 1990; Wentzel, 1993; Wilson-Sadberry, Winfield, & Royster, 1991” (p. 121).

Specifically focused on American Indian/Alaska Native students:

- Schools with high rates of successful American Indian/Alaska Native students had high daily attendance, low dropout rates, and a higher percentage of college-bound students (From Strand & Peacock, 2002: Blum & Rinehart, 1997).

¹⁴ See footnote on page 5.

Cultural Awareness

Three articles and two extensive literature reviews provide notable evidence that the inclusion of Native language and culture in the classroom promote academic achievement among American Indian and Alaska Native students. Culturally relevant curriculum and teaching methods, teachers who understand and have a curiosity about their students' cultures, and involvement in Native cultural activities were also found to be influential.

- Culturally relevant curriculum (Yagi, 1985; From Demmert (2001): Brancov, 1994; Little Soldier, 1988; Martens, 1992; McCarty, Wallace, Lynch, & Benally, 1991) and teacher understanding and knowledge of students' cultures (Yagi, 1985) have all been positive correlated with Native student success.
- Inclusion of Native language and culture in the classroom promoted academic success (Reyhner, 1992; From McDowell, Inc. (2001): Lomawaima, 1995; Peacock & Day, 1995; Yazzie, 2000).
- Teaching methodologies that reflect how Native Hawaiian students learn at home resulted in greater student achievement (From Reyhner (1992): Jordan, 1984; Tharp, 1982; Vogt, Jordan, & Tharp, 1987).
- Being well grounded and connected to tribal culture was found to be an influential reason for staying in school (From Strand & Peacock (2002): Bergstrom, Cleary, & Peacock, 2003; Whitbeck, Hoyt, Stubben, & LaFromboise, 2001).

ACTIVITIES

Schools obviously have a great influence on how students spend their time during school hours, but there are also ways they can influence student achievement during non-school hours as well. In our review of the research, we found evidence that students who have regular homework assignments, spend some time reading for pleasure, and are involved in other types of extracurricular activities and programs were also demonstrating higher achievement scores in school.

Homework

Test scores and grades were proven to be higher for students who receive and complete regular homework assignments in six studies reviewed here.

- In a study of out-of-school activities, students produced higher test scores when they had been engaged in 8-15 hours per week of out-of-school learning activities (Clark, 2002).
- Middle school students enrolled in a specific parent-involvement homework program (TIPS) exhibited higher language arts grades (Epstein, Simon, & Salinas, 1997) and higher science grades (VanVoorhis, 2001).
- A study of resilient at-risk high school students found that school engagement behaviors, including effort made with homework assignments, were positively correlated with higher success rates (Finn & Rock, 1997).
- Examination scores were higher in middle schools where teachers regularly gave homework assignments (Grobe & Bishop, 2001).
- Mathematics achievement and overall school attendance were higher in programs that included rigorous classroom work and homework (Phillips, 1997).

*Other related sources*¹⁵

- Scales & Leffert (1999) present 4 additional studies that draw an association between time spent on homework and "higher achievement test scores, grades, or both (Corno, 1996; Keith, Reimers, Fehrmann, Pottebaum, & Aubey, 1986; Leone & Richards, 1989; Thomas, Bol, Warkentin, Wilson, Strage, & Rohwer, 1993)" (p. 123).

Reading for Pleasure

Research on this topic is a bit slim, especially for middle school and high school students. One document we reviewed provided a case study of a reading program in rural Alaska where all members of the community were involved in encouraging students to read. As a result of this effort, achievement test scores were raised (Kleinfeld, 1992).

¹⁵ See footnote on page 5.

Other related sources

- Scales & Leffert (1999) also highlight two studies that associate reading with “increased reading achievement (Lee, Winfield, & Wilson, 1991; Smith, 1990)” and one study that is associated with “increased overall academic achievement (Smith, 1990)” (p. 123).

Youth Programs

Involvement in formal after-school programs, extracurricular activities, and meaningful community activities have all been linked to higher grades and test scores, as supported by six studies we reviewed, and within those five, numerous additional studies are cited as relevant.

- In an evaluative study of formal community schools programs, 73% of those with a learning and achievement focus and were found to have positive influence on students’ school performances (Dryfoos, 2000).
- Eccles & Barber (1999) found that participation in extracurricular activities is a predictive factor in increased GPAs, school attachment, and full-time college enrollment at age 21. However, only volunteerism and church involvement among all students and involvement in performance arts among male students were associated with lower levels of alcohol and drug use.
- California schools with students reporting high levels of involvement in meaningful community activities (in combination with other factors) exhibited higher test score gains over time (Hanson & Austin, 2003).
- In a review of 27 evaluative studies of formal national and local after-school programs, 17 were shown to have positive correlation with increased test scores and/or grades (Harvard Family Research Project, 2003).
- Linking assets to school success (as self-reported by students on the Attitudes and Behaviors survey) found youth programs to be a predictor school success for all demographic groups except African-Americans (Scales, Benson, Leffert, & Blyth, 2000).

Other related sources¹⁶

- Henderson & Mapp (2002) conducted a review of 51 studies regarding the influence of parent and community involvement on student success, including evaluation of formal youth programming. Many of these studies provide evidence that the program promoted academic success.
- Involvement in formal after-school programs has been linked to improved grades (From Miller, 2003: Baker & Witt, 1996; Brooks, 1995; Cardenas, 1992; Carlisi, 1996; Hamilton & Klein, 1998; Schinke, Orlandi, & Cole, 1992).
- “Participation in extracurricular activities has been linked to increases in GPA, school engagement, and educational aspirations” (From Eccles & Barber, 1999; Lamborn, Brown, Mounts, & Steinberg, 1992; Newmann, Wehlage, & Lamborn, 1992; Winne & Walsh, 1980).
- In Scales & Leffert’s (1999) review of the literature, five additional studies are cited as showing an association between youth programs and “increased academic achievement (Hanks & Eckland, 1976; Posner & Vandell, 1994), increased grade-point average among 11th graders (Barber & Eccles, 1997)...and improved protection of students at risk of dropping out of school (Mahoney & Cairns, 1997; Zill, Nord, & Loomis, 1995)” (p. 101).

¹⁶ See footnote on page 5.

HOW SCHOOLS CAN HELP

As we have determined in the previous section, students and schools reap great benefits when the school environment is intentional about building assets. However, rather than thinking of asset building as another program or responsibility added to already overburdened schools, it is actually best to think of it as an integral part of all the current activities and goals of a school. In *Great Places to Learn* (Starkman, Scales, & Roberts, 1999), the following five school strategies are offered as areas of the school system that could be structured with asset building as an intentional focus. In our review of the literature, we found convincing evidence that many of these strategies are also correlated with improved academic achievement.

Curriculum/Instruction

Schools can foster asset development in their consideration of what is taught and how it's taught. Examples of research-supported strategies include: implementing a variety of teaching techniques; having high expectations for students while also providing the support to accomplish them; engaging, activity-based learning techniques; cooperative learning (especially with presence of both group goals and individual accountability for the groups); providing a caring learning environment; using teaching methods that value individual student strengths; grouping students of mixed abilities; giving clear instructions; and creating opportunities for active student participation in discussion and presentation of content. Specific strategies and associations are as follows:

High Expectations

- Schools with higher numbers of students reporting high expectations at school had higher overall scores on standardized tests in California (Hanson & Austin, 2003).
- Caring, well-structured learning environments with high, clear, and fair expectations are related to highly engaged students, and high levels of engagement are associated with higher attendance and test scores (Klem & Connell, 2003).
- A high school program that taught college core curriculum resulted in a higher percentage of students going on to higher education when compared to a control group (California Department of Education, 1990).
- Students who perceive high expectations from their schools as well as the support to achieve them have demonstrated higher achievement than those who report lower expectations and/or the support to accomplish classroom goals (Klem & Connell, 2003).

Cooperative Learning

- Successful cooperative learning has been shown to produce bigger advances in math, science, history, and reading (Lee, Smith, & Croninger, 1996), and has positive effects on students of all achievement levels especially if it includes both group goals and individual accountability (Manning & Lucking, 1991).
- In a review of 52 studies on cooperative learning, 63% reported significantly higher achievement, 13% reported no difference, and only 3 of the studies showed cooperative learning classroom scores as lower than classrooms using traditional methods. Particular attention to both group goals and individual accountability consistently produced positive results (Slavin, 1995).

Teaching Techniques

- Teaching methods that at least partially value individual student strengths (Sternberg, 2001) and inclusion of students' individual interests in the curriculum (Southern Regional Education Board, 2002) are associated with academic success.
- Mixed-ability groupings with clear instructions and structured outlines are effective in increasing achievement for students of all abilities (Barley, Lauer, Arens, Apthorp, Englert, Snow, & Akiba, 2002).
- Schools that incorporated independent study time and mixed-ability classes showed bigger academic advances in math, science, history, and reading (Lee, Smith, & Croninger, 1996).

- A review of effective classroom management techniques includes having an appropriate balance between teacher dominance and student opportunities for cooperation, as well as teacher awareness and attention to high-needs students (Marzano & Marzano, 2003).
- Teachers who use variety of teaching techniques, i.e. analytical, creative, and practical methods in addition to traditional memory/rote, are more likely to see improvements in their students' progress (Sternberg, 2001; Sternberg, Torff, & Grigorenko, 1998).
- Classroom rigor and amount of instruction time has been shown to influence student success (Phillips, 1997).
- Democratic, goal-directed classrooms give students greater opportunities for participation and have been shown to improve student performance (Schaps, 2003).
- Students in smaller class sizes achieved greater academic success (Finn & Rock, 1997).

*Other related sources*¹⁷

- Johnson & Johnson (1989) provide a comprehensive review of the academic benefits of cooperative learning (As cited in Manning & Lucking, 1991).

Specifically focused on American Indian/Alaska Native students:

- Open-ended questioning, student participation in discussions with peers and teachers, and inclusion of Native language and culture all led to increased student responsiveness and articulateness (From Demmert, 2001: McCarty, Wallace, Lynch, & Benally, 1979).
- Attention to the unique learning styles of Native students promotes greater student success. Some of these styles include preferences for understanding the whole concept before digesting pieces of content; visual instead of verbal presentation; the opportunity to observe a learning goal first and then duplicate it; and cooperative learning (Hillberg & Tharp, 2002).
- A study of native Hawaiian students found increased academic achievement when the teaching methodologies incorporated more traditional teaching strategies (From Reyhner, 1992: Jordan, 1984; Tharp, 1982; Vogt, Jordan, & Tharp, 1987).

Demmert (2001) provides evidence that the following classroom strategies are associated with improved school performance among Native students:

- Highly engaging, activity-based learning and cooperative learning (Cleary & Peacock, 1998);
- Informal classroom organization and flexible furniture arrangement (Brancov, 1994; Little Soldier, 1988);
- Providing a “real world” purpose for the assigned school work (Cleary & Peacock, 1998); and
- Group work and cooperative learning (Brancov, 1994; Cleary & Peacock, 1998; Larimore, 1990; Little Soldier, 1988; Swisher, 2000) as well as opportunities for individualized instruction (Malmberg, 1983).

Organization and structure of school building and school day

Strategic decisions about a school's structure and schedule can have an impact on student achievement. Specific examples found in our literature review include: school-wide stress on accomplishment; positive recognition of individual students; flexible student groupings; time structures and activities that allow for personal relationships among students and staff; interdisciplinary team teaching and more common planning time for teachers; effective, trustworthy leadership; established behavior guidelines and consistent consequences; student positions of responsibility within the school; frequent monitoring of instruction and teachers. The Caring School Climate asset is very closely related to this strategy and was discussed earlier in this report. Specific findings include the following:

- Schools with higher numbers of students reporting high levels of caring relationships at school had higher overall scores on standardized tests in California (Hanson & Austin, 2003).
- Middle schools with established behavior guidelines and fewer class disruptions also had higher test scores; high schools with fewer discipline problems also reported higher achievement levels (Grobe & Bishop, 2001).
- “Restructuring” schools (those that incorporate strategies such as students keeping the same homeroom throughout high school, staff collectively solving school problems, and

¹⁷ See footnote on page 5.

- interdisciplinary teaching teams) exhibited higher academic advances than more traditionally organized schools (Lee, Smith, & Croninger, 1996).
- Shared vision, or a clear sense of purpose with buy-in from the school staff and students, is key to successful school organization (United States Department of Education, 2000).
 - Positive disciplinary environments and orderliness enhance student learning (United States Department of Education, 2000).

Other school-wide strategies that have been associated with improved student performance include:

- Flexible student groupings (Miles & Darling-Hammond, 1998);
- Time structures that allow for personal relationships (Miles & Darling-Hammond, 1998);
- More common planning time for teachers (Miles & Darling-Hammond, 1998);
- Longer and more varied blocks of instructional time (Miles & Darling-Hammond, 1998);
- Creative definition of staff roles and workday (Miles & Darling-Hammond, 1998);
- Shared student/staff activities (Schaps, 2003);
- Student positions of responsibility in school (Schaps, 2003); and
- Low student-adult ratios/smaller class sizes (Finn & Rock, 1997).

*Other related sources*¹⁸

- In their literature review, Haynes, Emmons, & Ben-Avie (1997) cite the following sources as evidence that positive school climate correlates with student achievement (Brookover, Beady, Flood, Schwietzer, & Wisenbaker, 1977; Brookover & Lezotte, 1979; Edmonds, 1979; Gottfredson & Gottfredson, 1989; Maduas, Airasian, & Kelleghan, 1980; Rutter 1983; Rutter, Maughan, Mortimore, & Ouston, 1979; Schaps, 2003; Shipman, 1981; Teddlie, Falkowski, Stringfield, Desselle, & Garvue, 1984).

Specifically focused on American Indian/Alaska Native students:

- Strong administrator, vocationally-oriented components, low student-adult ratios, and smaller class sizes have all been associated with improved academic performance among Native students (From Demmert, 2001: Malmberg, 1983).
- School-wide commitment to and promotion of a student reading program raised student achievement scores in the Yukon-Koyukuk school district (Kleinfeld, 1992).

Co-curricular Programs

Schools can be a resource and encouragement for student involvement in before- and after-school activities and programs. In addition to providing the traditional selection of extracurricular programs and activities, schools are finding creative ways of partnering with community youth programs. For example, some schools can provide space for programming, which is a resource many youth programs lack. See “Youth Programs” (above) for a summary of the research that supports the connection between co-curricular programming and academic achievement.

Community Partnerships

Schools with active parent and community involvement foster stronger connections across the community and, consequently, with their students. In the first section of this report, we provided evidence that the involvement of parents and other caring adults has significant influence on student achievement. Some examples of ways schools can foster these connections are to involve parents and community member as volunteers, decision-makers, or in other participatory roles at the school; partner with local youth clubs and recreation programs; or provide opportunities for student involvement in meaningful community activities, such as service-learning projects. The research we reviewed provided the following evidence:

- Community/parent involvement in local schools correlates positively with student achievement (Clark, 1983).
- Schools with higher numbers of students reporting significant participation in meaningful community activities had higher overall scores on standardized tests in California (Hanson & Austin, 2003).

¹⁸ See footnote on page 5.

- An extensive literature review conducted by Henderson & Mapp (2002) highlights numerous studies demonstrating a relationship between student-community interaction and improved school performance.

Specifically focused on American Indian/Alaska Native students:

- Parent/community involvement in school decision-making has positive effects on student achievement among Native students (Demmert, 2001; McDowell Group, Inc., 2001).
- Strand & Peacock (2002) cite several studies conducted with Native students that show the importance of connections to communities in nurturing school performance.

Support Services (i.e. health, counseling, etc.)

While our focus in this review didn't uncover many studies to correlate supportive services with academic achievement, it isn't difficult to imagine how the presence of counseling, health services, and mediation programs could be helpful in building a caring school climate. The literature review focused on American Indian and Alaska Native students conducted by Demmert (2001), highlights associations between school success and the following services:

- Counseling
- Peer tutoring
- Hardship assistance

HELPFUL RESOURCES

For more resources and information on the significant influence asset development has on student achievement, check out the following websites:

Alaska Initiative for Community Engagement:

In addition to the full report of this literature review, find other resources and ideas for supporting students. Look under “resources” for the full report.

<http://www.alaskaice.org>

Search Institute is an independent nonprofit research organization that provides leadership, knowledge, and resources in the area of youth development, most notably through the Developmental Assets framework.

<http://www.search-institute.org>

The Collaborative for Academic, Social, and Emotional Learning (CASEL) is an organization dedicated to providing information and resources on incorporating social and emotional learning as an essential part of every child’s education. <http://www.casel.org>

AEL, Inc. is a nonprofit corporation providing education research, development, professional development, and consulting services in the K-12 arena. Their website includes links to documents from the U.S. Department of Education’s Educational Resources Information Center (ERIC), including a specific grouping of American Indian and Alaska Native documents, and other electronic library resources.

<http://www.ael.org>

IndianEduResearch.net provides a collection of resources in educational research and development focused on American Indian and Alaska Native populations. They also provide the opportunity for searching ERIC.

<http://www.indianeduresearch.net/>

Mid-continent Research for Education and Learning provides a comprehensive approach to educational information and strategies by offering a variety of services. Resources, policy studies, and significant information about school standards are available on their website.

<http://www.mcrel.org>

National Youth Development Information Center, a project of the National Collaboration for Youth, includes numerous resources on a variety of youth development topics, including school success.

<http://www.nydic.org>