Commentary: The Centrality of the Learning Context for Students’ Academic Enabler Skills

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Abstract. According to DiPerna and Elliott (2002), academic competence comprises both academic skills and academic enablers. Academic enablers, which are within student variables, are essential for understanding student achievement; however, missing from this picture is the influence of context on the development and application of students’ academic enabler skills. In this article, a theoretical framework for considering the direct and indirect effects of important contexts (e.g., child, school, family, and peers) on student performance and how these contexts change over time is described. Also, the literature regarding social and emotional influences on student performance is reviewed. Finally, the implications for assessment and intervention practices and directions for future research are discussed.
tively by their learning contexts. The learning context is defined as being composed of critical systems (child, home, school, peer, and community or neighborhood) that affect academic, social, and emotional learning for students in Grades K-12. The learning context is an interwoven structure of circumstances and people that surround the child across systems at a given point in time and over time. Of particular interest is the “affordance value” of this context—or how the learning context facilitates or impedes child adaptation to challenges and demands of schooling. Students’ innate psychological needs to be self-determined, relate to others, and to be competent certainly are represented in the four academic enablers: interpersonal skills, motivation, engagement, and study skills. Similarly, students are, without a doubt, metacognitively, motivationally, and behaviorally active in their own learning (Zimmerman, 1990). And yet, students’ adaptation to schooling depends in part on the degree of support, opportunity to learn, and resources available to the child (Pianta & Walsh, 1996).

The primary assertion of this article is that the concept of academic enablers must be expanded to encompass key student and contextual factors that promote the development and application of academic skills. To support this assertion, theoretical and empirical support for contextual influences on students’ academic competence are described. Also, key implications of these contextual influences for assessment and intervention practices are offered and directions for future research are provided.

The Learning Context as a Social System

Theoretical Underpinnings for Considering Context

The quest for explaining school success, or the lack thereof, for individuals and groups of students has been constant within school psychology. Varied models and researchers have found that many factors influence academic outcomes for students, and in particular factors that represent student characteristics in reciprocal interaction with environmental conditions (Ysseldyke & Christenson, 1993, 2002). Historically, several theoretical perspectives have contributed unique elements to our understanding of student outcomes as a result of reciprocal interaction between the learner and the affordance value of the learning context. In 1962, Vygotsky oriented psychologists to the importance of an interpersonal context and creating optimal environmental conditions for children’s learning. These conditions included teachers providing supports (i.e., scaffolding) and ensuring the appropriate level of difficulty, or the zone of proximal difficulty (i.e., the level at which the student can learn with the aid of the teacher or more knowledgeable peers).

In his model of school learning, Carroll (1963) illustrated for school psychologists that the quality, intensity, and frequency of supportive learning strategies must be considered as students need and experience differential support in classrooms. According to his model, the degree of learning for an individual student is a function of time spent learning (comprising opportunity and perseverance) divided by time needed for learning (comprising aptitude, ability to understand instruction, and quality of instruction). If the quality of instruction is less than optimal for the individual student, he or she may be disadvantaged by instruction that does not provide a good person-environment fit. The extent of this barrier is influenced by the student’s ability to understand instruction. Students with a high ability to understand will be able to overcome difficulties created by a mismatch in instruction. However, students who require additional instructional supports to be engaged and successful on a task will be challenged to the point that their perseverance and motivation to learn will be reduced. For example, if a student needs 2 hours to learn (aptitude, quality of instruction, ability to understand instruction) and the teacher allows 1 hour (opportunity), but the student spends 30 minutes (perseverance), only 25% of optimal learning has occurred (Ysseldyke & Christenson, 1993). If the student’s aptitude is lower, the other variables, according to Carroll, take on much greater sig-
nificance for success in mainstream classrooms. It is well supported that high achieving students can perform adequately with more implicit instruction; however, low achieving students perform best with explicit, teacher-directed instruction (Chall, 2000).

Bandura’s (1978) concept of reciprocal determinism directed school psychologists to consider how students’ learning problems are functionally related to the setting in which they occur. He theorized that behavior is determined by a continuous reciprocal interaction among behavioral, cognitive, and environmental influences. Thus, student performance in the classroom is a function of student characteristics interacting with the nature of instructional tasks (i.e., demands) interacting with what teachers do instructionally. Similarly, student behavior at home is a function of student characteristics interacting with the nature of home tasks (i.e., demands) interacting with what parents do to support learning. The numerous studies correlating teacher/instructional practices or home practices with academic achievement (Christenson, Rounds, & Gorney, 1992; Ysseldyke & Christenson, 1993) reflect the impact of Bandura and substantiate that factors in home and school environments influence academic competence of students.

Bronfenbrenner (1979, 1992) delineated the most detailed articulation of types and levels of systems that influence children’s learning and development. Specifically, he stressed understanding development-in-context by noting the relevance for child outcomes of “immediate settings” and the “larger contexts” in which the immediate settings are embedded. The principal element of his theory is its focus on reciprocal relationships among systems rather than on the properties or practices characteristic of one system. With respect to ecologically oriented research, he asserted, “The principal main effects are likely to be interactions” (1979, p. 38). He also argued that it is the individual’s perception and meaning of a given situation that exerts the most influence on development. His commitment to understanding how contextual influences are perceived or experienced by the person was largely due to his appreciation for variability in the circumstances in which children live and learn. For example, he identified variability in several types of interconnections between the mesosystem of home and school: Multisetting participation where the child participates regularly (or not) across settings (home, school, childcare), intersetting communications where messages are transmitted (or not) to two microsystems for the purpose of providing specific information, and intersetting knowledge where participants in one setting have information or experience (or not) about participants in another setting. With respect to the exosystem, Bronfenbrenner contended that parents’ workplaces, quality of social networks, and availability of community resources were highly influential on family behavior. Finally, macrosystem encompasses the concept of “a cultural repertoire of belief systems” (Bronfenbrenner, 1992, p. 228). To Bronfenbrenner, the belief systems of the significant individuals in a child’s world (e.g., value of school) create a context that influences family goals and practices, and ultimately child behavior and performance. Finally, he introduced the concept of the chronosystem. The simplest chronosystem focuses on the effect of life transitions, consisting of normative (e.g., school entry, puberty, entering the labor force, marriage, retirement) and nonnormative transitions (e.g., death, severe illness in the family, divorce, moving, winning the sweepstakes). Undoubtedly, no theorist has been as influential in helping school psychologists frame the interrelatedness of multiple influences that affect learning outcomes.

Sameroff (1983) cogently argued that a coherent set of principles is required to understand outcomes of schooling, and that it is not sufficient simply to account for the varied ecological influences. In doing so, he has made a critical distinction between systems approaches and general systems theory for children’s development. A systems approach suggests an interactionist perspective in which bits and pieces of behavior cannot be examined in isolation. For example, the importance of the family’s influence on children’s school performance (usually represented by correlations) represents a systems approach. In contrast,
general systems theory provides a framework for organizing the reciprocal influences of the various systems of the developing child. Students, in transaction with others, are active participants in their learning. Emphasis is placed on understanding individual child behavior as part of separate systems (home or school) and in relation to the whole system (home and school). More recent work has focused on the complementary nature of influences across key socializing systems (Christenson & Sheridan, 2001; Pianta & Walsh, 1996).

Based on general systems theory, specific organizational principles govern interactions between the developing child’s systems. Examples of four principles applied to family-school relationships include:

- **Circular causality.** The system is a group of interrelated individuals; thus, change in one individual affects other individuals and the group as a whole. Causality is circular rather than linear because every action is also a reaction (i.e., transaction). School difficulties affect children’s behavior within a family, and conversely family problems influence students’ achievement and/or behavior in school.

- **Nonsummativity.** The system as a whole is greater than the sum of its parts; the whole adds the property of relationship to the parts (i.e., synergism). Coordinating effort among home, school, and community resources achieves a synergistic relationship, and the notion of synergism further underscores that school-family-community together can achieve more than either alone.

- **Equifinality.** According to this principle, the same outcome may result from different antecedents. For example, families whose interactional styles are diverse may have children who are experiencing school success. Simply stated, there is more than one path to the same goal; thus, options for instructional practices and family involvement are not only accepted, but also expected.

- **Multifinality.** This principle suggests that similar initial conditions may lead to dissimilar end states; thus, similar home support for learning strategies may have different effects on children’s completion of homework. Therefore, a standard, uniform prescription for parental assistance with homework may achieve the desired goal for some children and families, and not for others.

Coleman (1987) advanced our conceptualization with his contention that home and school provide different inputs for the socialization process of children. One class of inputs—opportunities, demands, and rewards—comes from schools; the second class of inputs—attitudes, effort, and conception of self—comes from the social environment of the household. Educational outcomes result from the interaction of the qualities that the child brings from home and experiences in school. Schools do make a difference for children; however, they do not have an equal effect on children. According to Coleman, there is greater variation in family resources than school resources for children’s learning. Similarly, some, but not all, children learn attitudes, skills, values, and behaviors at home that prepare them well for the tasks of school (Sloane, 1991). Schools reward, make demands, and provide opportunities for children to learn; however, Coleman viewed families as providing the building blocks that make learning possible (possibly academic enablers). Coleman’s work illustrates the essential role of the family-school relationship and has significant implications for school psychologists to foster motivational, not only academic, support for learning from parents.

In their Contextual-Systems Model, Pianta and Walsh (1996) advanced the work of Bronfenbrenner and Sameroff in two important ways for school psychology practices. First, they identified relationships as essential for fostering children’s adaptation to a successful transition to kindergarten. For example, they wrote, “There is no state of ‘readiness’ that either children or schools can achieve that will guarantee a fit for all children in all schools. Rather the answer lies in where and how children (and families) and schooling come together in a relationship, and in the qual-
ity of that relationship” (p. 4). Quality of relationships, represented in the pattern of family-school interactions over time or the shared meaning that is created for the purpose of supporting children’s learning, helps regulate the children’s learning. The seminal focus on relationships is evident in effective family-school intervention programs (Comer, Haynes, Joyner, & Ben-Avie, 1996; Galloway & Sheridan, 1994).

Second, they have helped denote a clearer understanding of risk for school failure by extending the discussion beyond status characteristics (e.g., poverty) to include the effect of the quality of family-school relationships, or lack thereof, as a primary contributing factor to level of child risk. For example, they opined that children are educated in low-risk circumstances if the child/family and schooling systems are functional; home and school communicate, providing children with congruent messages about their learning. In contrast, high-risk circumstances occur when children derive meanings from home or school that result in conflicting emotions, motivations, or goals.

Referring to locating risk for school failure in child, family, or school as “single-location discourse” (p. 47), Pianta and Walsh (1996) argued that to locate problems in one or even two of the systems in the absence of a focus on transactions and relationships among the systems will simply not advance our knowledge of academic, social, or emotional problems. Rather, risk is distributed across systems. Similarly, resilience is not a property of children, but resides in the interactions, transactions, and relationships among the multiple systems that envelop children. Therefore, child competence is understood in terms of co-action, the dynamic influence of relationships among child, home, school, peer, and neighborhood systems. How these relationships change over time is also significant. Therefore, the kind of question that needs to be included in assessment is: How are resources of the child and the learning context organized to respond to problems or help the child meet developmental demands or demands of assigned tasks in school over time? Their work underscores the critical nature of continuity across socializing systems and the cumulative effect of positive transactions between the child/family and schooling systems for educating children. As such, family-school links should be considered an outcome of the early school transition (Rimm-Kaufman & Pianta, 2000) and of school success across school years (Christenson, 2000), and not considered as only a correlate or antecedent.

Rimm-Kaufman and Pianta (2000) have proposed the Ecological and Dynamic Model of Transition. Rather than focusing on the direct effects of contexts (e.g., family, school) on children’s school performance or on indirect effects from the interactions between student characteristics and these contexts, the dynamic model emphasizes the combined influences of child, direct, and indirect effects and the relationships among these contexts over time. Drawing on this model, we purport that relationships among child characteristics, and family, school, peer, and neighborhood systems as well as subsystems (e.g., teacher-student, parent-child) develop and change over time and settings; collectively the pattern of relationships is a social system that enhances or thwarts students’ learning in elementary and secondary schools. In other words, children learn academic skills and enablers in the context of this dynamic social system. Parent and teacher roles are complementary; they do not need to perform the same task but they need to work on shared, mutual goals for the benefit of student learning.

It is noteworthy that Clark (1990) found that students in Grades K-12 who were low income and high achievers in large urban school districts were involved, on average, 25-30 hours per week in constructive learning activities outside of school hours. The activities involved thinking while completing the task and receiving supportive input and guidance from an adult or peer. Supportive guidance from adults, not just families, was a determining factor for the availability of these activities. Clark (1990) stated, “The attitudes and relationships between youngsters and their parents, relatives, teachers, ministers, coaches, instructors, and tutors can be among the most
important factors in creating an environment that will maximize the chances for success during their school years and throughout their lives” (p. 23). Also, Phelan, Davidson, and Yu (1998) examined how ethnically diverse adolescents make transitions and how personal meaning attached to experiences among home, school, and peer worlds affected their engagement in classrooms and school. They found students have extreme difficulty in making transitions when they experience borders among these contexts. Borders refer to aspects of cultural differences where the values, beliefs, knowledge, skills, and actions of one group are more valued than those of another. Although all students—even those who are academically successful and describe their home, peer, and school contexts as congruent—report psychosocial pressures, those who experience extreme discontinuity among home, peer, and school worlds had the most difficulty in making transitions and were most at-risk for poor school performance and social and emotional problems.

Critical Contextual Influences

What contextual influences enhance learning and development for children and youth? Or, what does it take for a child to develop an identity as a learner? According to Chall (2000), “The processes and characteristics that enhance academic achievement are essentially the same—whether found in the home or in the school” (p. 159). This is an intriguing statement, and yet it is easy to speculate about the similarities. For example, the home predictors of school learning: work habits of the home, academic guidance and support, stimulation to explore and discuss ideas and events, language environment, and academic aspirations and expectations are similar to school factors that enhance achievement (Kellaghan, Sloane, Alvarez, & Bloom, 1993).

Complementary roles of home, school, and community. Based on the theoretical underpinnings described, particularly the notion that student success in school behavior is determined by a continuous reciprocal interaction among student characteristics (behavioral, cognitive) and environmental influences (family and school) and the principle of equifinality, Christenson and Peterson (1998) intended to identify the influence of family, school, and community systems on children’s learning. The available database, however, was primarily cross-sectional and adopted a systems approach or a direct effects model rather than a dynamic effects model (Rimm-Kaufman & Pianta, 2000). The researchers examined over 200 studies of family, school, or community influences on positive indicators of school success, such as improved academic performance, attendance, self-esteem, and motivation to learn; fewer suspensions; and increased classroom participation. Across studies, the indicators were varied and included academic performance (tests, grades, teacher ratings), social competence (ratings of peer affiliation and behavior), and emotional development (ratings of achievement motivation and self-esteem). A major conclusion of this review was that there is evidence for a common set of contextual influences important for learning regardless of the child’s immediate microsystem (i.e., home or school setting). Remarkable similarity in the contextual influences that enhanced student learning emerged as a result of examining studies from family, school, and community literature simultaneously. For example, structure was evident when families established a routine that included priority for schoolwork and the classroom maintained an academic, task-oriented focus. Or evidence existed for opportunity to learn in home and school contexts when students were involved in constructive learning activities after school and the amount of academic learning time during school was high. Christenson and Peterson identified six factors that reflect the complementary nature of family-school-community roles for children’s school success: Standards and Expectations, Structure, Opportunity to Learn, Support, Climate and Relationships, and Modeling (See Table 1).^1

As part of this review, Christenson and Peterson assessed ecological validity of the factors by gathering student perspectives, a primary element of Bronfenbrenner’s work. Teachers nominated students in Grades 4-12 who could be characterized as consistent or inconsistent
Table 1
Facilitator’s of Children’s Performance Across Family, School, and Community

- **Standards and Expectations:** The level of expected performance held by key adults for youth. Student success in school is facilitated when parents and teachers clearly state expectations for student performance, set specific goals and standards for desired behavior and performance, discuss expectations with youth, emphasize children’s effort when completing tasks, and ensure youth understand the consequences for not meeting expectations.

- **Structure:** The overall routine and monitoring provided by key adults for youth. Students’ success in school is facilitated when families and schools provide a consistent pattern of events and age appropriate monitoring and supervision (e.g., authoritative parenting, proactive classroom management). Students perform better in school when they understand their schedule of daily activities, directions for schoolwork, and rules for behavior.

- **Opportunity to Learn:** The variety of learning options and resources available to youth in the home, at school and within the community. Student success in school is facilitated when youth are provided with various tools for learning such as: reading materials, access to clubs and organizations, varied teaching strategies, and time to practice/master new skills. Also, it is enhanced when the key adults in the youth’s life communicate with each other.

- **Support:** The guidance provided by, the communication between, and the interest shown by adults to facilitate student progress in school. Progress is facilitated when adults give frequent verbal support and praise; provide the youth with regular, explicit feedback; talk directly to youth about schoolwork and activities; provide autonomy supportive environments; and teach problem-solving and negotiation skills. It is what adults do on an ongoing basis to enhance school success.

- **Climate/Relationships:** The amount of warmth and friendliness; praise and recognition; and the degree to which the adult-youth relationships are positive and respectful. These relationships are facilitated by cooperative, accepting environments; a nonblaming relationship between home and school; and encouragement, praise, and involvement in the youth’s life from key adults. The degree of continuity of these relationships and interactions, between adults at home and at school, influences the degree of academic achievement of the youth. It is how adults in the home, in the school, and in the community help youth to be learners.

- **Modeling:** How adults demonstrate desired behaviors and commitment/value toward learning and working hard in their daily lives. Student success at school is enhanced when teachers establish an academically demanding classroom that has clearly defined objectives, explicit instructions, and an orderly and efficient environment, and when parent(s) or other adults read, ask questions, discuss the importance/value of education, set long term goals, and are able to intervene and be involved with youth’s school.
learners. Consistent learners were described as working hard at school, taking school seriously, doing one’s level best, and being viewed as a responsible, productive, and competent learner. Students whose behavior reflected their motivation to learn and academic preparedness regardless of their level of academic achievement were of primary interest to the researchers. In contrast, inconsistent learners were characterized as performing inconsistently in school, generally not taking school and assigned activities seriously, and not performing their level best. These students tended to lack a connection with school, and often displayed behavior such as disruptions, tardiness, absenteeism, lack of listening, and not completing assignments. Their behavior was not conducive to being a responsible, productive learner.

One hundred twelve students (N = 112; 70 consistent, 42 inconsistent) from schools in urban, suburban, and rural settings participated in 1 of 14 focus groups that discussed the home and school factors that promoted their learning success. Themes from the focus group interviews revealed that both characterizations of learners experienced all six factors. Consistent and inconsistent learners provided examples and comments, which often represented academic enablers, about what parents and teachers do that helps them be more successful in school. Examples of student comments were:

- “You do better if you know you have someone at school who is cheering you on.”
- “The only thing I look for in a teacher is a teacher who respects me. I mean if they respect me and listen, too.”
- “Teachers should not judge, but encourage…you are afraid to do it because you might get it wrong and people make fun of you.”
- “Expect us to do well, but if we make a mistake or get a bad grade, don’t yell at us, but at the same time, don’t just not care.”
- “Everyday my mom asks me how school went, whether it was the actual school work or about my friend or what happened, if anything interesting happened. She wants me to know she’s interested.”
- “Being supportive, not all students will be as good as others and you should be supportive of everyone. Recognize everyone’s strengths and weaknesses so you support the ones that are not only good or somewhat skilled in the subject, but also the ones that need a little help.”
- “Try to stay in their life, don’t send them off to school and have to work all day. Sometimes you have to, but try to make sure you give them attention they need, and then they don’t have to get it during class.”
- “Teachers need to make it comfortable to ask for help.”

Also, students responded on a 4-point scale, where 1 = Not Important and 4 = Very Important, to two questions: How important is it to your success in school that you have each of the following factors from your parents/home? From your teacher/school? For each factor across home and school, consistent learners gave higher ratings of importance than inconsistent learners. Mean responses for consistent learners ranged from 3.1 (structure) to 3.8 (support) for home factors and 3.4 (structure) to 3.8 (support) for school factors, whereas the range for inconsistent learners was 2.9 (structure) to 3.4 (support, modeling) for home factors and 2.9 (standards and expectations) to 3.3 (opportunity) for school factors. For the home factors, differences between the two types of learners were most apparent in their ratings of importance for opportunity (3.7 vs. 3.2) and climate/relationships (3.7 vs. 3.2). In contrast, for the school factors, differences between the two types of learners were most apparent in their ratings of importance for standards and expectations (3.5 vs. 2.9) and climate/relationships (3.7 vs. 3.1). It was apparent in the focus groups and in responses to these questions that the home and school experiences described by consistent learners were more frequent, systematic, and clearly more evident across grade levels than were those described by inconsistent learners, suggesting the cumulative effect of family and school learning environments for students’ academic competence.
In sum, Christenson and Peterson concluded that the factors suggest conditions that increase the likelihood that students will be more successful in school. Because there are many ways for these factors to be reinforced at home, in school, and within the community (i.e., equifinality), there is not one prescription for helping children. Rather, the critical variables are the degree to which children’s family and school systems are learning environments, and complementary roles, not symmetrical roles, are created between families and schools.

**Social and emotional influences.** Although Christenson and Peterson’s (1998) review did not reveal the mediating role of social and emotional factors, which are academic enablers, on academic performance, the correlations suggest that social (e.g., teacher/peer/family support) and emotional (e.g., motivation, belonging) variables affect academic competence. What appears to be missing from DiPerna and Elliott’s (2002) model is (a) the role of belonging or identification with school as an enabler for students’ academic success, and (b) the influence of family, school, and peer contexts on social and emotional variables related to academic competence.

A variety of terms, such as “relatedness,” “membership,” and “sense of community,” have been used to describe the psychological experience of belonging and its association with school outcomes (Osterman, 2000). Regardless of the terminology, definitions generally refer to “students’ sense of being accepted, valued, included, and encouraged by others (teachers and peers) in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class” (Goodenow, 1993a, p. 25). Students who feel connected to their families and schools are less likely to engage in high-risk behavior such as substance abuse, sexual activity, and violence, and show less emotional distress (Resnick et al., 1997). In addition, others have found a negative relationship between belonging with absences and tardies (Finn, 1993; Goodenow, 1993a) and dropout (Yazejian, 1999). In her review of the belonging literature, Osterman (2000) concluded that across studies, feelings of belonging at school have been associated with positive attitudes toward school, engagement, participation in activities, and personal investment in learning.

Motivational support for learning, often underemphasized, is important for academic achievement. For example, research underscores the critical nature of parents’ motivational support for children’s learning, particularly the subtle messages parents (and teachers) convey about children’s abilities to learn and master new skills. In a study of parents’ roles for low income, ethnically diverse, successful fifth and sixth graders’ attributions for success and failure in math, Bempechat, Graham, and Jimenez (1999) found poor and minority parents are involved in their children’s education, and high achievers, regardless of ethnic background, credited success to their innate ability and effort, and tended not to blame failure on lack of ability. She also found that students who received more motivational support for learning (i.e., encouragement; messages about importance of effort and value of education; help regulating their time to complete schoolwork; and discussion of the relation among effort, schooling, and future goals) performed the best academically. In fact, students who received more parent-initiated academic support for learning performed less well in math, presumably because parents were placed in a reactive position, getting involved as a reaction to low grades. Her findings are corroborated by Finn (1993) who found that disengagement (merely passing or unsuccessful in school) was associated with fewer parental discussions about school, increased monitoring of homework, and fewer academic resources like dictionaries and books at home for ethnically diverse eighth-grade students with at least one of three risk factors (minority status, belonging to a low SES family, living in a home where a language other than English was primarily spoken). Engagement (successfully passing) was associated with the opposite family characteristics, namely, more numerous discussions about school, less monitoring of homework, and greater academic resources in the home.

Although it is probably not surprising to any educator that children’s relationships with
Contextual Influences

their parents, the home environment, and parenting practices affect the school performance of children, aspects of the school environment, and the relationships that students establish with teachers and peers are also associated with important student outcomes. Schools with committed faculty, orderly environments, and an emphasis on academics have been associated with lower rates of absenteeism and dropping out (Bryk & Thum, 1989). Furthermore, rigid school policies, harsh punishments, and perceptions of “over-regulation” are related to poorer engagement and achievement (Barber & Olsen, 1997). In terms of teacher-student relationships, the data indicate that from preschool through adolescence, supportive relationships between teachers and students promote student engagement, positive attitudes toward school, belonging, motivation, and achievement (Barber & Olson, 1997; Birch & Ladd, 1997; Connell, Halpern-Felsher, Clifford, Crichlow, & Usinger, 1995; Hamre & Pianta, 2001; Wentzel, 1997). Finally, the goal structure of the classroom and school affect the willingness of students to seek help when they need it; their use of self-handicapping strategies; and feelings of academic self-efficacy, motivation, and achievement (Ryan, Gheen, & Midgley, 1998; Urdan, Midgley, & Anderman, 1998).

Relationships between students and their peers are an important dimension in understanding student achievement, belonging, and engagement (see Wentzel & Watkins, 2002). In adolescence, peers highly influence students’ day-to-day behavior in school, including activities such as time spent on homework and enjoyment of school (Steinberg, Dornbusch, & Brown, 1992). In addition, having friends at school supports involvement and engagement in school-related activities (Berndt & Keefe, 1995) and is associated with feelings of belonging at school (Goodenow, 1993b; Isakson & Jarvis, 1999). Kurdek and Sinclair (2000) found that the average level of friends’ academic performance accounted for significant increases in the variance of teachers’ ratings of end-of-year verbal and math skills for individual students. Also, children’s peer groups tend to have similar levels of motivation to learn (Kindermann, 1993; Sage & Kindermann, 1999).

Perhaps even more strongly predictive of school outcomes are negative aspects of relationships with peers. For example in a longitudinal study, Guay, Boivin, and Hodges (1999) found that the greater the children’s perceptions of loneliness and dissatisfaction, the more they experienced peer rejection. In turn, perceptions of loneliness negatively affected academic competence, which led to a decrease in academic achievement over time. Also, participation in the classroom is directly linked to academic achievement; participation is negatively affected by rejection from peers (Ladd, Birch, & Buhs, 1999). Similarly, victimization from peers predicts poor psychological adjustment, which compromises school outcomes (Juvonen, Nishina, & Graham, 2000) and has been linked to negative attitudes about school (Kochenderfer & Ladd, 1996). Finally, there is evidence that students who eventually drop out associate with like-minded students, those who do not feel part of the social world of school or value educational success (Hymel, Comfort, Schonert-Reichl, & McDougall, 1996).

**Implications for Assessment and Intervention**

As a nation, we are focused on raising the level of academic achievement in our schools. The value of the concept of academic enablers is the recognition that academic success encompasses more than ability. However, it must also be acknowledged that academic competence, including academic enablers, is influenced by the contexts of home, peers, and school and the relationships and emotional variables embedded within those contexts. Currently, many of our assessment practices and interventions fail to address these variables and contexts that are an integral part of student success.

Assessment should be more than a process used to qualify a student for services; rather, a good assessment will lead to interventions that are tailored for each child. Assessment and intervention practices should be
expanded to include broader contextual influences and student perspectives of these contexts and learning (e.g., belonging, motivation, relationships). In a related vein, a greater emphasis should be placed on the assessment of alterable variables associated with student performance. Expanding our focus to include relevant and alterable contextual variables will lead to interventions that are individualized and more likely to effect positive change. Based on the review of contextual influences and academic competence, four implications are offered for assessment and intervention practices.

**Many Variables Related to Academic Performance Are not Fixed**

Assessment practices must include consideration of student performance in different contexts and over time. Although academic enablers are an essential piece of the achievement puzzle, assessing a student’s academic enabler skills at a single point in time is not sufficient because family, school, and peer contexts affect not only the acquisition of these skills but also when students decide to use them. For example, in a study of classroom goal structure and avoidance of help seeking, Ryan et al. (1998) found that perceptions of task-focused classroom goal structures were associated with lower levels of help avoidance and conversely, there was increased avoidance of help seeking in classrooms with relative-ability goal structures. Furthermore, in classrooms where teachers reported concern for social and emotional nurturance, students with low academic self-efficacy were more likely to seek the teacher’s help when struggling academically. In this case, context is an important determinant of whether students seek academic help when needed. In addition, it seems very likely that aspects of academic competence, such as study skills or motivation to learn, are affected by variables specific to a particular context, such as the student’s liking and knowledge of the subject, relationships with teachers and peers, and feelings of belonging, and may change with the student’s experiences in and out of school.

**The Home-School Relationship is Important for Student Success**

The degree of continuity in messages between home and school to the student about such things as the value of school and learning, use of time, and persistence in the face of challenging tasks must be considered. Over a decade ago, Hess and Holloway (1984) concluded that consensus between home and school about the goals of education was essential to counter information from competing sources, such as television and peers, and that discontinuities between families and schools compromise the effectiveness of either parents or educators as socializing agents. Furthermore, Hansen (1986) found the continuity between home and school, not the classroom type, was the critical factor for elementary students’ math gains. Also, there is evidence that gains in student performance are greater when mesosystemic intervention (home and school), in contrast to microsystemic intervention (classroom or parent only), is used. For example, research on conjoint behavioral consultation has found that interactions involving parents, teachers, and school psychologists in joint problem solving are effective with academic, social, and behavioral concerns (Sheridan, 1997).

Bempechat et al. (1999) recommended strengthening home-school partnerships by developing shared understanding of messages about the process of learning. Her data support the need to develop a common language about conditions that promote students’ school performance, and a need to encourage children’s persistence and performance in the face of difficulty and challenge. Her message about learning is clear and straightforward: It is a process that takes time, is not always interesting, and is one in which mistakes are both inevitable and invaluable. Education and learning must be a top priority, and to do so, messages from parents and teachers must stress the power of diligence, practice, persistence in the face of challenge, and ability to delay gratification. Supporting these findings, Floyd (1997) identified three protective mechanisms for high achieving African American 12th graders from impoverished backgrounds: Supportive home
environments, involvement with concerned educators, and development of perseverance (willingness to work hard in the face of barriers) and optimism (belief that academic efforts would pay off).

It is Important to Assess Opportunity and Support for Learning In and Out of School

The opportunity and support for learning a child receives cannot be overlooked. Educators may have assumed that students have academic enabler skills, forgetting to teach or foster the skills directly when not present. The value of explicit instruction of these skills for academic performance is yet to be demonstrated.

How students spend time outside of school and during the summer are important determinants of their academic success (Alexander, Entwisle, & Olson, 2001), as is the support for learning they receive at school (Carroll, 1963) and at home (Sloane, 1991). In terms of support for learning at home, it is important to consider both the academic support and motivational support present in students’ lives. Academic support refers broadly to the ways in which parents foster their children’s intellectual and cognitive development; it is what parents do that is directly related to their children’s experiences in school. Conversely, motivational support refers to the ways in which parents cultivate the development of attitudes and approaches to learning that are essential for student success. Across school years and during the summer months, parents play an important role in their children’s learning through the activities and guidance they provide. In addition, the emotional support parents provide their children, particularly the things parents do to help their children feel competent, capable, and important, are critical in setting the stage not only for children’s school performance, but in all of life.

Many variables, such as attendance, amount of television watching, time spent learning outside of school, instructional match, and the availability of reading materials are particularly amenable to intervention. For assessment, it may be helpful to consider the alterable variables in Carroll’s (1963) model of school learning, such as the time a student spends learning (comprising opportunity and perseverance) and the time he or she needs to learn (understanding instruction, quality of instruction); the goodness of fit between child characteristics and the characteristics of the learning environments; and the extent to which the standards and expectations, structure, opportunity to learn, and modeling are present and consistent across the contexts of home and school (see Table 1; Christenson & Peterson, 1998).

Although not well researched, a student’s instructional history may provide useful information for intervention planning and delivery. Questions that may be helpful are: Is there a mismatch in instruction for the student? When in the student’s school experiences was there a good match in instruction and what was that like? What interventions have been tried and what was the outcome? Does the student’s attitude, in-class behavior, motivation, or use of study skills vary from subject to subject or from teacher to teacher? Under what conditions does the student try the hardest? Are there holes or missing pieces in the student’s education because of attendance problems, changing schools, or deviation from the intended curriculum?

Social and Emotional Variables Embedded in Family, School, and Peer Contexts are Vital Aspects of Student Performance

Students’ experiences at school and home; perceptions of the learning environment; and relationships with parents, teachers, and peers, are often unnoticed in the assessment process, and yet, these variables are associated with academic outcomes and represent the affordance value of the learning context. Of particular relevance for this article is Deci’s (1992) notion that interpersonal relationships that provide students with a sense of belonging may be powerful motivators of their interest in school. For example, students’ feelings of belonging at school are negatively related to absences and tardies (Finn, 1993;
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Goodenow, 1993a) and dropping out (Yazejian, 1999), and are associated with positive attitudes towards school, engagement, participation, and investment in learning (Osterman, 2000). Furthermore, positive relationships with teachers and peers promote feelings of belonging as well as student engagement, motivation, and achievement. Unfortunately, many interventions aimed at improving academic achievement fail to address key social and emotional variables associated with student success. To improve student achievement, educators must do a better job addressing the affective and social needs of students.

The construct of engagement is illustrative of this point. For example, academic engagement, often measured as time on task during observation, is only one essential aspect. Consider the value of identifying other aspects of engagement for intervention planning, including cognitive engagement (i.e., self-regulated learning, metacognitive strategies), behavioral engagement (i.e., attendance, participation in class and extracurricular activities), and psychological engagement (i.e., identification or sense of belonging).

The recommendations of Phelan and her colleagues (1998) underscore enhancing family-school-peer relationships to address student engagement with learning. Their identification of psychosocial pressures experienced by adolescents, even those who are performing well academically, emphasizes the need to view students’ schooling holistically. Fortunately, there are programs for promoting social and emotional learning in classrooms (Elias et al., 1997) that can address the psychosocial pressures identified by adolescents in this study (e.g., fear of speaking in classrooms because of classmates’ prejudices, attending college feels like devaluation of their cultural/ethnic identity, little cultural capital in homes resulting in limited comprehension of school practices and access to information, vulnerability to family circumstances that divert their attention from school, and peer groups devaluing learning). Also, Rich’s (1998) Megaskills, which underscores the integral role of academic enablers for academic and life success, provides parents with excellent suggestions for teaching and reinforcing these skills in homes in direct, efficient ways.

**Future Directions and Conclusions**

Despite four decades of theoretical work regarding the importance of interpersonal contexts, support for learning across systems, and interactions among systems, the vast majority of research has focused on the direct effects of one context (e.g., what the home does to enhance academic achievement) on student performance. Rather than determinants of student performance, these contextual influences are best viewed as mediators and moderators of students’ success. At this time, the relative importance of the timing, continuity, and cumulative effects of experiences for students’ school performance is unknown, as are the specific processes and mechanisms through which context shapes learning. In the future, researchers must move beyond the mere identification of contextual influences that affect children’s learning (i.e., determining whether something is a family, peer, or school influence) to understanding the reciprocal interaction of multiple influences over time for children’s school success and design interventions accordingly.

Elliott and DiPerna’s (2002) conceptualization of academic competence as comprising academic skills and academic enablers is a useful contribution to describing student performance. However, it should be recognized that the development and application of academic enablers cannot be separated from the social systems in which children are embedded. As we strive to understand and improve student performance, we must consider the opportunity and support for learning that children receive, the relationships among systems of family, school, and peers, and how these systems interact and change over time. In addition, students’ own attitudes and perceptions of the learning environment, though often overlooked, are vital for understanding student performance, particularly regarding their feelings of self-efficacy and competence (“I can do it”), their motivation (“I want to do it”), and their sense of responsibility for learning (“I will do it”).
Footnotes

1 Readers are referred to Christenson and Peterson (1998) or Christenson (2000) for original citations.
2 The purpose of these ratings was not to examine significant differences between the groups but rather to check for ecological validity of the six factors identified in the literature review.
3 Thank you to the anonymous reviewer who made this point.

References


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