School Engagement

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Paper presented at the Indicators of Positive Development Conference,

Child Trends, March 11th-13th

Introduction

There is a growing interest in the construct of engagement. One reason for the interest in engagement is that it seen as antidote to low achievement, high levels of student boredom and disaffection, and the high dropout rates in urban areas. Another reason for the interest in engagement is that it is presumed to be malleable and responsive to variations in the environment. In our review of the literature, we found that there are three types of engagement. Behavioral engagement draws on the idea of participation including involvement in academic, social, or extracurricular activities; it is considered crucial for achieving positive academic outcomes and preventing dropping out (Connell, 1990; Finn, 1989). Emotional engagement draws on the idea of appeal. It includes positive and negative reactions to teachers, classmates, academics, or school, and is presumed to create ties to the institution and influence willingness to do the work (Connell, 1990; Finn, 1989). Finally, cognitive engagement draws on the idea of investment; it includes being thoughtful, willing to exert the necessary effort for comprehension of complex ideas and mastery of difficult skills (Corno & Mandinach, 1983; Newmann, Wehlage, & Lamborn, 1992).

This paper has several purposes. First, we present research on the relation between engagement and school related outcomes. Second, we describe the three types of engagement in greater detail. Third, we review common measures of engagement. Finally, we present analyses of survey and interview measures of behavioral, emotional, and cognitive engagement that are based on research conducted with inner city elementary school children in conjunction with MacArthur Network for Successful Pathways Through Middle Childhood.

Linking Engagement to Achievement

Most of the research has examined the relation between behavioral engagement and achievement. Several studies have demonstrated a positive correlation between behavioral engagement and achievement-related outcomes for elementary and high school students (Connell, Spencer & Aber, 1994; Marks, 2000; Newmann et al., 1992; Skinner, Wellborn, & Connell, 1990). Other studies have demonstrated a relation between discipline problems, or behavioral disengagement, and lower school performance across grade levels (Cairns & Cairns, 1994; Finn & Rock, 1997). Although much of the research in this field has been cross-sectional, longitudinal studies show that early problems with behavioral engagement have long-lasting impacts on achievement. The Beginning School Study (BSS) examined the relation between teachers' ratings of children's behavior and interest in the early grades and later school performance (Alexander, Entwisle, & Dauber, 1993; Alexander, Entwisle, & Horsey, 1997). Teachers' ratings in the first grade were related to higher achievement scores and grades over the first four years.

The strength of the correlation between behavioral engagement and achievement varies across studies. One likely reason for this variation is differences in measures of achievement, including self-reports of grades, teachers' grades, standardized achievement tests, and tests administered by the school. The relation might be overestimated in the case of grades, as teachers often take behaviors that indicate effort into account when assigning grades. Additionally, the association might be overestimated in the case of tests. These tests often assess memory and low-level skills, where simply doing the work and paying attention (indicators of behavioral engagement) may be sufficient for success. In contrast, behavioral engagement may not be a very good predictor of assessments that tap deep level understanding of content,

problem solving or critical thinking. Another possible reason is the variation in the age and types of students studied, which range from those at risk for disengagement to average and gifted students. The strongest relations are between teachers' ratings of behavioral engagement and achievement in the early elementary school years. There also is a great deal of variation in samples studied, which include both under-performing and under-resourced schools and well functioning schools with high academic rigor.

There has been less work on the relation between emotional engagement and achievement as compared to the work on behavioral engagement. Some studies have demonstrated a correlation between a combined measure of emotional and behavioral engagement and achievement (Connell et al., 1994; Skinner et al., 1990). Further, Voelkl (1997) documented that emotional engagement was significantly correlated with achievement test scores in fourth and seventh grade for white students, but not for African-American students.

In contrast, a considerable amount of research has documented the relation between cognitive engagement and achievement. Achievement benefits have been found when students are rated as going beyond requirements such as doing more work than is required or initiating discussions with the teacher about school subjects, indicators of cognitive engagement (Fincham, Hokoda, & Sanders, 1989; McKinney, Mason, Pekerson, & Clifford, 1975). Other studies have demonstrated the achievement benefits of metacognitive and learning strategy use. Children who use metacognitive strategies, such as regulating their attention and effort, and learning strategies, such as relating new information to existing knowledge, and actively monitoring their comprehension do better on various indicators of academic achievement (Zimmerman & Schunk, 2001).

Linking Engagement to Dropping Out

A variety of studies show positive relationships between the three types of engagement and dropping out. The Beginning School Study provides the most extensive research on the longitudinal consequences of early school behaviors on the decision to dropout (Alexander et al., 1997; Ensminger & Slusarcick, 1992; Entwisle & Alexander, 1993). Children's behavioral engagement and academic adjustment in the first grade were related to the decision to dropout of high school (Alexander et al., 1997). Other studies illustrate the long-term consequences of negative school-related experiences and early school failure. Dropouts are more likely than other students to have poor attendance, disruptive behaviors, and to exhibit early school failure (Barrington & Hendricks, 1989; Cairns, Cairns & Neckerman, 1989; Roderick & Camburn, 1999). There is a relation between low behavioral engagement and cutting class, skipping school, suspension and retention (Connell et al., 1994; Connell et al., 1995).

Students' emotional engagement also is related to the decision to dropout. Several scholars suggest that alienation, a feeling of estrangement or social isolation, contributes to the dropout problem (Elliot & Voss, 1974; Finn, 1989; Newmann, 1981). Other studies have compared students who dropout of school to those who remain in school; students who dropout are more likely to have social difficulties and negative attitudes towards school (Cairns & Cairns, 1994; Ekstrom, Goertz, Pollack, & Rock, 1986; Wehlage & Rutter, 1986).

Definitions and Design

In this section, we review the definitions of behavioral, emotional, and cognition engagement. Behavioral engagement has been defined in several ways. Some scholars focus on positive conduct, such as following the rules, adhering to classroom norms, and the absence of disruptive behaviors such as skipping school or getting in trouble (Finn, Pannozzo, & Voelkl,

1995; Finn & Rock, 1997). Other definitions focus on participation in classroom learning and academic tasks, and include behaviors such as persistence, effort, attention, and asking questions (Birch & Ladd, 1997; Finn, 1989; Skinner & Belmont, 1993). Finally, others focus on participation in school-related activities such as athletics or school governance (Finn, 1989; Finn et al., 1995).

Definitions of emotional engagement include students' positive and negative affective reactions in the classroom (Connell & Wellborn, 1991; Skinner & Belmont, 1993) and students' emotional reactions to the school and the teacher (Lee & Smith, 1995; Stipek, 2002). Other scholars conceptualize emotional engagement as identification with the school, which includes belonging, or a feeling of being important to the school, and valuing, or an appreciation of success in school-related outcomes (Finn, 1989; Voelkl, 1997).

Work on cognitive engagement comes from literatures on school engagement and learning and instruction. Definitions from the school engagement literature conceptualize cognitive engagement in terms of a psychological investment in learning, a desire to go beyond the requirements of school, and a preference for challenge (Connell & Wellborn, 1991; Newmann et al., 1992; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Definitions from the learning literature view cognitive engagement in terms of being strategic or self-regulating (Corno & Mandinach, 1983; Meece et al., 1988).

We noted several strengths and limitations of current conceptualizations of behavioral, emotional, and cognitive engagement. First, definitions of engagement encompass a wide variety of constructs that can help explain how children behave, feel and think in school. For example, behavioral engagement includes doing work and following the rules; emotional engagement includes interest, value, and emotions, and cognitive engagement includes

motivation, effort, and strategy use. Second, we noted overlap in the definitions across different types of engagement. For example, effort is included in definitions of behavioral and cognitive engagement and no distinction is made in effort that reflects a psychological investment in learning and effort that merely demonstrates compliance with the requirements of school. Third, these three types of engagement overlap in many ways with constructs that have been previously studied. The literature on classroom participation, on-task behavior, and student conduct (Finn, 1989; Karweit, 1989; Peterson, Swing, Stark, & Wass, 1984) is similar to the work on behavioral engagement. Further, the research on identification and belonging (Finn, 1989; Goodenow, 1993; Osterman, 2000), interest and values (Eccles et al., 1983), and student attitudes (Epstein & McPartland, 1976; Yamato, Thomas, & Karn, 1969) is similar to the conceptualizations of emotional engagement. Finally, the research on metacognition and self-regulation overlaps with cognitive engagement (Pintrich & De Groot, 1990; Zimmerman, 1990).

Many studies of engagement include one or two types but rarely all three components (i.e., behavior, emotional, and cognitive engagement) or deal with engagement as a multifaceted construct (see Fredricks, Blumenfeld, & Paris, 2003). Examining the components of engagement separately dichotomizes students' behavior, emotion, and cognition, whereas in reality these factors are dynamically embedded within a single individual and are not isolated processes. Although there are robust bodies of work on each of the components separately, considering engagement as a multi-dimensional construct provides a rationale for examining antecedents and consequences of behavior, emotion, and cognition simultaneously and dynamically. Some scholars have proposed moving towards a more holistic conceptualization of engagement that integrates all components. For example, Guthrie & Wigfield (2000) developed a model of "engaged reading" that includes aspects of emotional, cognitive and behavioral engagement.

Common Measures

Behavioral engagement most commonly has been assessed through teacher and student self-report questionnaires and observational methods; emotional engagement has been measured through student self-report surveys, and cognitive engagement has been measured using self-report questionnaires of strategy use, self-regulation, and classroom observations. In addition, parent surveys have been used to assess general measures of school engagement. In the next section we provide a brief overview of some of the most common survey measures of behavioral and emotional engagement. When information is available, we provide background on the items, samples, and psychometric properties.

A few measures conceptualize cognitive engagement as a psychological investment in learning. One example is Connell and Wellborn (1991) measures of cognitive engagement, which include items about flexible problem solving, preference for hard work, independent work styles, and ways of coping with perceived failure. There are several measures of students' strategy use by scholars who use either the term cognitive engagement, the term self-regulation, or both interchangeably. Since there is a presentation by Pintrich on self-regulation, we do not review the most common measures of cognitive engagement in this section.

Rochester school assessment package. The most common measure of behavioral and emotional engagement is the Rochester School Assessment Package (Wellborn & Connell, 1987). There is a student, teacher, and parent version of this survey. The measures of behavioral engagement include items about effort, attention, classroom participation, and initiative. Sample items from the behavioral engagement scale for the student version include, "The first time my teacher talks about a new topic I listen carefully" and "When I am in class, I just act like I am working". Sample items from the teacher version of the behavioral engagement scale include,

"When in class, the student participates in class discussions" and "When in class this student just acts like he/she is working". The emotional engagement scale includes items about emotional reaction in the classroom including: bored, worried, sad, bad, angry, interested, relaxed and happy. For these questions, children were asked to rate the extent to which they felt different emotions in school using 3 stems: ("When we start something new in class, I feel ", "When I am in class I feel", and "When I am working in class, I feel".)

The teacher and student version of the emotional and behavioral scales have strong reliability ($\propto$ = .79 - .86). The RAPS have been primarily used in a rural and suburban district in middle to lower class community with a small minority population (i.e., Connell & Wellborn, 1991; Patrick, Skinner, & Connell, 1993; Skinner & Belmont, 1993; Skinner, Wellborn, & Connell, 1990; Skinner, Zimmer-Gembeck, & Connell, 1998). In addition, there are a few studies that have used this measure in urban middle school samples (Connell, Spencer, & Aber, 1994; Connell, Halpern-Felsher, Clifford, Crichlow, & Usinger, 1995).

These items have been used to validate the self-system model (Connell, 1990). This model asserts that behavioral and emotional engagement will be higher in social contexts where students' needs for relatedness, autonomy, and competence are met. Engagement is assumed to be higher in classrooms in which: (1) teachers create a caring and supportive environment that meets students' needs for relatedness, (2) children are given choice and are not determined by external threats, so they feel autonomous and (3) children feel like they know what it takes to do well and can achieve success, so they feel competent. Connell and his colleagues have provided evidence to support the proposed links between individual needs and engagement, though the research is stronger for competence and relatedness than for autonomy (see Connell, 1990; Connell & Wellborn, 1991; Patrick et al., 1993; Skinner & Belmont, 1993; Skinner et al., 1990).

Several of the studies are based on research with one sample. These results need to be replicated with more diverse samples and developmental levels in order to test the validity of the measures and model.

Teacher ratings scale of school adjustment. Items from the Teacher Rating Scale of School Adjustment (TRSSA) have been used to assess teachers' perceptions of young children's behavioral and emotional engagement in kindergarten and first grade (Birch & Ladd, 1997; Ladd, Birch, & Buhs, 1999; Valeski & Stipek, 2001). This measure includes four subscales: school liking, school avoidance, cooperative participation, and self-directedness. The school liking scale assesses aspects of emotional engagement. The cooperative participation and self-directed scales assess aspects of behavioral engagement. The cooperative participation scale assesses the degree to which children accept the teachers' authority and comply with classroom rules and responsibilities (e.g., "follows teachers directions") and the self-directedness scale reflects the extent to which children display independent and self-directed behavior in the classroom (e.g., "seeks challenge"). These scales have strong psychometric properties (α = .74 - .91). This measure has been used with teachers of kindergarten and first grade students living in low-income urban neighborhoods and three communities that include both urban and rural sites. Scores on these measures of behavioral participation are related to achievement test scores and measures of emotional adjustment including school avoidance, liking, and loneliness (Buhs & Ladd, 2001; Ladd, Buhs, & Seid, 2000). Further research is necessary to confirm whether the relation between behavioral participation and academic and emotional adjustment hold across different developmental levels.

National Educational Longitudinal Study (NELS). Other studies have used items in the U.S. Department of Education National Educational Longitudinal Study (NELS) to measure

engagement (Finn, 1993; Finn & Rock, 1997; Lee & Smith, 1993; 1995). NELS is a large-scale nationally representative longitudinal study of the educational status of students in eight through twelfth grades (n = approximately 24, 000 students). The study has a random sample of high school students from all regions of the United States including four racial-ethnic groups: Asian or Pacific Islander, Hispanic, Black, and White. This dataset includes student survey information, achievement test data, parent surveys, and school administrator surveys.

Researchers have assessed aspects of emotional and behavioral engagement by selecting different items from NELS. Examples of items include measures of affect, value of school, adherence to classroom rules, getting in trouble, and level of participation (Lee & Smith, 1993; 1995). For example, Finn and his colleagues (Finn, 1993; Finn & Rock, 1997) created several scales to assess different types of behavior including students' basic compliance and noncompliance with the requirements of school and the classroom and students' in school and out of school initiative. Using the student survey data, Finn created several scales of behavioral engagement including: (1) attend (how often the student missed school, was late to school, and cut class), (2) trouble (how often the student got into trouble for not following rules or parents were contacted about a behavioral problem), and (3) prepare (how often the student arrived at school prepared for classes, with pencil and paper, with needed books, and completed homework). The NELS dataset also has measures of behavioral engagement that reflect the amount of time on which the student participates in academic and non-academic related activities that are beyond the regular school hours. Sample items include time on homework, extracurricular activities, discussing academic issues with school counselor, and discussing academic issues with adults other than parents.

In addition to measures of behavioral engagement, NELS includes measures of emotional engagement. Finn (1993) selected items from the NELS dataset to measure emotional engagement, including items about students' feelings of belonging in the school and the extent to which students value school subjects as being important in his/her future years. Sample items in the belongingness scale include "the only time I get attention in school is when I cause trouble" and "school is one of my favorite places to be"; sample items in the value scale include "school is more important than people think" and "I can get a good job even if my grades are bad". The behavioral and emotional engagement scales correlate in expected ways with achievement measures, behavioral problems, and dropping out (Finn, 1993; Finn & Rock, 1997). Since researchers have selected different items from NELS as measures of behavioral and emotional engagement, there are questions about the validity of these scales and the consistency of the relationships between behavioral and emotional engagement and school related outcomes.

National survey of American's families (NSAF). Although most of the measures of engagement are child and teacher measures, the National Survey of American's Families (NSAF) is the first large scale survey study to include parent telephone measures of school engagement. The National Survey of American's Families is part of a larger project at the Urban Institute to analyze the devolution of responsibility for social programs from the federal to state governments. The parent scale of school engagement has also been incorporated in the 1999 Survey of Program Dynamics (SPD) and the five-year follow-up of the national Evaluation of Welfare-to-Work Strategies (Ehlre & Moore, 1997). The parent measure of school engagement was adapted from the parent version of the Rochester School Assessment Package (Wellborn & Connell, 1987). The school engagement scale includes four questions in which parents were asked about how well each of the statements described their child: (1) did schoolwork only when

they were forced to, (2) did just enough schoolwork to get by, (3) did homework, and (4) and cared about doing well in school (Ehrle & Moore, 1999).

The parent school engagement scale had strong reliability ($\alpha = .76$) and adequate variation around the mean. Initial analyses of this scale demonstrated strong validity (Ehrle & Moore, 1999). For example, the percentage of students with low school engagement increased with poverty, single parenthood, and low parental education. In addition, a higher percentage of children (ages 6 –11) were highly engaged in school as compared to adolescents (ages 12- 17). Finally, white children and girls were more highly engaged in school than children in other sub-groups.

Methods

Sample

Based on the prior literature, we developed child survey and interview measures of behavioral, emotional, and cognitive engagement for a study of children's engagement in inner city schools. This study was conducted in conjunction with the MacArthur Network for Successful Pathways through Middle Childhood. This study had several goals. One goal was to use multiple methods to describe the phenomenology of engagement. Another goal was to examine classroom factors that influence engagement in the elementary school years. For this study, we chose elementary neighborhood schools located in urban high poverty neighborhoods. The schools were nominated by the central office as well run, with stable administrators and focused on improving achievement. We administered surveys and interviews to children over two waves of data collection.

At the first wave, the sample included children in five schools in Chicago, Milwaukee, and Detroit. The sample size at the first wave included 661 children (n = 238 third graders, 205

fourth graders, and 218 fifth graders). These children were in 55 classrooms. The sample includes a range of 5 to 27 children per class. Two of the schools had a majority of Hispanic children, two schools had a majority of African-American children, and one school served children from a variety of ethnic backgrounds. Over 95% of children in these schools qualified for free and reduced lunch.

At the second wave, we followed children in three of the five schools in Chicago and Milwaukee into the fourth and fifth grades. Two schools were dropped because of financial constraints in the study budgets. Since the network was focused on middle childhood, we did not follow the fifth graders into middle school. Two of the schools had a majority of Hispanic children and one school had a majority of African-American Children. At wave 2, the sample included 294 students (n = 151 fourth graders and n = 143 fifth graders). These children were in 22 classrooms. The sample includes a range of 8 to 23 students per class. Since the school did not permit us to ask the students' ethnicity, we are unable to give an exact breakdown by ethnic groups, though we do have an ethnic breakdown at the school level. At wave 2, we collected information from teachers about whether students were receiving special education services. At this wave, approximately 3% of the sample (22 students) received some type of special education services.

In addition, teachers filled out individual ratings on each student participating in this study. These surveys included questions about a variety of behavioral (i.e., pay attention, complete work, tries hard, follows rules), emotional (i.e. likes school), and cognitive (i.e., thoughtful when doing work) indicators of engagement. All items were on likert scales from 1 to 5 (1 = not at all true, 5 = very true). Teachers also were asked to rate children's reading and math achievement on a scale from 2 years below achievement level to 2 years above

achievement level in each domain. We collected information from both children and teachers because we were interested in whether the two groups were assessing behavioral, emotional, and cognitive engagement similarly. We did not collect survey information from children's parents.

Survey Measures

The child measures included items about student engagement and classroom perceptions. Behavioral, emotional, and cognitive engagement survey items were drawn from a variety of measures (Wellborn & Connell, 1987; Finn et al., 1995; Pintrich, Smith, Garcia, & McKeachie, 1993) and included new items developed for this study. A list of engagement items is presented in Table 1. All of the items were on likert scales from 1 to 5 (1 = never, 5 = all of the time, or 1 = not at all true, 5 = very true). The surveys also included items about perceptions of the social context (teacher support and peer support) and perceptions of the academic context (task challenge and work orientation). In addition, the surveys included items about perception of competence, value, and school attachment. The survey items were drawn from a variety of measures of motivation and classroom climate and context (Eccles, Blumenfeld, & Wigfield, 1984; Midgley et al. 1995; Wellborn & Connell, 1987), as well as new items developed for this study. The surveys were read aloud to students in each class. Bilingual adults administered surveys in Spanish in the bilingual classrooms and to students in other classes who requested who requested a Spanish version or whose teachers felt they were not sufficiently proficient in English. The survey took approximately 30 minutes to administer. We piloted the surveys on individual students in order to assess wording and comprehension.

Procedures

To examine the psychometric properties of three engagement scales, we examined the quality of the data, the reliability of the scales, and the validity of the scales. We present the

psychometric properties of survey items from the first and second wave of data collection for emotional and behavioral engagement. We documented a similar pattern of relations between the behavioral and emotional engagement scales, contextual variables, and demographic factors at both waves. Because wave 2 had stronger measures of behavioral, emotional, and cognitive engagement, our analyses focus primarily on this wave.

We made several changes to the cognitive engagement scale from wave 1 to wave 2 because of the low reliability at wave 1 [α = .55 (3 items)]. The majority of measures of cognitive engagement have been administered with middle school and high school students. At wave 1, we had fewer measures and limited items assessing self-regulation and strategy use. Therefore, at wave 2, we added survey items adapted from measures of strategy use with older grades to use with younger children. The addition of these items improved the reliability of this scale [α = .82 (8 items)]. Another possible reason for the low reliability at wave 1 was the inclusion of third graders. At wave 1, we included children in 3rd- 5th grade; wave 2 only included children in 4th and 5th grade. The reliability of the cognitive engagement scale was lowest for the third grade students (α = .50), followed by the fourth grade students (α = .54), and the fifth grade students (α = .63). Because of the problems with reliability at wave 1, we only present psychometric properties for wave 2 measures of cognitive engagement.

Data Quality. We examined the distribution of the responses to confirm that there was variation. We anticipated that the distribution of responses would be negatively skewed, as we assumed that most elementary school children would report positive behavioral, emotional, and cognitive engagement. There was little missing data, which appeared to be completely random.

Reliability. We tested the internal consistency of the items that compose the behavioral, emotional, and cognitive engagement scales. Cronbach's alpha was chosen as the measure of internal consistency.

Validity. We used a number of approaches to examine the internal consistency of each of the four scales for all samples. First, we conducted exploratory factor analysis with all scales. Next, we examined demographic patterns and concurrent and prospective validity of the three scales. We did not collect demographic data from parents, and therefore we were only able to examine the engagement patterns by gender and age. For construct validity, we examined whether aspects of classroom context (teacher support, peer support, task challenge, and work norms) that have been identified in the literature were related to the three engagement scales at wave 2. Further, we ran correlations between engagement and measures of school attachment and value. We ran these correlations using both the whole engagement scale and using each individual item. The purpose of these analyses was to examine the strength of the relation between individual items and the outcome variables in order to determine whether a more parsimonious scale could be developed.

In addition, we ran zero order correlations between students' reports of engagement and teachers' individual assessment of students' behavior. The purpose of these analyses was to examine whether teacher and students were seeing similar behaviors. We also conducted hierarchical regression analyses in order to examine the independent contributions of the four contextual variables (teacher support, peer support, task challenge, and work norms) on the three types of engagement, controlling for gender and grade. Finally, we ran correlations to examine the stability of behavioral and emotional engagement from wave 1 to wave 2. Because we made changes in the cognitive engagement measure, we did not examine correlations in this measure

over time. We did not collect longitudinal outcome data, and therefore we were not able to use our data to examine prospective validity.

Cut-point creation. Since there are few empirical or theoretical guidelines for establishing cut points in engagement, in our analyses we used the measures as continuous scales, the common method in the literature.

Results

Data Quality. We did find substantial variation for the three scales at both waves. For illustration, we present the distributions at wave 2 in Tables 2 - 4. As expected, there was a higher concentration of scores over 3 (indicating that students report higher behavior, affect, and cognitive engagement). Each of the scales was negatively skewed (behavioral engagement: -.565; emotional engagement: -.301, and cognitive engagement -.391), indicating distribution towards higher scores (see Tables 2 – 4).

Reliability/Internal Consistency. We conducted exploratory factor analysis. All items loaded onto the theorized factor. In Table 5 we present the items and factor loadings from the exploratory analysis. The three factors corresponded to the hypothesized scales: behavioral, emotional, and cognitive engagement. Based on this factor analysis and theoretical considerations, scales were developed to measure behavioral engagement [α = .72 (wave 1); α = .77 (wave 2)], emotional engagement [α = .83 (wave 1); α = .86 (wave 2)] and cognitive engagement (α = .82 (wave 1). The reliability of the scales was also examined across demographic characteristics (see Table 6). In general, the results were similar for boys and girls. The reliability for the behavioral engagement scale (α = .67) was slightly lower for third

grade than for fourth (α = .74) and fifth grade (α = .73). The reliability for emotional engagement was similar across the grades at both waves.

Validity. The means and standard deviation for the whole sample are presented in Table 7. We examined gender differences in engagement at wave 2. These results are outlined in Table 8. In addition, we tested for grade differences in engagement at both waves. The means, standard deviation, and F-values are presented in Table 9. The demographic patterns for the three engagement scales at wave 1 and wave 2 were as expected and confirm previous research (Fredricks, Blumenfeld, & Paris, 2003). We documented gender differences in engagement. Girls reported significantly higher behavioral, emotional, and cognitive engagement than did boys. In addition, at wave 1, we found that behavioral, emotional, and cognitive engagement decreased from third to fifth grade. We did not document grade differences between the fourth and fifth graders during the second wave of data collection.

Concurrent Validity. To examine the concurrent validity, we ran simple zero order correlations between perceptions of the classroom context and the three components of engagement. We included aspects of classroom context (teacher support, peer support, task challenge, and work orientation) that have been identified in the literature as related to engagement (see Fredricks, Blumenfeld, & Paris, 2003). The teacher and peer support measure included items about whether teachers and peers care and created a supportive social environment. The task challenge scale included items about level of task difficulty and authentic instruction.

All of the zero order correlations were significant and in the expected direction. Perceived teacher support was positively related to behavioral, emotional, and cognitive engagement (r = .35 -. 49). Perceived peer support had similar correlations with the three

engagement scales (r = .23 - .41). Work orientation was positively related to behavioral, emotional, and cognitive engagement (r = .37 - .42); task challenge was associated with three scales (r = .30 - .41). Students' reports of engagement were more strongly correlated with teachers' reports of behavior (r = .29 - .43) than with teachers' perceptions of emotion (r = .15 - .20). The stronger correlation with behavior was not surprising because teachers tend to be better able to observe behavior than to make inferences about students' emotional state (Fredricks, Blumenfeld, & Paris, 2003). Finally, students' reports of engagement were highly correlated with school attachment (r = .44- .57) and moderately correlated with perceptions of school value (r = .26 - .32).

Not surprisingly, the correlations were stronger when we used the full scale then when we correlated each individual item with the outcome variables. In general, the correlations between the individual items and outcome variables were similar, making it difficult to tear apart the scales to pick out the items that are best able to predict the outcome variables. The two exceptions were the following: (1) children's perceptions of being bored were slightly less strongly correlated with the outcome variables than the other items in the emotional engagement scale; and (2) children's reports of completing homework on time were slightly less strongly correlated with the outcome variable than the other items in the behavioral engagement scale.

The standardized regression coefficients are presented in Table 10. Work orientation (β = .28, $p < .001$), task challenge (β = .23, $p < .001$), and peer support (β = .13, $p < .01$) were significant predictors of behavioral engagement. After controlling for other variables in the model, perceptions of teacher support was not related to behavioral engagement. Each of four contextual factors was uniquely associated with emotional engagement (see Table 9). Similarly,

aspects of both the social context (teacher and peer support), and academic context (work orientation and task challenge) were significant predictors of cognitive engagement.

Finally, we ran zero order correlations between the behavioral and emotional engagement measures at wave 1 and wave 2. The behavioral (r = .60) and emotional (r = .50) measures were highly correlated at the two waves, suggesting considerable stability in children's engagement over time.

Interview data

In order to take a more qualitative approach to understanding the phenomenology of engagement, we also interviewed a sub-set of students in great depth. The purpose of the interviews was to examine differences in how students, identified as high or low in engagement based on their survey responses, talked about their classrooms, schools, work, teachers, and peers. We were interested in whether the two groups noticed different aspects of the classroom or whether they told us similar things about their classrooms but responded to these environments differently. The interviews included questions about aspects of the classroom that were assessed in the student surveys. We asked about teachers, peers, academic tasks, work norms, the school, and the family's participation in and help with school activities and assignments. Children also were asked about their behaviors, their emotions, and cognition. The only difference between the interviews at the two waves was that in our efforts to examine change, the interviews in the second wave included more questions about differences in engagement and a comparison of classroom environments that might explain changes in engagement across the years. A copy of the student engagement interview at wave 1 is included in Table 11.

The interviews were conducted individually, audiotaped, and took approximately 30-45 minutes. A bilingual interviewer talked with low English proficiency students. We used the survey data to initially select individuals to interview in greater depth about their school experiences. The selection criteria differed across the two waves. At wave 1, we selected children in the classrooms with the highest average total engagement and children in classrooms with the most variation in total engagement scores. The total interview sample at wave 1 was 92 students. At wave 2, we selected students who exhibited different engagement trajectories, that is students who increased or decreased fairly significantly in their total engagement on the surveys as compared to rest of sample. In total, we interviewed 46 children at this wave.

We used several different analytic techniques to compare the survey and interview responses. First, we took a sample of 10 of the high engagement interviews and 10 of the low engagement interviews. Research assistants who were blind to the survey scores read each interview and sorted them into either a high or a low engagement group. There was perfect correspondence between the interview sorting and the survey scores, demonstrating that it was possible to reliability discriminate between the high and low engagement students. Careful notes were taken about students' comments related to work, behavior, peers, and teacher. Overall, the high engaged students were more positive about their classroom, teacher, and peers than were the low engaged students.

Next, we rated the interviews in terms of engagement and aspects of classroom context including teachers, peers, work, and school. After reading the entire interview transcript, we gave each dimension a numerical rating (1-3 rating, or 1-5 rating). For example, we rated children on their own behavior and any indication of cognitive engagement in terms of going beyond the requirements or being strategic. Within the larger dimensions of classroom context,

we created sub-categories based both on what students discussed and distinctions that have been identified in the literature. For example, we rated teachers on a variety of dimensions (e.g., fairness, personal characteristics, and interpersonal support). We ran zero order correlations between these numerical interview ratings and the surveys scales for engagement and classroom context. We found that the numerical ratings of engagement from the interviews were moderately correlated with the survey scales of engagement. Similarly, the interview ratings of classroom context were associated with individuals' perceptions of classroom context. Finally, the engagement survey scales were moderately correlated with the interview ratings of classroom context. These results provide additional evidence for the validity of interview and survey measures.

In addition to the quantitative analyses of the interview data, we examined interviews more holistically for themes that cut across students in the low engagement group. We found considerable variability in the reasons why students were disengaging from school. For example, some of the students in the low engagement group were disengaged because of the academic work, either because it was too easy or too challenging, while others were disengaged because of social problems with their teachers and/or peers.

In sum, these results illustrate the benefits of including interview questions in studies of engagement. In the quantitative analyses, we documented correspondence between the interview and survey responses. However, the thematic analyses reveled variability within the low engagement group. There was variation in these students' perceptions of the work, teachers, peers, and their classroom. These results show that it is important to not assume that all students within one group are similar. The interviews provided in-depth information about what aspects

of the school experience were creating low engagement. This information is critical for designing targeted interventions to increase engagement.

Summary and Discussion

Our Measures

One of the strengths of our study is that we included child survey items assessing behavioral, emotional, and cognitive engagement. In general, the measures have good face validity, adequate internal consistency, and adequate predictive validity. The three scales presented in this paper generally exhibit good data quality. There is variability in the distribution of responses, though students are more likely to answer these survey questions positively on the high end as they do in other measures in elementary school grades. A strength of this study is that it was conducted with inner city elementary school students of various backgrounds. These scales appear to be reliable measures of engagement in this sample. The Cronbach's alpha for the scales suggests that the items hang well together as a construct. The descriptive analyses suggest that the three scales are valid measures and follow expected patterns by age and gender. The zero order correlations between engagement and classroom context were in the expected direction.

Nevertheless, there are several limitations with our survey analyses. First, we were unable to test the prospective validity because we had not collected long-term outcome data. Although there is evidence in the research literature of the association between engagement and positive academic outcomes, more research is needed to test the concurrent and prospective validity of these specific items. The age of the students likely impacted on the reliability and validity of this

construct. Modifications of these measures may be necessary for older children. The psychometric properties of these items need to be tested across wider and more diverse samples before inclusion into national databases. Finally, in our analysis, we used the scales as continuous variables, a common practice in the literature. More theoretical and empirical work is necessary to determine what is the minimum level of behavioral, emotional, and cognitive engagement necessary to achieve positive achievement outcomes.

General Measurement Problems

In our review of the research, we noted several problems with measurement that cut across different surveys of engagement (see Fredricks, Blumenfeld, & Paris, 2003, for more detailed discussion). One problem is that many studies combine behavioral, emotional, and cognitive items into a single scale, which precludes examining distinctions among each type of engagement. A second problem is that conceptual distinctions are blurred because similar items are used to assess different types of engagement. For example, questions about persistence and preference for hard work are used as indicators of behavioral engagement (Finn et al., 1995) and cognitive engagement (Connell & Wellborn, 1991). Another concern is the three types of engagement overlap with other behavioral and motivational constructs. However, because engagement encompasses several constructs that are usually tapped individually, the measures of engagement are less well-developed and differentiated than these constructs. For example, typically emotional engagement scales include one or two items about interest and value along with items about feelings. Other measures that only focus on interest and values include many items that make distinctions within interest, such as intrinsic versus situational interest, and within value, such as intrinsic, utility, and attainment value (Eccles et al., 1983; Krapp, Hidi, & Renninger, 1992).

An additional limitation with current measures is that survey items do not distinguish a target or source of engagement. In some measures the target is quite general, such as "I like school". Furthermore, these measures are rarely attached to specific tasks and situations, yielding information about engagement as a general tendency. This makes it difficult to determine if students are more engaged in certain parts of the classroom, such as the social or

academic dimensions, whether they are more engaged in certain tasks, such as working in groups or doing presentations, or whether they are more engaged in some subjects than others.

There also are likely to be developmental differences in the appropriateness of certain measures. One issue is that children at different ages may interpret engagement items differently because of their developmental capacities. For example, participation may mean different things to an elementary and high school student. Finally, assessing cognitive engagement using with young children is difficult, resulting in an abundance of self-report data on older students (middle school, high school, and college students) and a dearth of studies with younger children (Pintrich, Wolters, & Baxter, 2000).

Summary

There are extensive child and teacher measures of behavioral engagement that include adherence to classroom norms and participation in school and in out of school activities from a variety of surveys that could be included in national databases. These scales have strong psychometric properties and concurrent and prospective validity. In addition, the measures of emotional engagement provide a quick and easy measure that distinguishes between low and high-engaged students. However, if researchers want to know about the sources of affect, we recommend using more detailed measures designed to tap specific motivational constructs such as interest, value, and flow (Csikszentimihalyi, 1988; Eccles et al., 1983; Schiefele et al., 1992). Finally, our measure of cognitive engagement provided a quick measure that is valid for use with elementary school children. Researchers who want to know specifically about how students use learning strategies should refer to more detailed measures of strategy use and metacognition (Pintrich et al., 2000).

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Table 1: List of Engagement Scales

Behavioral Engagement (5 items, α = .72; α=.75)
1) I pay attention class
2) When I am in class, I just act as if I am working (reversed)
3) I complete my homework on time
4) I follow the rules at school
5) I get in trouble at school (reversed)

Emotional Engagement (6 items; α=.75; α=.83)
1) I feel happy in school.
2) I feel bored in school (reversed).
3) I feel excited by the work in school
4) I like being at school.
5) I am interested in the work at school.
6) My classroom is a fun place to be.

Cognitive Engagement (8 items, α = .82 (wave 2)
1) When I read a book, I ask myself questions to make sure I understand what it is about.
2) I study at home even when I don't have a test.
3) I try to watch TV shows about things we are doing in school.
4) I talk with people outside of school about what I am learning in class.
5) I check my schoolwork for mistakes.
6) If I don't know what a word means when I am reading, I do something to figure it out, like look it up in the dictionary or ask someone.
7) I read extra books to learn more about things we do in school.
8) If I don't understand what I read, I go back and read it over again.

Table 2: Distribution for Behavioral Engagement- W2

	Frequency	Percent	Valid Percent	Cumulative percent
1.40	1	.1	.3	3
2.20	2	.2	.7	1.0
2.25	1	.1	.3	1.3
2.40	4	.5	1.3	2.7
2.60	7	.8	2.4	5.1
2.80	8	1.0	2.7	7.7
3.00	20	2.4	6.7	14.5
3.20	15	1.8	5.1	19.5
3.40	31	3.7	10.4	30.0
3.60	17	2.0	5.7	35.7
3.80	25	3.0	8.4	44.1
4.00	21	2.5	7.1	51.2
4.20	32	3.8	10.8	62.0
4.40	17	2.0	5.7	67.7
4.60	26	3.1	8.8	76.4
4.75	1	.1	.3	76.8
4.80	24	2.9	8.1	84.8
5.00	45	5.4	15.2	100.0
TOTAL	297	35.4	100.0	

Table 3: Distribution for Emotional Engagement Scale- W2

	Frequency	Percent	Valid Percent	Cumulative percent
1.00	3	.4	1.0	1.0
1.33	2	.2	.7	1.7
1.67	1	.1	.3	2.0
1.83	3	.4	1.0	3.0
2.00	2	.2	.7	3.7
2.17	3	.4	1.0	4.7
2.33	4	.5	1.3	6.1
2.50	6	.7	2.0	8.1
2.67	6	.7	2.0	10.1
2.80	1	.1	.3	10.4
2.83	8	1.0	2.7	13.1
3.00	23	2.7	7.7	20.9
3.17	21	2.5	7.1	27.9
3.33	18	2.1	6.1	34.0
3.50	21	2.5	7.1	41.1
3.67	24	2.9	8.1	49.2
3.83	18	2.1	6.1	55.2
4.00	18	2.1	6.1	61.3
4.17	19	2.3	6.4	67.7
4.33	27	3.2	9.1	76.8
4.40	1	.1	.3	77.1
4.50	8	1.0	2.7	79.8
4.67	20	2.4	6.7	86.5
4.83	9	1.1	3.0	
5.00	31	3.7	10.4	100.0
TOTAL	297	35.4	100.0	

Table 4: Distribution for Cognitive Engagement Scale at Wave 2

	Frequency	Percent	Valid Percent	Cumulative percent
1.00	1	.1	.3	.3
1.25	1	.1	.3	.7
1.38	1	.1	.3	1.0
1.50	1	.1	.3	1.3
1.63	2	.2	.7	2.0
1.75	2	.2	.7	2.7
1.88	1	.1	.3	3.0
2.00	3	.4	1.0	4.0
2.13	2	.2	.7	4.7
2.25	5	.6	1.7	6.4
2.38	7	.8	2.4	8.8
2.50	12	1.4	4.0	12.8
2.63	10	1.2	3.4	16.2
2.75	10	1.2	3.4	19.5
2.88	12	1.4	4.0	23.6
3.00	15	1.8	5.1	28.6
3.13	13	1.5	4.4	33.0
3.25	26	3.1	8.8	41.8
3.38	20	2.4	6.7	48.5
3.50	19	2.3	6.4	54.9
3.63	11	1.3	3.7	58.6
3.71	2	.2	.7	59.3
3.75	13	1.5	4.4	63.6
3.88	12	1.4	4.0	67.7
4.00	20	2.4	6.7	74.4
4.13	8	1.0	2.7	77.1
4.14	1	.1	.3	77.4
4.25	19	2.3	6.4	83.8
4.38	13	1.5	4.4	88.2
4.50	15	1.8	5.1	93.3
4.63	4	.5	1.3	94.6
4.75	5	.6	1.7	96.3
4.88	4	.5	1.3	97.6
5.00	7	.8	2.4	100.0
TOTAL	297	35.4	100.0	

Table 5: Factor Loadings for Engagement Scales

Items	Behavioral Engagement	Emotional Engagement	Cognitive Engagement
I like being at school.	.79		
I feel excited by my work at school.	.75		
My classroom is a fun place to be.	.73		
I am interested in the work at school.	.72		
I feel happy in school.	.71		
I feel bored in school (R)	.67		
I follow the rules at school.		.83	
I get in trouble at school (R)		.78	
When I am in class, I just act as if I am working (R)		.72	
I pay attention in class.		.72	
I complete my work on time.		.52	
I check my schoolwork for mistakes.			.73
I study at home even when I don't have a test.			.72
I try to watch TV shows about things we do in school.			.69
When I read a book, I ask myself questions to make sure I understand what it is about.			.67
I read extra books to learn more about things we do in school.			.66
If I don't know what a word means when I am reading, I do something to figure it out.			.62
If I don't understand what I read, I go back and read it over again.			.58
I talk with people outside of school about what I am learning in class.			.58

Table 6: Reliability By SubGroup – wave 2

Wave 2 Reliabilities				
Engagement scales	Grade 4	Grade 5	Boy	Girl
Behavior	.79	.76	.78	.72
Emotion	.83	.83	.84	.81
Cognitive	.85	.77	.80	.82
Wave 1 Reliabilities				
Engagement Scales	Grade 3	Grade 4	Grade 5	
Behavior	.67.	.74	.73	
Emotion	.87	.86	.88	

Table 7: Overall Descriptives

Relationship Scale	Score Range	Mean	Standard Deviation	Skewness	Kurtosis
Behavior engagement wave 1	1-5	4.00	.76	-.71	.28
Emotional engagement wave 1	1-5	3.60	1.00	-.51	-.56
Behavior engagement wave 2	1-5	4.00	.76	-.40	-.60
Emotional engagement wave 2	1-5	3.76	.85	-.57	.27
Cognitive engagement wave 2	1-5	3.49	.79	-.30	-.17

Table 8: Gender Differences in Engagement at Wave 2

Scale	Girls		Boys		
	Mean	Standard Deviation	Mean	Standard Deviation	F-Value
Behavioral	4.18	.68	3.76	.78	25.15***
Emotional	3.89	.80	3.60	.88	8.68**
Cognitive	3.60	.78	3.36	.78	6.59**

Table 9: Grade Differences in Engagement

	Third		Fourth		Fifth		
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	F- value
Beh- w1	4.13	.75	4.01	.78	3.84	.72	8.51**
Emot-w1	3.84	1.00	3.50	1.00	3.42	.93	12.00***
Beh-w2			4.00	.80	4.01	.72	.00
Emot-w2			3.70	.87	3.79	.83	.54
Cog-w2			3.46	.80	3.50	.73	.52

Table 10: Standardized Regression Coefficients

	Behavior		Emotional		Cognitive	
	Step1	Step2	Step1	Step2	Step1	Step2
Controls						
Grade	.03	-.03	.06	-.03	.03	-.05
Gender	.29***	.21***	.17*	.05	.15*	.03
Contextual Variables						
Teacher Support		.10		.27***		.25***
Peer Support		.13*		.13*		.17***
Task Challenge		.23***		.29***		.30***
Work Orientation		.28***		.33***		.25***
Change in R^2		.26***		.49***		.41***
Total R^2		.34		.52		.44

N = 297, Gender is coded 0 = male and 1 = female, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 11: Student Engagement Interview

We are interested in hearing about what school is like for kids your age. There are no right or wrong answers. Do you have any questions?

Questions about identity

1) What is your name, and how old are you?

2) Lets say you are meeting someone for the first time and want to be friends with them?
   a) What would you tell them about yourself?
   b) What is your favorite thing to do?
   c) Are there things that you do that are important to you? What are they?
   d) Is there anything that you do not like?

SCHOOL

What school is like

1) First we are going to talk about your school. Have you been at your school all year?

2) Tell me about your school. What do you like most about your school? What do you like least about your school? Why?

3) Have you ever gone to a different school. When? What was it like? How was it different than this school?

4) Some kids feel good about themselves at school, other kids don't feel good about themselves? How do you feel about yourself at school (PAUSE).
What things at school make you feel good about yourself? What things makes you feel bad about yourself?

5) Now lets talk about the other adults at your school. Are their any adults in the school besides the teacher who are important to you? Who are they? Why are they important to you?
Is there anyone you can talk to if you are having a bad day?

6) How do the adults at this school treat the kids here? (PAUSE)
Do they care about them? Do they treat them respect? Are they fair/not fair?

7)Do you think most of the rules in the school are fair? What do kids get in trouble for? How often do they get in trouble?

8) Some kids don't care if they get in trouble. Do you care if you get in trouble? Why or why not? Have you ever gotten in trouble? How often? Why? How did you feel about it?

9) Do you feel safe in your school (yes or no)? What makes you feel safe? Are there place and times when you don't feel safe? (PAUSE) Do you feel safe getting to school or getting home from school? Why (or why not)?

10) There are a lot of different types of kids here- (*talk about types of students in that school: African-American (Black), Latino (Hispanic), Asian, and white students*). Sometimes schools are good places for kids from different backgrounds and sometimes schools are not good places for kids from different kinds of backgrounds? Is this school is a good place for people from your background? Why do you say that?

Note:
If child has hard time answering questions:

What would you tell a new kids to your school about your school? (the other adults, whether it is safe, etc.)

What is your class like

1) Now lets talk about what your class is like. What do you like about your class? Why? What do you not like about your class?

2) When is it fun? How much does this happen? When is it not fun? How much does this happen?

3) What do you usually do in your class? (*probe about what they do in reading and math)*

4)Are there any special things you do in class that do not happen all of the time? (For example, parties, field trips)

5) What are you going to remember about this class?

Teacher
1) Now lets talk about your teacher. Have you had the same teacher for the whole year? How is your teacher this year the same or different from your old teacher?

2) What is your teacher like? (PAUSE)
How much do you like him/her? Why? Are there things you don't like about your teacher? Are there times when he/she is mean? How does this make you feel?

3) Some teachers treat kids like they really care about them; other teachers act like they do not care that much. What about your teacher? What makes you say that? (PAUSE) Does the teacher care about you? Why do you say that?

4) Some teachers are fair all of time, other teachers are not fair. Which is your teacher like? (PAUSE)
Is your teacher fair with you? Sometimes not fair with you? How often does this happen? How does this make you feel?

5) Some kids don't care about doing what the teacher says. Do you care about doing what the teacher says? Why do you say that? (PAUSE)
Are there a lot of kids in your class who don't care?

6) What does the teacher do to get kids to do their best? (PAUSE) Does the teacher give special prizes or wards to kids why are doing well?
(*Note to Interviewer: ask these next questions only if answer to previous one is yes).* Why do kids get prizes or awards? Have you ever gotten a prize or award? For what? How often does this happen?

7) What does your teacher do to make school more interesting?

Other kids/ belonging
1) Now lets talk about the other kids in your class. How much do you like them, why? (PAUSE)

What don't you like about the kids in your class? Does this happen a lot?

2) In some classes students treat each other well, in other classes students are mean to each other. Which is more like your class? (PAUSE)

How do the kids in your class treat you? Are there some things they are mean about? Does it happen a lot? What does the teacher do when this happens?

Note:
If child mentions fighting or teasing ask this set of questions

a) How often do kids fight or tease each other?
b) Who starts it?
c) Do you get involved? Why or why not?
d) What do adults do?

3) Do you ever feel left out? When? How often? What do you do when this happens? Does your teacher do anything to help so you don't feel left out?

4) Do you ever wish you were in another class? Why or why not?

5) Are there kids in your class that you look up to (admire, want to be like)?
Why do you look up to them?

Note:

Other ways to ask: For children who are having difficulty talking about their class (what they like, the teacher, and the student)

1) If a new kids comes to your class what would you tell them about your class, about your teacher, about the other kids in your class?

2) What is a typical day like in your class? Ask about reading and math (what does the teacher do, what do you like about it, not like about it)? (*do we want to ask about any other domains)*

Ability / Cognitive Engagement
Now lets talk about what you are learning in school and how you feel when you are there.

1) How well do you do in school? How good are you compared to the other students in your class? (PAUSE)
Is it "cool" to do well in school? Is it "cool" to like school?

2) Tell me about your favorite subject in school. (PAUSE)
What makes it your favorite? What do you do in this subject?
What do you do to learn more about it (get books, watch t.v. programs, talk with other people)?
Is there anything that your teacher does to make it your favorite?

3) Is there anything in school that you learned a little bit about but want to know a lot more?
What have you done to learn more about this topic? (got books, watched television programs, talked with other people)

4) Tell me about your least favorite subject (PAUSE)
What makes this your least favorite? Is there anything that your teacher does to make you not like it?

5) Are there times you are really excited about what you are learning in school? How often does it happen? What makes you excited?

6) What makes you excited when you are out of school? When does it happen? How often does it happen? Why is this different than school?

7) Some kids get bored at school. Do you get bored at school? When does it happen?
How often does it happen?

8) Some kids get frustrated at school. Do you get frustrated at school? When does it happen?
How often does it happen?

9) Some kids care about getting good grades at school, other kids don't care about getting good grades at school. Which is more like you? Why do you say that?

10) Some kids care about learning as much as they can, other kids don't care too much about learning. Which is more like you? Why do you say that?

11) Lets talk about your schoolwork. Do you ever do anything on your own to get better at school? (do you practice, ask for help, try to get information on how to improve)?
12) If you are going to have a test what do you do? How do you get ready for it?

13) Are things ever really hard at school? What things are hard? What do you do when things are hard? (Do you give up, ask teacher/peer for help, try and figure things on your own)

14) Do you ever concentrate really hard at school? When you do concentrate really hard? How often?

Family participation/ helping

Now we are going to talk about your family and school.

1) Is there anyone in your family who really cares about how you are doing in school? Who is it? How do you know they care?

2) Tell me about who helps you at school (PAUSE) How do they help you? How often do the they help you?

3) Do you every talk with anyone in your family about school? Who do you talk with? What do you talk about? (PAUSE)
What does your family tell you about why school is important?

4) When does your family come to school? Who comes? Why do they come? How often do they come? Do you wish your family could come more?

5) Does anyone in your family do really well at school? Would you like to be like them? Why? Do they help you with school? How do they help you? How often?

Participation in out-of-school activities: General profile

1) Now I want you to think about all the different things you do outside of school. I already know that you do _____. What else do you do when you're not at school? How often do you do each of these?

   List of other activities kid mentions independently:

   _____
   _____

Probes

- Are you on any sports teams or do you take any sports lessons?
- Do you take music, singing, art, dance, or acting lessons?
- Do you belong to any clubs such as scouts, YMCA, or Boys or Girls Club?
- Do you take religious classes, belong to any religious groups?
- Do you go to an after school program at your school? If yes, what do you do there? Are there things you do there a lot that you like? Is there an adult who you work with a lot of the time?
- Where else do you go when you are done with school (e.g., grandparents, neighbors)?

2) Are there some activities that you do at other times of the year that you are not doing now?

Probes

What do you do in the summer?

List: _____
_____

3) Are there activities you used to do and stopped doing? Why did you give it up?

List: _____
_____

Now we've talked about some of the other things that you do. (*Interviewer: List what student said)* Did you forget anything? Think about all of those things that you just told me that you do when you are not in school.

4) Which of these activities is your favorite? Why? (PAUSE) Which is your least favorite? Why?
5) Which activity do you spend the most time doing? Why?

6) Which of the things you do is most important? Why?

7) If you could do any activity that you wanted that you don't already do, what else would you like to be doing? Why would you like to do that? Why aren't you?