

**Early Childhood Longitudinal Study, Kindergarten
Class of 2010-11 (ECLS-K:2011)**

**Spring Third-Grade National Data Collection, Fourth-Grade
Recruitment, and Fifth-Grade Tracking**

**OMB Clearance Package
1850-0750 v.15**

Supporting Statement

Part B & C

Prepared by

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Collection of Information Employing Statistical Methods

B

This submission requests an update of the most recent previously obtained clearance for the ECLS-K:2011 spring second-grade data collection (OMB No. 1850-0750 v.12). This current submission describes the procedures for the spring third-grade data collection, which has been informed by the experiences and results of the ECLS-K:2011 kindergarten, first-grade, and second-grade data collection rounds, the ECLS-K:2011 pilot tests, and the ECLS-K kindergarten, first-grade, and third-grade data collection rounds.

B.1 Universe, Sample Design, and Estimation

Section B.1.1 includes information on the study universe of interest and the sampling plan implemented in the base-year of the national study. Section B.1.2 describes the precision requirements and target sample sizes set out for the study. Section B.1.3 describes the sample plan implemented in the first- and second-grade years. Section B.1.4 discusses the sample design for the spring third-grade data collection.

B.1.1 Universe and Sample Design

The universe for the ECLS-K:2011 includes all children attending kindergarten or of kindergarten age being educated in ungraded settings in the 2010-11 school year in the 50 States and the District of Columbia. The sample design for the ECLS-K:2011 kindergarten year produces a sample that is nationally representative of this population of children in the United States. In the base year (i.e., kindergarten year), children were selected using a multistage probability design. In the first stage, 90 primary sampling units (PSUs) that are counties or groups of counties were selected with probability proportional to size (PPS). In the second stage, public and private schools offering kindergarten programs or programs for children of kindergarten age in an ungraded setting were selected, also with PPS, within the sampled PSUs. The third-stage sampling units were children in kindergarten programs and five-year-old children (i.e., children of kindergarten age) in ungraded schools and classrooms. Children were selected within each sampled school using equal probability systematic sampling. Asians, Native Hawaiians, and Other Pacific Islanders were sampled at a higher rate so as

to achieve a minimum required sample size in order to generate reliable estimates for them and to meet the study precision requirements discussed in section B.1.2. Although they were oversampled as one group, the numbers of completed interviews for children in the Asian group and children in the Native Hawaiian and Other Pacific Islander group were large enough in the kindergarten year to produce estimates for each of these two groups separately.

The ability to generate reliable estimates and meet study precision requirements are as important for Hispanics, Blacks, and children of other races who are not part of the Asian or Native Hawaiian and Other Pacific Islander groups as they are for children oversampled in the API group. However, children in these subgroups do not have to be oversampled because their expected sample sizes exceed the required minimum sample size for meeting the precision requirements.

Only base-year respondents¹ are eligible for data collection after the kindergarten year. The data collections after the kindergarten rounds are named to refer to the grade most of the study children are expected to be in during that round of data collection. For example, the spring 2014 data collection is called the third-grade data collection because most of the study children are expected to be in third grade at that time. However, after kindergarten, children are included in the data collection regardless of their grade at the time of data collection. Additionally, children are included in the study regardless of their school enrollment status after the first round in which they first participated; thus, children who become homeschooled remain part of the study.

While ideally the study would follow all base-year respondents who move from their original schools after the spring of kindergarten, it is expensive to do. Significant effort must be made to locate students in their new schools and to obtain permission to assess them in their new schools. As the study progresses, student mobility has a more serious impact on the cost of collecting data because the number of schools children attend increases. The most expensive children to survey are these children who change schools, who are referred to as movers, because collecting data on them requires additional efforts to get permission from the entities from which permission is required (e.g., from new districts and

¹ A student needs to have either a complete parent interview or a child assessment in fall 2010 or spring 2011 to be included in the study as a base-year participant/respondent.

school administrators). Also, cost per completed case is increased when there are fewer children per school, and it is often the case that when children change schools, they are the only study child in the school to which they move. Due to the high cost of following children who change schools (i.e., “movers”), most children who move from the school they attended in kindergarten are subsampled for follow-up and inclusion in later rounds of collection. The study design calls for a subsampling rate of 50 percent. The design allows for this rate to be increased or decreased as the study progresses if it becomes necessary to do so in order to achieve end-of-study study sample size targets, given the number of respondents in each round of data collection.

There are some situations in which children who change schools are not subsampled for follow-up but instead are followed with certainty. The first involves the movement of a group of children from one school to a different school because their original school did not educate children past a certain grade. For example, many schools originally sampled for the study educate children only through kindergarten, and all of the children in the school had to move to a different school after the kindergarten year. Schools to which at least four children from original schools move are identified as destination schools for study purposes, and all children who move to those destination schools are followed with certainty. There are three other groups of children that are not subsampled: students whose primary home language is not English (language minority (LM) students), students who have had Individualized Education Program (IEP) or who have had an Individualized Family Service Plan (IFSP), and students who were sampled for the fall first- and fall second-grade data collections, which were conducted in a 30 percent subsample of the study PSUs. These groups are followed with certainty to assure that there are enough of them in the last round of data collection to generate reliable estimates for them.

B.1.2 Precision Requirements and Sample Sizes

An objective of the ECLS-K:2011 is to obtain a minimum level of reliability for estimates pertaining to the cohort as a whole as well as for analytical subgroups, such as Asians, Native Hawaiians and Other Pacific Islanders, Blacks, Hispanics, private school kindergartners, and language minority children. Four precision requirements for the survey were identified and formed the basis for the base-year sample design and plans for the subsequent rounds. These requirements are the ability to do the following:

- Measure a relative change of 20 percent in proportions across waves;
- Measure a relative change of 5 percent in a mean assessment score across waves;
- Estimate a proportion for each wave with a coefficient of variation (CV) of 10 percent or less; and
- Estimate a mean assessment score for each wave with a CV of 2.5 percent or less.

The precision requirements that drive the sample design, which are the same as those used in the ECLS-K, are related to the ability to estimate changes over time and the precision of estimates in the grade 5 data collection for the sample as a whole, as well as for subgroups of analytic interest. The ECLS-K:2011 sample design began with the assumption, based on the ECLS-K experience, that at least 10,300 completed cases would be needed by the end of fifth grade to satisfy the study's precision requirements.

For the ECLS-K:2011, the minimum subgroup sample size is determined by first solving for the sample size needed to achieve the precision requirements under simple random sampling with 100 percent overlapping samples between waves using the formula:

$$n = \frac{\left[z_{1-\alpha/2} \sqrt{2(1-\rho)\bar{P}\bar{Q}} - z_{1-\beta} \sqrt{P_1Q_1 + P_2Q_2 - 2\rho(P_1Q_1P_2Q_2)^{1/2}} \right]^2}{(P_2 - P_1)^2},$$

where n is the sample size per wave, α is the significance level, β is the power term, z has the standard normal distribution, ρ is the correlation between two waves, P_1 and P_2 are the two proportions being compared, $Q_1 = 1 - P_1$, $Q_2 = 1 - P_2$, $\bar{P} = \frac{P_1 + P_2}{2}$, and $\bar{Q} = 1 - \bar{P}$. When $\alpha = 0.05$, $\beta = 0.80$, $\rho = 0.75$, $P_1 = 0.30$, and $P_2 = 0.36$, the sample size needed per wave is 241.² Assuming a design effect of 4 (based on the ECLS-K), this subgroup sample size would need to be further increased by a factor of 4 to 964, since the effective sample size is equal to the sample size actually obtained divided by the design effect.

The assumptions used to arrive at the sample size by the end of the longitudinal study include the completion rates for the child assessments, as well as the rates at which children move from the base-year sampled school to other schools, the rates at which the movers would be subsampled after the base year (children who changed schools between fall- and spring-kindergarten were not subsampled),

² The assumptions underlying the calculation of sample size noted here are: a two-tailed test of differences with significance level alpha of 0.05 and power beta of at least 80 percent; estimating proportions of 30 and 36 percent (i.e., a 20 percent relative change); and a correlation between assessment scores from different waves of 0.75. This assumed correlation of assessments comes from experiences in the ECLS-K. Specifically, looking at difference estimates computed between grade 1 and grade 3, and between grade 3 and grade 5 of the ECLS-K, the estimated correlations in assessments between consecutive waves were found to be very high (between 0.72 and 0.98), for an average of 0.75.

and the rates at which the subsampled movers are expected to be located. A complete case, also referred to as a respondent, is a child who has a completed child assessment or a completed parent interview. For the ECLS-K:2011, an original sample of 900 responding schools (720 public and 180 private) with an average sample size of 23 children in each school was expected to yield approximately 20,700 sampled children (18,630 participating students, assuming a 90 percent response rate) in the base year. However, during the first round of data collection in the kindergarten year, the sample was smaller than expected due to a lower-than-expected school cooperation rate, and also due to slightly lower kindergarten enrollment in the schools than was expected based on enrollment data from NCES's Common Core of Data and Private School Survey universe data files. In order to achieve a number close to the original target for participating schools, refusing schools were substituted with newly sampled schools and an attempt was made to obtain the new schools' participation. The study ended the base-year data collections with a sample of about 18,175 kindergarten children, which is about 460 children fewer than expected.

The original sample design for the ECLS-K:2011 used information about the movement of ECLS-K children after each data collection year and how successful the study was at locating the children to calculate the sample sizes and mover subsampling rate that would be necessary to meet precision requirements. In the ECLS-K, children who moved to another school (but not necessarily residence) were followed at a rate of 50 percent in grade 1, slightly higher in grade 3 so that all language minority children were followed, and slightly lower in grade 5 to accommodate a reduction in the overall sample size. The grade 5 subsampling rates varied according to child characteristics with the highest rate applied to language minority children. The initial ECLS-K:2011 study design was developed with the assumption that 25 percent of students would change schools between kindergarten and first grade and that 50 percent of movers would be followed. As mentioned above, the design allows for that rate to increase or decrease as necessary in order to achieve target sample sizes, in particular the 10,300 cases needed at the end of fifth grade, similar to the procedures used in the ECLS-K.

B.1.3 Sample Design for the Spring First-Grade and Spring Second-Grade Data Collections

The samples for the spring first- and spring second-grade data collections included all students who are considered respondents for the base-year data collection and who had not moved outside of the United States or died by the time of data collection. All the respondents in the base year who remained in their original school (i.e., the school in which they were sampled) or who moved to a destination school were followed with certainty. Movers who were LM students, students who have had an Individualized Education Program (IEP) or an Individualized Family Service Plan (IFSP), and students who were sampled for the fall first- and fall second-grade data collections were also followed with certainty.

Due to cost considerations, the remaining movers (i.e., the movers who are not LM/IEP/IFSP children or part of the fall subsamples) were subsampled for following at a rate of 50 percent, per the original sample design plan. Thus, these movers had a 50 percent chance of being included in the spring first-grade and spring second-grade collections. Subsampling movers was implemented by selecting 50 percent of the original sample schools using systematic probability sampling. In the selected schools, a group of non-protected students was selected to be followed into their new schools if they moved from their original school. This designation as a non-protected student to be followed holds for the life of the study.

It was not necessary to increase the subsampling rate for either the spring first-grade or the spring-second grade data collections because the rate at which children moved from their original schools was lower than expected (i.e., there was a higher-than-expected number of nonmovers who were followed with certainty). In the ECLS-K:2011, approximately 5 percent of children sampled in the beginning of kindergarten were not in the same school at the end of the 2010-11 school year, meaning they moved between the fall of kindergarten and the spring of kindergarten. By the end of first grade and prior to the start of second grade, the percentage of students who had moved out of their original sample schools (at any point after the fall of kindergarten) increased to 23 percent. This is 2 percentage points lower than the assumed mover rate noted above that was used in estimating the expected final sample size in the original sample design plan. The original sample design plan also included the assumption

that 34 percent of students sampled in kindergarten would not be in the same school by the end of second grade. This is very close to the actual rate of 32 percent based on the preliminary results of the second grade data collection.

B.1.4 Sample Design for the Spring Third-Grade Data Collection

As in the spring first-grade and spring second-grade data collections, the spring third-grade sample will again include all students who are considered respondents for the base-year data collection and who have not moved outside of the United States or died by the time of data collection. It will be very similar to spring first grade and spring second grade in that base-year respondents who remain in their original school (i.e., the school in which they were sampled) or who move to a destination school will be followed with certainty.

The subsampling strategy used for first grade and second grade will be used again for third grade. LM students, students with an IEP/IFSP on record with the school, and students who were sampled for the fall first- and fall second-grade data collections will be followed with certainty if they transfer out of their original sample schools. Other movers will be subsampled for following at a rate of 50 percent. This is the same subsampling rate used for first grade and second grade. The preliminary results of the second-grade data collection show that the number of respondents for the spring second-grade collection is larger than expected by 1.5 percent, so the subsampling rate does not need to be increased to meet the sample size targets. There are at least 13,700 students who were assessed in second grade, which is 200 students more than the expected sample size of approximately 13,500 for second grade.

The hearing evaluations will be conducted with the 30 percent subsample that participated in the hearing evaluations in the fall second-grade collection. Conducting the evaluation with the same group of children will allow researchers to do analysis on the data over time.

B.2 Procedures for the Collection of Information

Section B.2.1 describes the data collection procedures for the spring third-grade data collection.

B.2.1 Spring Third-Grade Data Collection

The spring third-grade data collection will include direct child assessments, child questionnaires, height and weight measurement, hearing evaluations, parent interviews, and school administrator and teacher (both general classroom and special education) questionnaires. Computer assisted interviewing (CAI) will be the mode of data collection for the child assessment and the parent interview. The Child Questionnaire (CQ) will be administered using audio-CASI, which allows for self-administration. School administrator and teacher data will be collected via hard-copy self-administered questionnaires. The hearing evaluations will be conducted using specialized audiometric equipment.

Advance School Contact. In the fall of the 2013-14 school year, school coordinators³ will be sent a welcome package via Federal Express with a signature requirement. The package will include a letter describing the study activities planned for the spring, the role of the school coordinator, and instructions for providing information on the participating children. The list of children participating in the study must be sent separately from the other study materials so that, in the event of loss, the children on the list are not associated with the study, thereby protecting their identity as study participants. For the spring third-grade collection, an ECLS-K:2011 Message Center has been created to allow field staff and school coordinators to communicate personally-identifiable information (PII) electronically. The message center is a secure website accessed with a username and password that has been assigned to specific users, namely field staff (field managers, school recruiters,⁴ and team leaders⁵) and

³ The school coordinator will often be the same school staff member who acted as school coordinator in the previous data collection round. If that person is not available, then a new staff member will be identified by the school administrator to act as a liaison to the study.

⁴ School recruiters are specially-trained data collection contractor staff who recruit districts and schools into the study. They are typically used in advance school contacts because they have experience in talking with school staff and discussing logistical arrangements, as well as recruiting new transfer schools that are identified during the pre-assessment contacts.

⁵ The team leader is a specially-trained ECLS-K:2011 staff member responsible for communicating with schools and making arrangements for assessment activities; for leading a team of assessors in each school; for conducting assessments him/herself; for recording school, child, parent, and teacher information in the field management system; and for reporting assessment and parent interview production information to the

participating schools. Instructions for the school coordinator to access their information will be included in the package with the other study materials sent in the fall. School coordinators will only be able to access information and messages for their particular school. The list of participating children will then be sent to each school from the home office as an attachment to a secure message sent through the messaging system. The school coordinator will be instructed to access the secure message center, open the attached list of participating children, and provide updated child information to the team leader either via secure message or over the telephone when a field staff member calls.

During this fall contact period, an experienced team of school recruiters will work with the school coordinators to discuss the logistics of the spring assessment visit. Additionally, school recruiters will confirm whether the children on the list sent to the school are still enrolled in the school. If the school coordinator informs the school recruiter that a child has moved to a new school, the school recruiters will attempt to get the child's new school information from the school coordinator. School recruiters will also determine:

- **Assessment Dates.** The school recruiters will discuss the schedule for spring data collection with the school coordinator. The dates for the assessment schedule will be set, making sure to avoid conflicts with any special events in the school's calendar, such as a field trip or school holiday.
- **Assessment and Hearing Evaluation Locations.** The locations within the school where the assessments and hearing evaluations will take place will also be determined. The goal will be to identify locations that provide as little distraction as possible, that protect the privacy of the children, and that are as nondisruptive of the school routine as possible. If space allows, the hearing evaluations will be in a separate location than the assessments to allow for a quiet space in which to measure hearing.
- **Teachers of Sampled Children.** School recruiters will ask the school coordinator to identify the ECLS-K:2011 children's regular classroom teachers and, if applicable, special education teachers.

field manager. The field manager is responsible for the management of all data collection activities in a region of approximately 100 schools, including the supervision of approximately 10 assessment teams, quality control, and reporting assessment, interview, and hard-copy production information to the home office field directors.

School recruiters will make a pre-assessment telephone call to each school coordinator to discuss these issues, making sure to address any questions that the school coordinator or school administrator may have. A checklist of the arrangements that need to be agreed upon and the tasks to be completed will guide the pre-assessment call. As noted above, school recruiters will work with the school coordinator to schedule a spring assessment date, determine an assessment location, and identify the teacher (or teachers) of the sampled child. If any of the sampled children are identified as having changed schools, a study information packet will be sent to the school administrator of the new school and he or she will be contacted by telephone in order to recruit the school into the study and identify a school coordinator. A pre-assessment call to discuss the issues outlined here will then be conducted with the new school. Throughout these pre-assessment activities, positive and cooperative working relationships with school personnel and the school community will be maintained.

In the spring of the 2013-14 school year, the team leaders will assume responsibility for the contacts with the schools. They will call the school coordinators prior to the assessment visit to confirm the logistical arrangements for the data collection within the schools that were made during the fall pre-assessment call. (In addition to the telephone, the team leaders will also continue to use the secure message center to communicate with school coordinators on topics that are respondent-specific, such as new information about a child who has moved to a new school.)

Team leaders will also ask about the organization of instruction for fourth grade (if fourth grade is taught in the participating school), specifically whether fourth-graders receive instruction in self-contained classrooms with a single teacher teaching multiple subjects; whether team teaching where two or more teachers collaborate to teach multiple subjects to a single classroom is used; or whether the school has departmentalized instruction where students have different teachers for different subject matter courses. This information will enable the study to make a more informed decision about the best questionnaire structure to use for the teacher questionnaires in the fourth-grade data collection.⁶

⁶ There may be a change in the approach to collecting the teacher questionnaire data in fourth and/or fifth grades. Children in the upper elementary grades often have more than one teacher involved in their instruction. Although in some schools children may be taught in one classroom by one teacher who covers all subjects, it becomes more common for children in these grades to have different teachers for at least a few subject areas, such as reading and language arts, mathematics, science, or social studies. This was the

The spring third-grade hard-copy questionnaires will be mailed to each school coordinator for distribution at least 2 weeks prior to the school's scheduled spring assessment visit.

Child Questionnaire and Direct Assessment

Typically, the assessment visit will take between 1 and 3 days in each school. The number of days for the visit will depend on several factors, such as the number of participating children at the school, any restrictions on the assessment schedule (e.g., if assessments can only be conducted in the morning), and the amount of space available for simultaneous assessments. The length of the assessment visit will be worked out with the school coordinator during the pre-assessment call. Generally, the assessment team that visits the school will include the team leader and two assessors, though sometimes an additional assessor or two will participate in an assessment visit when a larger number of children needs to be assessed in a shorter time frame due to the school calendar. There will be one team per PSU. The assessment team will arrive at the school on the appointed first day of assessments and, following any of the school's required check-in procedures, immediately contact the school coordinator. The team leader will introduce the assessors to the school coordinator. The procedures to be used during the on-site data collection period will be discussed with the school coordinator to ensure there is a common understanding of those procedures. The team leader also will confirm that all sampled children are still enrolled in the school as of the assessment day and determine which children are at school that day. New school contact information will be obtained for any children who may have left the school after the preassessment call.

On assessment day, the team leader and assessors will be taken by school personnel to the assessment area(s), where they will remove potential distractions as much as possible and establish a comfortable environment for conducting the assessment. They will set up the assessment materials and log into the child assessment CAI program on the laptops that they will carry with

experience in the ECLS-K. The model used for the teacher questionnaires in prior rounds of the ECLS-K:2011, in which a single classroom teacher received questions about all three core academic subjects in a single questionnaire, may not be the best structure to use in the later grades. The purpose of the questions on organization of instruction is to obtain information that will enable the study to make an informed decision about the most appropriate questionnaire structure to use for these later rounds.

them. All field staff will be provided with backup batteries, cords, etc., to ensure that data collection activities are not disrupted by equipment problems.

Once the assessment areas have been set up and assessors are ready to begin work, the school coordinator will introduce the ECLS-K:2011 team members to the teacher(s) whose children will be assessed. The teacher, in turn, will introduce the assessors to the class. Assessors will then escort the sampled children to the assessment areas, one-by-one, and conduct each 80-minute direct child assessment. As discussed in Part A, the assessments will consist of the following: a self-administered child questionnaire; a direct assessment of reading, mathematics, science, and executive functioning; and measurement of children's weight and height, which will be obtained using instruments and equipment brought by the assessors.

As in second grade, but unlike the kindergarten and first-grade cognitive assessments, the cognitive assessment fielded in third grade will not include a language screener, an assessment of English basic reading skills, or a Spanish assessment, as it is expected that by third grade most, if not all, children will be proficient enough in English to be assessed in English.

When the assessor and study child arrive at the assessment space, the assessor will introduce the child to the task and begin the audio-CASI Child Questionnaire. The assessor will explain how to use the headphones, adjust the volume, and how to use the stylus pen to choose responses to the questions. After the child puts on the headphones, the assessor will begin the audio-CASI program. The questionnaire starts with example items to show the child how the task works and to give him/her practice choosing responses. The instructions, examples, and questionnaire items are all read to the child while the corresponding text appears on the screen. The child is able to skip questions, as well as change responses to previously-answered questions. During the CQ, the assessor will sit with his/her body averted in order to give the child privacy while responding. After the questionnaire is completed, the assessor will thank the child and then turn the computer back to face the assessor to begin the cognitive assessments in reading, math, executive function, and science, which are administered using CAPI.

After completing the cognitive assessments, the child's height and weight will be measured and then the child will be returned to the classroom (unless he or she is part of the hearing sample, in which case the child will be taken to the hearing evaluation station) and the next sampled child will be assessed. At the end of each day, once the assessors are home, the data for their completed assessments will be transmitted electronically to a central database by each team leader and assessor.

It is expected that some children will be absent from school when the assessments are scheduled. Certain days throughout the field period will be designated as days on which some field staff can conduct make-up assessments. Attempts will be made to conduct a make-up assessment at some point during the field period for all children absent on their school's assessment day.

If a school refuses to participate (e.g., the school has changed its mind and no longer wishes to participate in the ECLS-K:2011) and attempts to convert the school's refusal are unsuccessful, then the study will attempt to assess the sampled children outside of the school. Other circumstances where a child may be assessed outside of school include when sampled children transfer into a school that never agreed to participate in the study or into a school in a district that refused to allow its schools to participate, or when sampled children are no longer enrolled in a school and are being homeschooled.

Prior to assessing a child outside of school, the assessor will contact the parent to confirm that the child is enrolled in a school that has not agreed to participate in the study for the current round of data collection (referred to as a refusal school). If the parent informs the assessor that the child has transferred out of a refusal school, the assessor will collect information about the school into which the child has transferred (referred to as a transfer school), and attempts will be made to assess the child in the transfer school. However, if it is determined that the child either attends a refusal school (or a school in a refusal district) or is homeschooled, the assessor will ask the parent when and where he or she would like the assessment to take place. Possible locations for the child assessment include a library, an after-school program location, or the child's house. The assessor will try to accommodate the preferences of the parent as much as possible.

Hearing Evaluations

As noted above, during the third-grade data collection, a subsample of children will also participate in hearing evaluations. The evaluations will be conducted by trained health technicians.

The hearing screening protocol used in fall 2012 will be used again in the spring third-grade data collection, and the entire evaluation is expected to take about 15 minutes. The protocol includes:

- Asking the child a short set of hearing-related questions (appendix B);
- Conducting a brief visual inspection of the ears;
- Obtaining measures of middle ear function in both ears; and
- Obtaining specific audiometric thresholds. It is expected that initially thresholds at three primary frequencies will be obtained in each ear (2000, 4000, and 8000 Hz, with a retest of 2000 Hz for test reliability). Additional frequencies (1000, 3000, and 6000 Hz) will be obtained as time and children's attention permit.

Prior to the inspection of the ears, the trained health technician will ask the child if he or she has had a cold, runny nose, or ear pain recently. If the child reports recent ear pain, the technician will ask in which ear the pain was experienced. The technician will also ask the child if he or she listens to the TV loudly, has ear tubes, wears ear plugs while swimming, or has problems hearing. If ear tubes or problems hearing are reported, the technician will follow-up to determine in which ear the child has tubes or problems hearing. The results of these questions will aid analysts in the interpretation of the collected evaluation data. After the child finishes answering the questions, the technician will also conduct a brief visual review of both ears to determine if any abnormalities or issues are immediately apparent, as well as if any significant wax buildup is present.

During the hearing evaluation, actual hearing thresholds will be recorded for each ear separately. As part of data collection, ambient noise levels in the testing rooms will be obtained. As in second grade, the equipment specified by the cosponsoring agency for evaluating hearing and measuring ambient noise will be used.

Specialized hearing evaluation equipment will be used for testing auditory impairments. Before assignment to a health technician, each set of equipment will be professionally calibrated by staff at the National Institute for Occupational Safety and Health (NIOSH), which works closely with the ECLS-K:2011 hearing evaluation cosponsor (the National Institute on Deafness and Other Communication Disorders (NIDCD)). Health technicians will be trained in a daily equipment calibration check protocol, to be conducted each day after their equipment is set up in the school. If the equipment must be moved during the day, for example, if the location within the school must change for the afternoon, the health technician will again conduct the daily calibration check after setting up in the new space. If a set of equipment fails the calibration check in the field, the equipment will be replaced with a properly calibrated set.

A laptop will be used to capture data from the hearing evaluation. Some information will be entered into the laptop by the health technician (e.g., children's responses to the questions) while other information will be transferred directly from the specialized equipment to the laptop (e.g., results of the audiometric thresholds). In addition, data from the noise monitor will also be collected and stored by the laptop, so that background noise data can be used when analyzing the threshold data. Health technicians will be trained to transmit collected data to Westat (the data collection contractor) after each day of hearing evaluations.

Recruitment of the selected schools and their respective school districts to participate in the fall 2012 hearing evaluations was extremely successful, reflecting enthusiasm and comfort with the schools' ongoing participation in the ECLS-K:2011 main study data collection. Schools' willingness to participate also reflects an awareness of the importance of hearing health for schoolchildren. Of the 308 schools sampled for the fall second-grade hearing screenings, no school districts and only six schools refused participation.

In the fall second-grade hearing evaluations, signed or verbal parental consent was obtained for each child prior the evaluations. Consent forms, along with a letter outlining the procedures, were mailed to parents of the children in the 30 percent subsample in the spring of 2012. In the fall of 2012, parents who had not

yet returned a signed consent form were asked to give verbal consent to conduct the hearing evaluations during the parent interview; this consent was recorded. Just as consent for the assessments applies to the entire duration of the study, the consent that was obtained for the first hearing evaluation is also applicable for the evaluations planned for the spring third-grade round. Children whose hearing was evaluated in the fall of 2012 will have their hearing re-evaluated in the spring of 2014. Parents of the subsampled children will be notified of the spring 2014 hearing evaluation, as well as the next round of assessment, by letter (see Appendix H). The letter includes information about how the parent can have his or her child excluded from the third-grade screening if so desired.

For those schools in the hearing evaluation subsample, the hearing evaluations will be integrated into the ECLS-K:2011 third-grade spring data collections in the same manner as in the fall second-grade round. One health technician will accompany the assessment team to the school. Each child who is part of the 30 percent subsample will receive the hearing evaluation after the conclusion of the other assessment activities and will then be returned to the classroom.

The assessment team will coordinate the timing of the hearing evaluations in relation to the assessments. For example, the start time of the assessments of hearing sample children may be staggered on the half hour. After an assessment is completed, the assessor will lead the child to the health technician and the hearing evaluation will be conducted in 15 minutes. The assessor or the health technician will return the child to the classroom, and the health technician will then prepare the hearing screening station for the next child, cleaning the equipment and setting out fresh supplies.

Each participating child's parent will receive a letter with information about his or her child's hearing evaluation a month or two after the evaluation. The letter will have information summarizing the results of the evaluation of children's audiometric thresholds (the softest sounds he or she is able to hear) and an explanation of what the results mean. (These materials are contained in Appendix H.) Should the health technician find something of concern during the visual inspection of the ear (e.g., an unusual growth in the child's ear), the technician

will consult with a project audiologist and notify the school nurse or other school staff member on the day of the evaluation so that the child's parent/guardian can be notified right away.

Teacher and School Administrator Questionnaires

During the advance school contact in the fall and again in the spring of the 2013-14 school year, the team leader will identify the teachers of the sampled children who will be asked to complete questionnaires and enter the teachers' names into the field management system (FMS),⁷ creating a link between each sampled child and his or her teacher. This linking system was first developed and used successfully for the ECLS-K and is currently being used in the ECLS-K:2011 data collections.

Teachers will be sent a set of materials approximately 2 weeks prior to the assessment visit. These materials will consist of a letter describing the ECLS-K:2011 and a copy of the ECLS-K:2011 brochure,⁸ one teacher-/classroom-level questionnaire, one curriculum-specific questionnaire, one questionnaire for each sample child the teacher teaches, an incentive check, and instructions for completing the questionnaires and returning them to the school coordinator.

Distributing the Teacher and School Administrator Questionnaires. In the spring third-grade collection, teachers will be asked to complete three types of self-administered questionnaires; the first focuses on their background, curriculum, and instructional practices.⁹ They will also complete a curriculum-specific questionnaire, containing items asking about the amount of classroom time spent on common core reading, math, science, and social studies constructs.¹⁰ If the teacher does not teach one or more of these subjects, and

⁷ The Field Management System (FMS) is a secure web-based system designed to help team leaders manage and view their cases, enter and update case information at the school, child, parent, and teacher levels, and communicate information to the contractor's home office.

⁸ The ECLS-K:2011 brochure was approved in a previous OMB clearance package that was approved in May 2010 (1850-0750, v.8).

⁹ While most students will be in third-grade in spring 2014, not all students will be "on-grade." These data collection activities still apply regardless of the grade level of the student and teacher (i.e., off-grade students will have the same teacher questionnaires distributed to their teachers that are given to teachers of on-grade students).

¹⁰ These questions focus on concepts and skills delineated by the "Common Core State Standards (corestandards.org)," which have been adopted by 45 states and the District of Columbia as of April 16, 2013. See section C of this document for more details.

thus is unable to answer the items associated with that particular subject, she or he will be asked to pass the questionnaire to the teacher who is able to complete the items. Teachers of sampled children will also be asked to complete child-level questionnaires about the ECLS-K:2011 children in their classrooms, which indirectly assess the children's socioemotional and cognitive skills and collects other information on children's classroom and program placements. The teacher questionnaires will provide data from a source that has first-hand knowledge of the child and his/her abilities.

As described above, the school recruiter will work with the school coordinator to identify the teachers of the ECLS-K:2011 children during the advance school contact phone call. Child-level questionnaires will be mailed to the school coordinator for distribution to the children's teachers. The average number of children per teacher is expected to be about two; we have proposed that the teachers of the sampled children who are asked to complete the teacher-/classroom-level questionnaire receive an incentive of \$20 plus \$7 per child-level questionnaire, for an average incentive of \$34 per teacher. The incentives will be included in the package of instruments and instructional materials the teachers receive in the spring. Team leaders will collect completed teacher questionnaires, with assistance from the school coordinator, during the assessment visits. Once all questionnaires have been collected, the team leader will mail the completed questionnaires to the home office via signature-required Federal Express. If there are any questionnaires that are not completed by the last day of assessments in the school and hence require follow-up collection, the team leader will visit the school at a later date to collect the remaining questionnaires and use Federal Express to return them to the home office.¹¹

In the spring, the special education teachers or related service providers of sampled children who are receiving special education services will be asked to complete questionnaires about their background and qualifications. They also will be asked to answer questions about the types of services the ECLS-K:2011

¹¹If questionnaires have to be collected after the school visit is completed, the team leader will stop by the school on a prearranged date to pick up the questionnaires. However, on rare occasions, arrangements are made with the school coordinator to have questionnaires mailed to the home office. In these cases, the team leader will give the school coordinator a Federal Express mailer and prepaid label to mail the questionnaires to the home office. Such mailings may occur if a follow-up visit cannot be arranged or if the questionnaires are not completed by the time of the follow-up visit and another visit by the team leader to the school cannot be arranged.

children who have an IEP receive in a separate child-level questionnaire. The Special Education Teacher Questionnaires will be distributed and collected in the same manner as the regular classroom teacher questionnaires described above. In order to have a consistent incentive structure for all teachers participating in a school, special education teachers will also be offered an incentive of \$20 plus \$7 per child-level questionnaire, and the expectation is that each special education teacher will complete two child-level questionnaires, on average, for an average incentive of \$34 per teacher. The incentives will be included in the package of instruments the special education teachers receive in the spring.

Also in the spring, school administrators will be asked to complete a self-administered questionnaire. There will be two versions of the School Administrator Questionnaire: one for schools that completed an SAQ in a prior round of the study (“continuing schools”) and one for any school that did not previously complete the SAQ, either because the school is a new school into which an ECLS-K:2011 student has transferred or because the school did not complete the SAQ in any previous study round. In order to reduce respondent burden, the administrator questionnaire for continuing schools will not contain questions included in the SAQ in previous rounds about characteristics that are unlikely to change from year to year.

Information about the school administrator, the school staff, and the school building will be collected through this questionnaire. The questions about school characteristics may be completed by a designee, but the study requests that the principal or head administrator complete the section about his/her characteristics. The School Administrator Questionnaire will be mailed to the school administrator in advance of the spring assessment visit; on the first day of assessments at the school, the team leader will remind the school coordinator of the need to complete this instrument. The team leader for each school will collect the school questionnaire during the on-site assessment visit. School administrators will receive a \$25 incentive, which will be attached to the questionnaire when it is given to the administrator. If the school questionnaire has not been completed by the beginning of the last day on-site for assessments, the team leader will remind the school coordinator about the questionnaire once more. If the school questionnaire still is not completed by the time the team has finished its assessment work at the school, the team leader will ask for a specific date from

the school coordinator and/or school administrator by which the school administrator will complete the questionnaire. Follow-up will continue until the questionnaire has been received.

Parent Interview

The ECLS-K:2011 field staff who conduct the child assessments will also be trained to conduct the telephone interviews with parents using a computer assisted telephone interviewing (CATI) instrument. Having the same staff members conduct the child assessments and the parent interview better links the activities that take place in the school with the parent interviews, which may in turn promote greater parent participation. Similarly, an effort is made to have the same staff members interview the same parents and/or assess the same children that they worked with in previous rounds (as long as the prior interaction was positive). The list of parent interview cases assigned to each field staff member will be loaded on the laptops when field staff receive them, with new cases being transmitted as they become available (e.g., when a parent interview case gets transferred from one interviewer to another).

Flexibility in Scheduling Interviews. Procedures for conducting telephone interviews at times that are most convenient for parents and that allow sufficient flexibility will be used. To establish initial contact with a parent of a sampled child during the spring third-grade round, field staff will be trained to place two day, three evening, and two weekend calls over a 3-week period. If, after these seven call attempts, no contact has been made with the parent by telephone, the field staff will visit the child's home to explain the study and attempt to complete an in-person interview. Once telephone contact is established, up to seven additional calls will be made to complete the parent interview. If the interview is still not completed after seven calls and the respondent has not actively refused to participate, the field staff will swap cases amongst the members of their team in order to allow another interviewer to attempt an in-person interview. Sometimes having a different interviewer call from a different phone number has a positive effect on completion. During the last few weeks of data collection, cases that have not yet been contacted or completed will be attempted as in-person interviews.

Non-English Interviewing. The ECLS-K:2011 sample includes a substantial number of children from households in which the parents speak a language other than English as their primary language. Based on the data from the spring 2012 first-grade data collection, Spanish is spoken in the majority of these households. Of the 12,992 completed spring 2012 parent interviews, 1,582 were completed in a foreign language. Of those, 1,410 (or 89 percent) were completed in Spanish. Therefore, as was done for the ECLS-K:2011 kindergarten, first-, and second-grade data collections, the parent interview will be fully translated into Spanish and field staff will be recruited who are bilingual in Spanish and English to conduct parent interviews in Spanish. A number of Asian and other languages were also identified in the kindergarten data collections as spoken by parents of sampled children, but in much smaller numbers. It is cost-prohibitive to develop a full translation of the parent interview for less common languages and identify and train bilingual staff that represent all languages spoken by ECLS-K:2011 families. Therefore, the primary approach for conducting parent interviews in non-English, non-Spanish languages in the ECLS-K:2011 has been to identify someone in the household or community to provide a translation during the administration of the parent interview. All translators must sign an affidavit of nondisclosure prior to working on the project and are paid for their time. Over the course of the previous rounds of data collections, interpreters have been identified for the less common languages that are spoken by sampled children’s parents; they will serve as interpreters for the spring third-grade data collection as needed, if they are still available.

B.3 Methods to Secure Cooperation, Maximize Response Rates, and Deal with Nonresponse

This section describes methods for securing cooperation and gaining consent for the spring third-grade round of the ECLS-K:2011 and the methods that will be used to maximize completion rates for child assessments, parent interviews, and school administrator and teacher questionnaires in this round.

A major challenge in any survey today is obtaining high response rates, and this is even more important in longitudinal surveys where nonresponse can occur at multiple time points. As in most longitudinal surveys, attrition is closely associated with those persons who move between waves; however, as mentioned earlier, “moving” in the ECLS-K:2011 is defined as a change in the school the

sampled child attends, whether or not the child's residence changes. In the ECLS-K, 25 percent of children changed schools between kindergarten and first grade, and by the fifth-grade round, 56 percent of children were in different schools than they were in for kindergarten. By the end of the spring first-grade data collection, the percent of students who moved out of their original sample schools (at any point after fall kindergarten) was 23 percent.

The main problem associated with nonresponse is the potential for nonresponse bias in the estimates produced using data collected from those people who do respond. Bias can occur when the people who do respond are systematically different from the people who do not. Two approaches that will be used to reduce the potential for bias are designing the data collection procedures and methods wisely to reduce nonresponse (e.g., being flexible in scheduling parent interviews) and using statistical methods of sampling and weighting to reduce the effect of nonresponse on the estimates. While the statistical approaches are important in controlling biases and costs, the data collection procedures and methods are at the heart of a successful longitudinal survey.

B.3.1 Gaining Cooperation from a Variety of Sources

Cooperation issues loom large in any major school-based survey today. The demands of required testing, which have increased since the enactment of ESEA 2002, may reduce time for and willingness to participate in voluntary studies like the ECLS-K:2011, such that districts and schools may be increasingly less likely to cooperate. Parents are increasingly skeptical about the value of surveys and non-required tests for their children. Teachers and school administrators are heavily burdened and often reluctant to spend time on non-teaching activities or other activities required as part of their position. The additional burden of a longitudinal survey (and the need to communicate clearly to parents and schools the expected burden of participation in a longitudinal survey) makes securing cooperation even more challenging. The earlier rounds of the ECLS-K:2011 are paving the way for concerted follow-up efforts in later rounds by collecting high quality data that will help maintain cooperation and track movers.

The data collection plan approaches the school as a community. We aim to establish rapport with the whole community—school administrators, teachers, parents, and children. The school community must be approached with respect

and sensitivity to achieve high response rates and maintain cooperation for future rounds of data collection.

The ECLS-K:2011 field staff have been trained that all tasks—securing school and teacher cooperation, completing parent interviews, and completing the child components—are but different aspects of a single case in their assignment, which is their responsibility to complete. Therefore, field staff will be responsible for conducting the direct child assessments and child questionnaires as well as the parent interviews and any required follow up on the teacher and school administrator questionnaires. (Health technicians will only be responsible for conducting the hearing evaluations.) Also, incentives have proven to be effective tools in achieving high response rates, and we plan to offer monetary incentives to various respondents, as described in section A.9.

Based on the experience from the ECLS-K, most families who participate in kindergarten continue to participate in the later rounds, presumably because they feel invested in the study. Similarly, schools typically continue to participate once they participate in one round. The fact that parents have given consent to the longitudinal study is an incentive for schools to continue participating. In addition, many school coordinators are instrumental in maintaining school participation and recruiting new teachers into the study in later rounds because they see the value in the information collected and, as a result, serve as an advocate for the study in the schools.

B.3.2 Methods to Maximize Response Rates

Parent Interviews

Prior to data collection, as the parent interview is developed, careful consideration is given to the length of the interview, as well as the actual questions that are included in the instrument. By streamlining the interview as much as possible, and including relevant, concise questions, the effort needed to complete the questionnaire is reduced, which in turn helps to increase response rates.

There are four main areas during the field period itself that are also emphasized in order to maximize completion rates for the parent interviews: (1) flexibility in

scheduling interviews, (2) non-English interviewing, (3) locating parents of children who transfer schools, and (4) avoiding refusals, including converting initial refusals to completed interviews.

Review of Timings Data. The average length of time to complete the previous round's interview, as well as each section of the instrument, is carefully reviewed to determine if questions should be cut entirely or simplified to keep the interview to the desired time. After a first draft of the interview is developed, timings tests with project staff are conducted to obtain a general idea of the length so that further cuts can be made if needed. Completion rates typically improve when the interview is shorter in length.

Consideration of Questions. As the instrument is developed, consideration is given to which questions asked in prior rounds do not need to be asked again, are no longer relevant due to the age of the children, or that have been reported to be overly burdensome or sensitive. As much as possible, the interview is streamlined so the questions included are straight-forward and easy for respondents to answer. In addition, skip patterns based on answers to questions that appear earlier in the interview or even in a previous round are built into the interview so that not all questions need to be asked of all parents.

Flexibility in Scheduling Interviews. Effective calling patterns are essential for achieving high response rates on all telephone surveys. Previous experience shows that individual respondent schedules (work, classes, recreational activities, vacations, etc.) have a more negative effect on response when call attempts are limited to a short time span. A larger percentage of the cases that are noncontacts after the first call attempt will be converted to a successful contact if the call attempts are distributed across a longer time span. Completion rates improve when interviewers call on different days of the week and at varying times of the day and evening.

To establish initial contact with a parent of a sampled child during the spring third-grade round, field staff will be trained to place two weekday, three evening, and two weekend calls over a 3-week period. These calls will be made in a nonsequential set of targeted time periods called “time slices.” The time slices and required number of calls are as follows:

	<u>Required Number of Calls</u>
■ Weekday 10 a.m. to 3 p.m.	1
■ Weekday 3 p.m. to 6 p.m.	1
■ Weekday 6 p.m. to 9 p.m.	1
■ Weekday 6 p.m. to 7:30 p.m.	1
■ Weekday 7:30 p.m. to 9 p.m.	1
■ Saturday or Sunday, 10 a.m. to 8 p.m., on separate weekends	2

If after seven call attempts no contact has been made with the parent, the field staff will be instructed to review the case with the team leader for additional instruction on how to proceed. The team leader may instruct the field staff to do one or more of the following: (1) send an email or handwritten note to the parent; (2) contact the school coordinator to see if the school can help or offer any insight into contacting the parent; (3) attempt to contact the parent using alternative contact information or methods listed for the parent, if any (i.e., call another phone number); (4) contact the nonresident parent, if applicable; (5) assign the case to another field staff member for a fresh approach and a new voice; or (6) conduct an in-person visit to the parent’s home.

Once contact is established, up to seven additional calls will be made to complete the parent interview. If the interview is not completed after these seven additional calls and the respondent has not explicitly refused, the field staff may be instructed by their team leader to attempt an in-person interview. During the last few weeks of data collection, noncontact and uncompleted cases will be visited in-person as appropriate.

Non-English Interviewing. In the spring first-grade data collection the ECLS-K:2011, 12 percent of the 12,992 completed parent interviews were conducted in

a language other than English. To achieve high response rates, it is important that study procedures work to include these parents to the greatest extent possible. As described in the data collection procedures section, we will hire and train field staff who are bilingual in Spanish and English to conduct fully translated parent interviews in Spanish and use home and community interpreters, as available, for interviews in non-English, non-Spanish languages. As mentioned above, if a household or community translator is not available, another approach we can employ is to identify bilingual staff working in Westat's Telephone Research Center (TRC) to conduct parent interviews.

Locating Parents of Transfer Children. Locating parents of transfer children is critical for maintaining high completion rates for parent interviews overall and helps reduce nonresponse bias. It is expected that a substantial portion of participating children will transfer schools between rounds of data collections. A tracking system database with household contact and school information was developed at the beginning of the study and the sample tracking activities described in Part A will be conducted to locate children who transfer schools. Maintenance of this tracking database will be an important activity for the lifetime of the study, with updates of new information occurring through the final data collection round.

If children transfer to a school that is outside of a sampled PSU, they are not assessed; however, interviewers still attempt to contact the parent and conduct the parent interview, thereby retaining these cases as study participants. If the child transfers to a school that is in a sampled PSU, an attempt is made to complete all components of the study.

Refusal Avoidance and Conversion Procedures. Achieving an acceptable parent response rate will require active and effective refusal conversion efforts. Given that most of the parents will have participated in previous data collection rounds, a key factor in converting refusals is the ability of the team leaders and assessors to clearly and confidently convey the purpose of the repeated data collections and the importance of parents' continued participation in the study, including the benefits that will be derived from it. This will be a focus of the field staff training. The training materials for averting refusals direct field staff to become thoroughly familiar with the study and include activities designed to help

field staff: 1) answer frequently asked questions (FAQs) and respond to respondent objections, 2) draft responses to FAQs in the interviewer's own words, 3) practice saying these responses, and 4) diagnose respondent objections and quickly respond with a response tailored to the objection. The training includes modules on preparing answers for different situations, using the voice effectively, and role-plays between trainers and interviewers. Additional training will cover how to avert refusals, focusing specifically on addressing reasons for refusals on the parent interview component of the ECLS-K:2011 study.

During the parent interview data collection period, team leaders and field managers will review initial refusals (i.e., a refusal by a respondent after the first recruitment effort) with the field staff, putting a particular emphasis on reviewing the interviewer record of calls, which will be available to supervisory staff (i.e., team leaders and field managers) on a weekly basis. If a parent refusal occurs, the interviewer will be instructed to record key demographic information about the refusing respondent (e.g., sex, approximate age) and the respondent's reason(s) (if given) for refusing to participate. This information will be evaluated by the team leader to determine the best strategy for converting refusals. Cases identified for refusal conversion will be assigned to a select group of field staff identified as possessing the necessary skills to act as refusal converters. During data collection, field managers will hold telephone conferences with the identified field staff to review the refusal conversion procedures and discuss strategies for converting refusals.

Child Questionnaires, Assessments, and Hearing Evaluations

There are two main areas that can be focused on in order to maximize completion rates for the child questionnaires, assessments, and hearing evaluations:

(1) conducting make-up assessments with children who are absent on scheduled assessment days, (2) locating transfer children, and (3) assessing children at home.

Absent Children. It is expected that some children will be absent from school during the time that assessments are scheduled at their school. Days on which some field staff have no assessments scheduled will be set aside throughout the field period so that those staff can conduct make-up assessments. A make-up assessment will be conducted for any child who is unable to be assessed during

his/her school's scheduled assessment day(s) and who can be assessed at some other point during the field period. If an in-school make-up assessment cannot be scheduled, team leaders will contact parents to make arrangements to assess these children outside of school, if possible.

Locating Transfer Children. As is the case with the parent interview, locating transfer children and the new school in which they are enrolled is critical for maintaining high completion rates for child assessments overall and reducing nonresponse bias.

There is an additional consideration with locating children who transfer schools, which is the need to contact their new schools and teachers and encourage them to participate (if a child transfers to a school not already participating in the ECLS-K:2011), thereby allowing the children to be assessed in the school. This issue is discussed further in the next section.

Assessing Children at Home. As children transfer, they may move to schools that decide not to participate in the study. In these cases, every effort is made to assess the child at home or in a neutral location, such as a public library. Often the field staff can interview the parent in-person before or after the assessment as well. Assessing children at home allows for the inclusion of these children in the study, even when schools decline to participate in the study.

School and Teacher Instruments

There are three main areas that can be focused on in order to maximize completion rates for the teacher and school administrator hard-copy instruments: (1) early distribution of instruments to schools and teachers, (2) effective communication of the importance of school administrator and teacher participation to school personnel, regardless of whether they participated in a prior round, and (3) efforts made by field staff to avoid refusals and to convert initial refusals to cooperating respondents.

Early Distribution of Instruments. Feedback from school administrators and teachers in the ECLS-K indicated that there would have been increased study participation if they had had more time to complete the hard-copy instruments. Along with an increased honorarium model, the distribution of the questionnaires early enough in the school year to allow staff sufficient time to complete them is critical. For the spring third-grade data collection, most of the sampled children's regular classroom and special education teachers, as well as the school administrators, will be identified during the advance school contact in the fall of the third-grade school year. School and teacher questionnaires, along with the

incentive checks, will be sent in February of the school year, to allow sufficient time for these respondents to complete and return the instruments to their school coordinator for field staff to collect on assessment day.

Effective Communication with School Staff. The participation of school administrators and teachers (especially new school administrators and teachers, either at schools to which study children have transferred or at schools that participated in the earlier rounds) can be increased by effectively communicating information about the ECLS-K:2011, including the goals of the study, what the study measures, the various study components, why it is important that schools and teachers participate, the study activities to date, study plans for the future, and selected results from the ECLS-K and ECLS-K:2011. Effective respondent materials, as well as telephone contact by school recruiters who are trained to convey this information efficiently and completely, will help maximize the participation of schools to which sample children transfer. In addition, parental consent was recorded for all children who had a completed parent interview in the kindergarten data collection, so a record of consent will be available for their new schools.¹² If children with a completed parent interview move into a new school, his/her recorded consent will be reviewed and verified by project staff and a hard-copy consent form will be produced documenting the recorded consent. This recorded consent should make it easier to recruit new schools and teachers to participate, because they will have written documentation of the parent's consent for the student to participate in the study.

A similar process was followed in regards to the parental consent for the hearing evaluations. Consent for the study's hearing evaluations was initially sought in the spring of the first-grade round. At that time, parents were mailed active parent consent forms that they were asked to sign and return to the school in order to indicate permission had been granted. In cases where a signed consent form was not received, the parent was asked to give verbal consent, which was recorded during the fall 2012 parent interview. School staff will be reminded that the children sampled for the third-grade hearing screenings already have parental permission for their participation.

¹²Roughly 70 percent of the schools required that the study obtain active parent consent for the child's participation. Other schools required only passive consent in which the parent was sent a notification consent form for the parent to return only if s/he objected to the child's participation. The study followed the consent procedure required by the school or district. If a child transfers from a school that requires passive consent to a school that requires active consent, and recorded consent is not available because the parent interview was not completed for that child, field staff will contact the parent and attempt to obtain a signed consent form.

Avoiding Refusals and Converting Initial Refusals. Team leaders will be trained to maximize the response rates for the hard-copy instruments, which will include being flexible in the timing in which they collect the questionnaires from teachers, following up with the school administrators and teachers to prompt the completion of the questionnaires, and returning to the school after the assessment visit to pick up questionnaires from school coordinators or other school staff. Team leaders will be trained to apply the general refusal aversion techniques to the collection of hard-copy questionnaires. These techniques will include analyzing the reasons for refusal, responding appropriately, and using their voice effectively.

District and school personnel have stated that they face increasing demands upon their schools for a variety of noninstructional activities, including requirements for state and district assessments. Sensitivity to these concerns is essential to gaining cooperation for the ECLS-K:2011, and it must be made clear to school system personnel at all levels that the ECLS-K:2011 staff is more than willing to work with them to facilitate their participation with the least burden and disruption possible.

Statistical Approaches to Nonresponse

One of the methods employed to reduce the potential for nonresponse bias is adjustment of the sample weights. If people with certain characteristics are systematically less likely than others to respond to a survey, the collected data may not accurately reflect the characteristics and experiences of the nonrespondents, which can lead to bias. To adjust for this, respondents are assigned weights that, when applied, result in them representing their own characteristics and experiences as well as those of nonrespondents with similar attributes. After the base year, the weights are also raked to sampled-based control totals in order to maintain the background characteristics of the sample. This is another method used to reduce the potential for nonresponse bias in the estimates produced from the data.

As described above, the study will subsample movers using a scheme that follows some groups of students at higher rates than other movers to protect the sample sizes and statistical power for analyzing these groups of children. The subsampling in and of itself does not reduce nonresponse bias; rather by

subsampling, the same fixed resources can be allocated to a smaller number of children so that higher response rates for subgroups can be achieved. The higher response rates lessen the potential for nonresponse bias to exist in the data.

Response rates will be computed for all the instruments fielded in the study. Data collected through any instrument with a response rate less than 85 percent will be evaluated for nonresponse bias. In addition to comparing the characteristics of respondents and nonrespondents using data that are available from the sampling frames (for example, school type and school locale from the school frame for evaluating bias at the school level, or student background characteristics collected from the school for student sampling for evaluating bias at the student level), we will also compare study estimates to estimates from other available sources that include a similar population (for example, estimates common to the ECLS-K:2011 and the National Household Education Survey). The nonresponse bias analysis will be similar to the analyses conducted for the ECLS-K and earlier rounds of the ECLS-K:2011, and that were reported in study methodology documentation (for the most recent ECLS-K methodology report published, see <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009003>).

B.4 Individuals Responsible for Study Design and Performance

The following individuals are responsible for the study design and the collection and analysis of the data for the ECLS-K:2011.

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The ECLS-K:2011 Instrument Details

C.1 Introduction

This section provides information about the general contents of the ECLS-K:2011 parent interview, the regular classroom and special education teacher questionnaires, and the school administrator/principal questionnaire. Appendixes A (Child Questionnaire), C (Parent Interview), D (Teacher Questionnaires), and E (Special Education Teacher Questionnaires), F (School Administrator Questionnaire), and B (Child Questions for Hearing Evaluations) include the final survey instruments for the national spring third-grade data collection. Appendix G summarizes the links between items in the instruments, constructs, and research questions.

The design of the ECLS-K:2011 and the survey instruments is guided by a conceptual framework of children’s development and learning that emphasizes the interaction among the various environments which children experience and the resources within those environments to which children have access. For this reason, the study collects information on a wide array of topics, including the characteristics of the child, the child’s family, the community, nonparental care and education arrangements, and the child’s school and classroom environments. The ECLS-K:2011 uses data from multiple respondents (e.g., parents, teachers) so that information about each of the environments children experience can be collected from the people most likely to provide accurate and reliable data. The respondent interviews and questionnaires included for the spring third-grade round of the study and the general topics covered in each include:

- **Parent Interview**—to be administered to the parents/guardians of children in the study. In the spring of third-grade, the parent interview includes questions about parent involvement with the school; family structure; whether a language other than English is spoken in the home; the home environment; before-and after- school care; nonresident parents; parental warmth; discipline; communication with the child; household food security; parent education; parent employment; and household income. Parents also report on their children’s experiences with peer victimization, as well as their physical activity, health, and any disabilities the children may have. New to the third-grade data collection are questions about whether the parent monitors that the



child's homework has been completed, the child's specific ethnic origin (that is, to what specific Hispanic, Asian, or Pacific Islander group the child belongs, such as Puerto Rican, Chinese, Samoan, etc.), how many hours of sleep the child gets on weeknights, and whether parents have been (since the child was born) or currently are on active duty in the military; questions to assess the child's working memory; and questions about whether the child has been on field trips focused on science activities.

- **School Administrator/Principal Questionnaire**—to be completed in the spring third-grade data collection by the school administrator or principal of each school attended by a child in the study. This instrument includes a broad range of questions about the school setting; policies, programs, and practices at the school level and in third grade; and questions about the school administrator/principal and about the teaching staff. No new constructs have been added to in the third-grade questionnaire, though an item about measures taken to ensure school safety has been expanded to ask about additional measures.
- **General Classroom Teacher Questionnaires**—to be completed by classroom teachers of children in the study. In the spring of third-grade, there are three teacher questionnaires.
 - The teacher-/classroom-level questionnaire (TQC) includes questions about the classroom and student characteristics, class schedules, technology, and instructional practices. It also includes items on the teacher’s background, teaching experience, and attitudes about teaching and the school climate. A new construct being introduced for third grade is a classroom-level measure of student difficulties, including lack of attention, lack of self-control, rejection by peers, and not accepting authority. This questionnaire will be completed by the general classroom teacher or by the teacher with whom a sampled child spends the most instructional time. (See Part B for further information questionnaire distribution.)
 - The curriculum questionnaire (TQS) contains questions about the skills taught in the reading, math, science, and social studies curriculum for this grade. For reading, math, and science, these skills are based on nationally-recognized curriculum criteria, developed by groups of states. This questionnaire will be answered entirely by the general classroom teacher if he/she teaches all four curriculum areas. If he/she teaches any of the subject areas, he/she will respond to the items relevant to those subjects. For subject matters he/she does not teach, if any, he/she will be instructed to pass the questionnaire to a teacher who teaches that subject(s) to at least one of the sampled children.
 - The child-level questionnaire(TQC) is answered by the general classroom teacher and has questions specifically about each study child and includes the teacher’s assessment of the child’s academic and cognitive abilities, behaviors, and social skills, as well as information about whether the child experiences peer victimization or engages in aggressive behaviors, the child’s program placements, and any specific services that each child may receive. Two new constructs have been added for third grade – aspects of the child’s relationships with peers and the nature of the child’s

working memory, an aspect of executive function (see descriptions in the parent interview section and the child-level teacher questionnaire).

- **Special Education Teacher Questionnaires**—to be completed in the spring third-grade data collection by the special education teacher or service provider for children in the study who have an Individual Education Program (IEP). There are two questionnaires for the special education teacher. The first questionnaire includes questions about the teacher’s background, training, and school assignment. The second questionnaire has questions about the study child who has an IEP, including items about child’s disability and services the child receives. . No new constructs are included in the third grade Special Education Teacher Questionnaires.

The data from these instruments can be used in conjunction with the data obtained in the ECLS-K:2011 direct assessments, along with the data from the questionnaires and interviews from previous rounds of the ECLS-K:2011, to answer a wide variety of research questions about how home, school, and neighborhood factors relate to children’s cognitive, social, emotional, and physical development over time. The following sections include research questions that may be addressed with the data from each instrument as well as a discussion of some of the important topics covered by each instrument.

C.2 ECLS-K:2011 Parent Interview

The children in the ECLS-K:2011 come from a broad range of family and community backgrounds and enter school with widely differing abilities and levels of preparation for school. Understanding these variations and examining the ways in which home and school environments interact in relation to them as children progress through school is a key goal of the ECLS-K:2011. Conducting interviews with parents is central to obtaining the information necessary to measure these constructs over time. The ECLS-K:2011 defines the parent to be interviewed as the child’s parent or guardian in the household who knows the most about the child’s care, education, and health.¹³ If the parent or guardian is not available during the field period, or if there is no parent or guardian, another adult who knows about the child’s care, education, and health is selected as the respondent.

¹³ After the first round of data collection, interviewers ask to speak with the previous round’s respondent. If that person is not available during the field period, the interviewer asks to speak with someone who is available and is knowledgeable about the child’s care, education, and health.

C.2.1 Spring Third-Grade Parent Interview

Research questions related to the ECLS-K:2011 spring third-grade parent interview are shown below.

C.2.1.1 Spring Third-Grade Parent Interview: Research Questions

- PQ1: What is the status of children’s development (as defined by cognitive, social, and emotional development; behavior; and physical status measures)? How does children’s development vary by child and family social, demographic, and contextual characteristics at the end of the third-grade year?
- PQ2: How are variations in children’s developmental status (as defined by ECLS-K:2011 cognitive, socioemotional, physical, health, and disability measures) at the end of third grade related to later success in school?
- PQ3: How do family sociodemographic and contextual characteristics influence later success in school within and across outcome domains and within sex and racial/ethnic subgroups?
- PQ4: How do family processes and parenting practices (e.g., home environment, family activities, and cognitive stimulation) relate to children’s developmental status and social and emotional adjustment? How do critical family processes and parenting practices influence later success in school?
- PQ5: How does parental involvement in children’s education relate to school performance over the course of the early grades? Do parental involvement levels differ by family social, demographic, and contextual characteristics? What forms of parent involvement are most influential for children’s outcomes? What school factors are related to parental involvement? How do schools respond to the needs of parents with little or no English proficiency? Are school or teacher practices to involve parents associated with higher levels of parent involvement?
- PQ6: What are children’s patterns of participation in before- and after-school care up to the end of third grade? How do before- and after-school care arrangements differ by family sociodemographic factors, SES, and race/ethnicity? How are these arrangements related to children’s progress through school? How does participation in early care and education in the year before kindergarten relate to participation in before- and/or after-school care during third grade (e.g., in what ways are these arrangements similar or different)?

C.2.1.2 Spring Third-Grade Parent Interview: Construct Coverage

Child Characteristics

Background information about study children was collected in the ECLS-K:2011 starting in fall 2010. Because of this, the child's sex and date of birth/age are not collected again in spring 2014. However, data for the child's race and ethnicity will be collected if they are missing from previous rounds. In addition, the parent interview will ask more specific questions about the child's ethnic group.

The spring-third grade parent interview includes questions about:

- Child's race and ethnicity; and
- Specific Hispanic, Asian, or Pacific Islander group the child is in, such as Puerto Rican, Chinese, Samoan, etc.

Parent's Involvement with the Child's Education

Parental involvement in education has proven to be a critical influence on school outcomes for children (Stallings and Stipek 1986; Hoover-Dempsey and Sandler 1997; Gonzalez-DeHass, Willems, and Holbein 2005). However, parent involvement is not a single construct but rather refers to many diverse types of home-school interaction. One type of parent involvement involves parents managing their child's education by monitoring whether homework has been completed and obtaining tutoring for a child, if he or she is having difficulties in school. Other ways that parents are involved with their children's education is in their interaction with teachers and through participation in organized school activities. Parents are also involved with their children's education by choosing a school for their children, and in some cases by deciding to homeschool their children for all or some of their classes.

The research on parent involvement describes not just how parents are involved with schools but also how schools work to involve parents. The reauthorization of the Elementary and Secondary Education Act (ESEA) (No Child Left Behind, or NCLB) specifically mentions the need for states to consider proven practices for involving parents in the education of their children. The ECLS-K:2011 will ask parents about school practices designed to communicate with parents about their child and increase parental involvement.

The following data about parent involvement and school practices to involve parents in their children's education will be collected from the parents:

- Parent's choice of a school for the child;
- Parent attendance at parent-teacher conferences and meetings;
- Parent participation in school activities;
- Parent volunteering at the school;
- School practices to communicate with parents and encourage involvement;
- Parent networks;
- Parent's satisfaction with the teachers and school;
- Frequency the child does homework at home; and
- How often parent or someone else checked that the child completed homework.

Parental Beliefs and Expectations

Parents' beliefs and expectations about their children are other areas of interest in the ECLS-K:2011. Mother's educational expectations have been shown to be positively related to children's academic interests as they proceed through school, and academic interests are, in turn, related to school performance (Dotterer, McHale, and Crouter 2009). Parent educational expectations can be related to children's academic outcomes in spring-third grade and later years as the study continues.

One question about parent expectations will be included in the spring-third grade parent interview:

- Parent's educational expectations for how far the child will go in school (high school, college, etc.)

Family Structure

Family structure affects the economic, social, and psychological resources available to the family for child rearing purposes. In 2010, 31.6% of families headed by a single mother were in poverty, compared to 6.2% of families with married parents (National Poverty Center n.d.). Research indicates that a wide range of outcomes for children under 18, including academic performance, mental health, behavior, and relationships with parents and peers are more optimal in families composed of two biological parents who interact with minimal conflict than for children who do not live with both biological parents (Dawson 1991; McLanahan and Sandefur 1994; Peterson and Zill 1986; Morrison and Cherlin 1992). Also, having the additional support of another adult appears to be beneficial to children without a second biological parent in their household. Dunifon and Kowaleski-Jones (2007) found that the presence of a residential grandmother in single-mother homes was associated with greater cognitive stimulation and higher reading scores, although this association was only found for White children.

Effects of family structure are not static. Structural conditions need to be looked at over time, because family turbulence—changing schools, residence, family composition, or even early care and education arrangements—can have a negative influence on children's outcomes (Haurin 1992; Peterson and Zill 1986; Howes and Stewart 1987). However, there is recent evidence suggesting that after accounting for other parental factors, remarriage after divorce may have benefits for children's academic achievement (Shaff, Wolfinger, Kowaleski-Jones, and Smith 2008). The longitudinal nature of the ECLS-K:2011 makes it ideal for investigating the impact of change in family composition over the course of children's elementary school years.

The ECLS-K:2011 will gather data on the following aspects of family structure:

- Current household roster;
- Change in family relationship of key parent figures to the child (e.g., became adopted);
- Marital status of the primary caretakers;
- Information about why people who were in the household in a previous round of collection have left the household;
- Tenure at current address (based on how many data collection points the child has the same address); and
- Family structure change and loss (e.g., remarriage, divorce, and death).

Parent Characteristics

Basic parental demographic information will include:

- Parent's sex, age, and race/ethnicity (if not collected in a prior round);
- Parent's health; and
- Parent's vital status (collected indirectly by asking about contact with a biological/adoptive parent who does not live in the household or collected when a parent/parental figure identified in a previous round is no longer in the household).

Immigration Status

Differences have been found in cultural ideals among immigrant groups regarding child-rearing beliefs, the meaning and importance of cognitive ability, and educational objectives in the early grades (Okagaki and Sternberg 1993). To address issues regarding immigration status, the ECLS-K:2011 will gather the following information for focal children in the third grade if it had not already been collected in a prior interview:

- Country of origin for parents and sample child;
- Length of residence in U.S. for parents and sample child; and
- Citizenship of the child.

Home Language

It is of interest to know how young children in homes where the primary language is not English acquire English language skills. One study found that children who started school classified as English language learners (ELL), but were reclassified as English proficient later in elementary or middle school, performed similarly on achievement tests in high school compared to those who started school speaking English, and performed better on achievement tests compared to those who were never reclassified as English proficient (Flores, Painter, and Pachon 2009). The parent interview will include questions about the home language(s) of the study children and the English proficiency of the parents. Researchers can consider the language environment at home along with information from the school and teacher questionnaires about the child's instructional environment to better understand the interplay of factors related to ELL children's academic progress.

The parent interview includes questions about:

- Whether a language other than English is spoken in the home;
- How often parents speak a language other than English to the child; and
- How often the child speaks a language other than English to the parents.

Home Environment, Activities, and Cognitive Stimulation

The environment parents create in the home and activities conducted with their children represent a direct linkage between parental characteristics and the child's development. The parenting practices of the mother are closely associated with the development of the child (Maccoby and Martin 1983), but the practices of the biological father and other parent figures in the household such as step-parents and grandmothers have been shown to also play a role in children's development (e.g., Dunifon and Kowaleski-Jones 2007).

Many parent-child activities have been linked to children's achievement in school, for example with respect to literacy. In the ECLS-K, children's literacy was positively correlated with the frequency with which parents read to their children (Almond and Holt 2005; U.S. Department of Education 2000; Sy and Schulenberg 2005) and also with nonliterary, social activities (e.g., teaching children about

nature, doing arts and crafts, parents and children eating breakfast together) (Almond and Holt 2005). Other activities related to children's reading achievement in the ECLS-K have been the parent telling stories to the child, going to the library, going to museums, and the number of books in the home (Almond and Holt 2005). The amount of time children spend reading themselves has also been related to reading achievement (Mullis, Campbell, and Farstrup 1993).

Having access to a computer in the home is another valuable resource for children. Based on data from the ECLS-K, 53 percent of kindergartners in the kindergarten class of 1998-99 had a computer at home that they could use and by the third grade 81 percent of them had access to a computer at home. Espinosa et al. (2006) looked at how many children had and used computers at home, in addition to the number of books in the home and the amount of television the children watched. By the third grade, most children had a computer at home, and most of the computers were connected to the Internet. However, children whose parents had a higher education and income level had more access to computers and the Internet, and more books at home, than children whose parents had a lower education level and income. Among those with the lowest socioeconomic status (SES), 46 percent of children used a computer at home. Among those with the highest SES, 96 percent used a computer at home. Also, having a computer available at home and having more books in the home were related to how well children did on the ECLS-K reading and mathematics assessments. The ECLS-K:2011 data will be an important source of information about how children's environments – especially with regard to computer access and use – have changed over the past twelve years. Because computers are now available in many different forms, including various handheld devices such as cell phones, questions about computer use in the ECLS-K:2011 have been modified to allow for home computers and other electronic devices. Also, in addition to asking about how many hours a day children watch television, the study will also ask about how many hours a day children play games on computer devices.

The spring-third grade ECLS-K:2011 parent interview will also ask about the hours of sleep children generally get on a school night. Sleep has been related to many different children's outcomes including achievement (Eide and Showalter 2012), depression (Smaldone, Honig, and Byrne 2007), and body mass index (BMI) (Snell, Adam, and Duncan 2007).

The following information collected in the ECLS-K:2011 parent interview will address research questions concerning how the home environment influences children's cognitive and social development:

- Number of books in the home;
- Frequency of reading by the child;
- Use of a home computer or other electronic device to teach the child something such as reading or math skills;
- Tutoring;
- Child's activities outside of school hours (including new items about science-related field trips taken with organized clubs or as part of academic activities outside of school hours);
- Frequency with which the family eats dinner together; and
- Number of hours of sleep child gets on school nights.

Peer Victimization

A study of bullying, a construct closely related to peer victimization, by the National Center for Education Statistics found that 30 percent of middle and high school students reported being bullied once or twice at school in the 2010-2011 school year (United States Department of Education forthcoming). The study also found that among middle and high school students surveyed in 1999 and 2011, several indicators of bullying declined. These included the rate of hate-related words used; hate-related graffiti, being afraid of being harmed or attacked at school; and avoiding particular places at school (although for 10th graders and Latino students, avoiding particular places at school because of fear increased). Fewer studies have been done with younger children, but those that have been published suggest that bullying is experienced by many children and is related to negative outcomes. Glew et al.'s (2005) study of third through fifth graders found that 22 percent of children were classified as victims, bullies, or both. Victims, and children who were both bullies and victims, had lower achievement scores and were more likely to feel like they did not belong at school compared to bystanders (Glew et al. 2005). Kochenderfer and Ladd (1996) found a relation between victimization and school adjustment outcomes, with victimization related

to children's loneliness and desire to avoid school. Given these findings and the current White House anti-bullying initiative, having the ECLS-K:2011 collect information about peer victimization in this national sample of elementary school children would be useful. The parent interview includes questions about:

- Physical, verbal, relational, and indirect social peer victimization.

Parent's Psychological Well-Being and Health

Current maternal depression is related to mothers' reports of children's externalizing problems (Moore et al. 2006), internalizing problems, and children's own report of depressive symptoms (Tompson, Pierre, Boger, McKowen, Chan, and Freed 2010). Parents who are depressed or highly stressed are less likely to provide emotional support and more likely to employ harsh disciplinary practices (Puckering 1989; Moore, Zaslow, Miller, and Magenheim 1995). In the spring of kindergarten, findings from the ECLS-K showed that 6.4 percent of children had mothers who indicated they had symptoms of depression, with more mothers in lower-income families reporting symptoms than those in higher income families (Moore et al. 2006).

The parent interview will include questions about parent's psychological and physical health including:

- Depression and subjective well-being; and
- Respondent's general health status.

Food Sufficiency and Food Consumption

Adequate nutrition is critical for children's growth and development. Children in families with low income levels or who are below the poverty level, children of adolescent mothers, and children whose parents are receiving welfare may be at risk of undernourishment. Families' economic status is significantly associated with food insecurity and food insecurity is associated with children's health and behavior difficulties (Dunifon and Kowaleski-Jones 2003). The food sufficiency and food consumption items in the ECLS-K:2011 are from a well-established measure used by the USDA to describe the level of food security or insecurity in the household. In order to reduce respondent burden, a shorter 10-item version of

this measure suggested by USDA will be used to measure adult food security (which can be used to predict child food security) in the spring third-grade round.

The items ask about:

- Ability to purchase food sufficient for family needs; and
- Frequency that adults in the household do not have sufficient food.

Parent Education and Human Capital

Parents' education - especially mothers' education - has a strong relationship with children's cognitive abilities at the beginning of kindergarten (U.S. Department of Education 2000; Lee and Burkam 2002) and as children progress through school (Rathbun and West 2004). Studies have shown that maternal education is a strong predictor of the amount of time mothers spend playing with children, teaching them, and taking them on outings (Hill and Stafford 1980) and engaging in high quality home literacy experiences (Roberts, Jurgens, and Burchinal 2005; Storch and Whitehurst 2001). Research has suggested that this interaction between a parent and child, especially the amount the parent speaks to an infant or small child, dramatically affects the child's vocabulary development (Huttenlocher, Haight, Bryk, Seltzer, and Lyons 1991). Lower parent education has also been related to children's externalizing problems and maternal depression (Moore et al. 2006).

Educational attainment data will be collected for the child's parents if it is missing in a previous round for that parent figure. The following data will be collected in spring-third grade:

- Diplomas or degrees parent has obtained

Working Memory

Executive functions are interdependent processes that work together to accomplish purposeful, goal-directed activities and include working memory, attention, inhibitory control, and other self-regulatory processes. Executive processes work to regulate and orchestrate cognition, emotion, and behavior to enable a student to learn in the classroom. For example, executive control

involves the ability to allocate attention, to hold information in working memory, and to withhold an inappropriate response (Casey, et al. 2000). Not only are these cognitive and behavioral processes predictive of reading and math achievement (Blair and Razza 2007), but there is also emerging research that indicates that some of these cognitive processes are trainable (Rueda, et al. 2005; Klingberg, et al. 2005) and can be improved upon in regular public school classrooms without costly interventions (Diamond, et al. 2007). Given the increased interest in executive functions, in the parent interview we have included items tapping one aspect of executive function:

- Children's working memory

Child Care

School-aged children are in a variety of nonparental care arrangements when they are not in school, including center-based before- and after school programs, care with related or unrelated adults, and self-care. A recent national study of children in kindergarten through the 12th grade by the After School Alliance (After School Alliance 2009) found that 15 percent of children were in an after school program, 24 percent were cared for by a relative, 10 percent were cared for by another adult (such as a sitter); and 26 percent were in self-care. Among children in elementary school, 17 percent of children were in after school care and 4 percent were in care by themselves.

Research has indicated that child care received during the school years can have implications for children's functioning in the elementary school grades. As reviewed by Durlak et al. (2010), although there are some inconsistent findings, many studies have shown that after-school care programs can have positive effects on children's achievement, behavior, physical health, and social competence. Studies of the effects of informal adult care with a relative have shown no apparent risks (Sarampote, Bassett, and Winsler 2004) and some protective effects for children of lower socioeconomic status who had child care with a sitter or relative compared with children of lower socioeconomic status who did not have this type of care (Pettit et al. 1997). Pettit et al. (1997) also found protective effects for children of lower socioeconomic status who had child care in a day care center compared to children of lower socioeconomic status who did not have this type of care. It was also found that girls who had small

amounts of child care with a nonrelative neighbor had better behavior and achievement ratings than those without any nonrelative neighbor child care or those with high amounts of nonrelative neighbor child care. Research has also looked at the effect of children taking care of themselves. Although some studies show have not shown negative effects of this for some children (Sarampote, Bassett, and Winsler 2004), Pettit et al. (1997) found that higher amounts of self-care was related to children's adjustment problems, especially for children of lower socioeconomic status, those with behavior problems at school entry in kindergarten, and those who were not in other activities supervised by adults.

Throughout the study, the ECLS-K:2011 will collect information on the number, consistency, and variety of formal before- and after-school care arrangements that the children currently experience.

As children move further in to the school-age years, families may rely more often on nonparental care arrangements—particularly self-care. Information on the amount of time that children spend in self-care, both before and after school, will also be collected.

- Participation in early care and education, by type of arrangement (e.g., relative; non-relative; and center-based);
- Time the child spends in these care arrangements; and
- Time the child spends in self-care.

Parental Discipline, Warmth, and Emotional Supportiveness

Warm, accepting maternal behaviors and relationships are positively linked to children's intellectual and emotional development. Greater warmth and support predict more positive child outcomes, regardless of income level (Moore, Zaslow, Miller, and Magenheimer 1995; Gregory and Rimm-Kaufman 2008). One way that parents can be warm and emotionally supportive to children is through communication. The ECLS-K:2011 spring-third grade interview will assess parental warmth and emotional support by asking parents to report on whether they listen to their children and encourage them to communicate.

The way in which parents discipline their children has also been related to behavior outcomes. Parents' use of inconsistent discipline has been associated with children's Attention-Deficit/Hyperactivity Disorder (Ellis and Nigg 2009), and found to be a mediator between mother's distress and children's aggression (Barry et al. 2009).

The ECLS-K:2011 parent interview will collect information about the following topics:

- Parental warmth;
- Parent-child communication; and
- Consistency of discipline.

Experts have suggested numerous factors to explain the increased obesity rate among children such as dietary habits, trends in eating out, sedentary activities, and changes in school lunch programs. However, data linking these factors to the recent trends in obesity are needed before policy can direct effective change. Parent interview data from the ECLS-K:2011 about the amount of exercise children get, meals eaten at home, hours spent in sedentary activities such as watching television and playing video games, child behavior, and other measures can be used together to examine factors related to obesity. The parent interview includes questions on the following topics related to the issue of sedentary behaviors:

- Amount of time the child watches television and plays video games.

Involvement of the Nonresident Parent

Asking questions about nonresidential parents is of great interest to researchers of family involvement. Nearly four out of ten children are born outside of marriage in the United States (Ventura 2009). Although one study found that 40 percent of nonmarital births are to mothers who are living with partners, the majority of children born outside of marriage do not live with their fathers (Chandra et al. 2005). The high incidence of divorce and separation in this country leads to more children living apart from one of their parents.

Although many fathers who do not live with their children tend to play a smaller role with their children than do resident fathers and may lose contact with them over time, a significant proportion of nonresident fathers do remain involved. Moreover, their involvement is important to children's lives (Amato and Gilbreth 1998; Nord, Brimhall, and West 1998; Jackson, Jeong-Kyun, and Franke 2009). Although the majority of nonresident parents are fathers, an increasing number of children have nonresident mothers. For both policy reasons and to understand children's development, it is important to learn more about both fathers and mothers who live apart from their children.

The following data about nonresident parents will be collected in the spring third-grade round:

- Time since last contact (either in person or by telephone, email, text, etc.) with biological/adoptive parents no longer living in household; and
- Frequency of contact in the last four weeks that was not in person (e.g., by telephone, email, text, etc.) with biological/adoptive parents no longer living in the household

Child's Health and Well-Being

This section includes items to identify children with different kinds of disabilities and to determine whether children with disabilities are receiving services. The presence of disabilities is an important risk factor for children and is related to children's development and educational in school. These items will also provide the data to analyze the accessibility of special education and other programs and plans for children with disabilities. Other important indices of children's well-being include rate of growth, physical fitness, and health care utilization (Newacheck and Hallfon 1988).

The importance of children’s health for school success is well established. Chronic conditions and disabilities, such as hearing impairment and physical handicaps, not only “flag” youngsters for administrative attention, they also shape the way that parents, peers, and school personnel relate to the child (Alexander and Entwisle 1988). Even seemingly relatively mild conditions, such as earaches, may affect children’s performance in school if left untreated.

Impairments in hearing can contribute to deficits in speech and language acquisition, poor academic performance, and social and emotional difficulties (Cunningham, et al. 2003). The American Academy of Audiology notes that 12% of children who are 6 to 19 years old have hearing loss related to noise (e.g., noise that may come from loud toys, stereos, sporting events, movie theaters, bands, etc.) and recommends that children be screened for hearing loss yearly if they are involved in activities that expose them to loud noise (National Hearing Conservation Association 2004). They also recommend that hearing loss be ruled out whenever a child is being considered for special education services (American Academy of Audiology 1997).

Impairments in vision can also lead to learning and socio-emotional difficulties. About one in four school-age children have vision problems including amblyopia (lazy eye), strabismus (crossed eye), and myopia (nearsightedness). Studies find that there are racial and ethnic differences in the prevalence and incidence of refractive disorders. A study of 2,523 children in Birmingham, Alabama found that 33.6 percent of Asian children and 36.9 percent of Hispanic children had astigmatism (Collaborative Longitudinal Evaluation of Ethnicity and Refractive Error Study Group 2003).

The ECLS-K:2011 will collect the following data addressing children’s current and retrospective health status:

- Overall health;
- Ear infections since second grade;
- Ear aches since second grade;
- Asthma;
- Diagnoses of disabilities and health conditions;
- Health insurance coverage including Medicaid;
- Glasses, hearing aids, cochlear implants;
- Prescription medications;
- Behavioral and attention problems;

- Vision and hearing problems;
- Exercise/physical activities;
- Services for disabilities;
- Learning problems;
- Emotional or psychological difficulties; and
- Communication problems.

Parent Employment

Parental employment status affects the amount of material resources available to the child (Jackson, Bentler, and Franke 2006). Meta-analyses of several studies document that socioeconomic status (parent occupation and education) is positively associated with the quality of stimulation that parents provide their children (Gottfried 1984).

One type of employment that has not been examined specifically in the ECLS-K:2011 is a family's employment in the military. Children in military families would be important to study because they may experience frequent changes in schools as their parent(s) receive new stations for their duties, and long periods of absence by one or both parents as they are deployed. Information will be collected about the following:

- Parents' current employment status; and
- Parents' active duty status in the military since the child was born and currently.

Parent Income and Assets

Family income affects the family's material standard of living, neighborhood and housing quality, opportunities for stimulating recreation and cultural experiences, and the stress and psychological well-being of the parents. Youngsters from more economically advantaged households tend to be more successful in the primary grades compared to their less advantaged peers (Alexander and Entwisle 1988). Any behavior and learning problems the child exhibits in the early grades are more likely to persist for children from economically disadvantaged families than for children in families with more financial resources (Ackerman, Brown, and Izard 2003). Because income is a dynamic force rather than a stable background characteristic (Duncan 1991) it is being measured longitudinally in the parent interviews in the ECLS-K:2011.



The spring third-grade parent interview will also include questions about the following:

- Total family income for the year; and
- Housing (whether home is owned, rented, or housing is obtained in other ways, such as by exchanging services for housing, living in temporary housing, living with a relative, etc.).

C.3 School Administrator Questionnaire

The ECLS-K:2011 will collect data in spring 2014 on school composition, policies, and practices from school administrators in schools attended by ECLS-K:2011 sampled children. School component data will be used to illuminate the school context of each ECLS-K:2011 child and investigate the influence of school and administrator attributes on student outcomes. The School Administrator Questionnaire is contained in Appendix C. The instrument is very similar to the administrator questionnaires administered in the spring data collections for grades K, 1, and 2 of this study. The questionnaire has been shortened somewhat compared to the analogous questionnaires used in previous rounds of this study; this was done in order to reduce respondent burden and increase response rates. We expanded the item on measures taken to ensure safety to address both armed and unarmed security guards and to include elements from an item in ECLS-K that asked about whether doors are locked during the school day, whether the school has a requirement that visitors sign in, and whether intercoms or telephones are available in classrooms. No new constructs were introduced.

The ECLS-K:2011 third-grade administrator questionnaire has two versions: one for schools without a completed administrator questionnaire in any prior round of data collection and a more streamlined version for schools with a completed questionnaire in a prior round. The items included in the instrument are described in more detail below.

C.3.1 School Administrator Questionnaire: Research Questions

- SAQ1: How does the length of the school day and school year relate to children's progress, especially with respect to cognitive gains?
- SAQ2: How do differences in schools' basic demographic, enrollment, resource, policy, and organizational characteristics relate to children's academic and social development in the early elementary school years?
- SAQ3: Are schools' practices to involve parents associated with higher levels of parent involvement?
- SAQ4: What kinds of services or programs do schools provide to families, children, or community members? How do these relate to children's academic and socioemotional development?

- SAQ5: How do schools respond to the needs of parents with little or no English proficiency?
- SAQ6: How do neighborhood or community differences relate to children’s cognitive and social development?
- SAQ7: What challenges associated with student behavior, attendance, teacher mobility, and school safety do schools face, and how do these relate to other school characteristics and children’s cognitive and social development?
- SAQ8: What are the characteristics of elementary school administrators and how do differences in their background characteristics relate to school characteristics, school practices, and interaction with parents and students?
- SAQ9: To what extent do schools use assessments to monitor students’ progress on specific skills and identify those in need of interventions? What kinds of interventions are provided for struggling students and how much staff support and parent communication are there for these efforts?

C.3.2 School Administrator Questionnaire: Construct Coverage

The ECLS-K:2011 will collect data in spring 2014 on school characteristics, facilities and resources, community characteristics and school safety issues, school policies and practices, and school governance and climate from school administrators in schools attended by ECLS-K:2011 sampled children. The school component data will be used to illuminate the school context of ECLS-K:2011 children and investigate the influence of school and administrator attributes on student outcomes.

School Characteristics, Facilities, and Resources, Including Federal Programs

Several characteristics of schools influence children’s educational experiences and may be related to their learning outcomes. For example, school size, average daily attendance, and the numbers of students enrolling in or leaving the school during the school year may influence the stability in classroom membership experienced by an individual student. Grade span dictates the number of school transitions children must make between levels of schooling and the age range of their school peers. In a study using ECLS-K data, Ready and Lee (2007) found that

the size of elementary schools, as well as the size of classes within schools, independently influenced children's learning in literacy and mathematics in both kindergarten and first grade. Farbman (2010) found that schools that had an expanded school year (that is, schools in which children attended more class days and/or hours per day) had students with higher achievement than schools for which the school year had fewer class days or hours per day.

The type of school attended has important implications for students' experiences and achievement. Most public elementary schools are not selective, enrolling all children within predefined attendance zones. Private schools, by contrast, typically have some kind of admission policy and therefore can be more selective in their enrollment. Of nonpublic schools, parochial schools, especially Catholic schools, have received the most research attention (e.g., Bryk, Lee, and Holland 1993). Catholic schools tend to have low absenteeism rates and high academic achievement, despite a high level of heterogeneity in the student body. The ECLS-K:2011 data will provide important opportunities to contribute to the literature on the effects of school type. Not only will analysts have information about sector, they will also know whether schools include magnet programs, if they are charter schools, and if they are schools of choice.

The composition of the student body has important consequences for the types of programs and services that schools offer. The diversity of student populations with respect to social and economic background, preparation for school, need for particular services, and levels of proficiency in English has created a number of challenges for schools. The ECLS-K:2011 will allow analysts to examine how schools have responded to student diversity.

In a study using kindergarten through third-grade data from the ECLS-K to examine family, school, and neighborhood factors for the impact of socioeconomic status (SES) on children's reading abilities, Aikens and Barbarin (2008) found that family characteristics, including home literacy and parental involvement in school, had the largest impact on reading ability at the beginning of kindergarten. However, school and neighborhood conditions were more strongly related than family characteristics to SES differences in rates of growth in reading over time. The authors stated that a school's poverty concentration and number of children with reading deficits in the school was negatively related

to individuals' reading outcomes. Like the ECLS-K, the ECLS-K:2011 will be ideally suited for studies that look at academic growth related to school characteristics.

There are strong opinions on both sides of the issue of the efficacy of retention in grade as a practice aimed at remediating the academic or social difficulties of young children. Schools and school districts mirror this uncertainty, some favoring the use of retention in certain circumstances, others having a "no retention" policy. Most research about retention focuses on children in kindergarten, in first grade, or in high school. There is a lack of research looking at the effect of retention in later elementary school years. Data collected by ECLS-K:2011 on the effect of retention in second- and third-grade would help fill that gap. The ECLS-K:2011 will collect data on the number of children retained in second and third grades the prior school year. These data will help address the school's practices regarding retention.

The success (or lack thereof) that the school has had in meeting the goals of NCLB, such as increasing overall student achievement and reducing the achievement gaps between subgroups of students, may have lasting effects on the school, its enrollment, the services it offers, and potentially on its governance. In particular, schools that have not met their NCLB goals (known as AYP, or adequate yearly progress), may have planned and implemented a number of specific school improvement activities.

In addition to each of the school context variables mentioned in the paragraphs above, other context information will be collected in order to better understand the educational processes occurring in the school. For example, sources of funding (in particular, Title I and Title III program funds) and adequacy of the physical facilities help define the resources available to serve the school's student. Overcrowding in schools can be a serious problem, as can inadequate facilities and low levels of funding. Altogether these variables define important differences between schools.

Elementary schools tend to be smaller, more local, and have larger grade spans than either middle or high schools. The smaller catchment area of elementary schools, combined with the longer grade span, suggests a long-term cumulative influence of the local neighborhood on both children and their schools. School-

level characteristics are likely to parallel those for the local neighborhood (demographically, but also, in terms of attitudes, values, and expectations), allowing a long-term, mutual reinforcement less possible in larger, more diverse middle and high schools. The community characteristics items in the school questionnaire focus on school and neighborhood safety and on measures the school has taken to ensure school safety. The questionnaire item on safety measures taken has been expanded for the third-grade questionnaire by the inclusion of three additional items from the ECLS-K, in addition to the existing two questions from previous rounds: the number of guards (now including armed and unarmed guards) and metal detectors.

The neighborhood questions in the School Administrator Questionnaire ask about the neighborhood in which the school is located. The data collected in these questionnaires can be combined with Census data that characterize the neighborhood in other ways (by racial composition, crime, income, employment, etc.).

This set of school activities, facilities, and resources items broadly defines the characteristics and basic resources of the school. These factors help describe the student population, the goals and purposes of instruction, time and resource constraints, and opportunities and resources to meet educational objectives.

These data will allow comparisons of schools that vary by these school characteristics:

- School type (public/private, affiliation, grades, magnet, etc.);
- Number of instructional days in the school year;
- Enrollment and attendance;
- Student demographics: racial/ethnic composition of the student population, language minority students in the student population, enrollment from outside the school's attendance zone, participation in special education;
- Percentage of children eligible for free or reduced-price meals;
- Numbers of students retained in focal grades;

- Receipt of Title I and Title III funding;
- Services and programs/Title I;
- Services and programs/Title III;
- Availability of facilities, resources, and computer labs;
- State assessment data;
- School status relative to Adequate Yearly Progress (AYP);
- Neighborhood problems (racial tensions, gangs, and crime);
- School safety;
- Measures taken to ensure school safety; and
- Recent changes at the school including funding, enrollment, demographics, and class sizes.

Response to Intervention Programs

Response to Intervention (RtI) is intended to support improved academic achievement for all students. It offers a model for early intervention to prevent failure by identifying students who are struggling in the classroom with the general curriculum. A hallmark of RtI is an integrated system of assessment and monitoring at every stage of the process (Burns and Ysseldyke 2005, Coleman et al. 2006). All students are periodically compared to their classmates, using pre-determined benchmarks or local or national norms. Students determined to be at risk in the area of assessment (e.g., reading, math, behavior) receive a targeted, evidence-based intervention and the student's progress is monitored. If the student improves, the student returns to general classroom instruction. Frequent monitoring occurs to ensure that progress is maintained following the intervention. If the student does not improve, the student may receive a more intensive intervention. Thus, the approach calls for dynamic assessment that allows practitioners to respond to children's needs (Fuchs and Fuchs 2006). Placement in different levels or "tiers" of services is data-driven.

Items related to RtI practices are being included in the School Administrator Questionnaire to obtain information at a national level to better understand the extent to which schools across the country are implementing identified RtI



programs or are using practices that would be identified as Rtl practices, even if the school has not formally adopted an Rtl program.

The policy and practice topics covered in the School Administrator Questionnaire include:

- Implementation of an RtI approach at the school;
- Number of years RtI has been used at the school;
- Areas in which RtI is implemented, i.e., reading, mathematics, writing, and behavior;
- Implementation of various RtI-type features at the school (e.g., learning goals, benchmarks);
- Communication with parents about RtI;
- Presence of staff members to train and assist teachers with reading and mathematics instruction, delivery of behavioral supports, and use of assessment data; and
- Number of students evaluated and eligible for an IEP (using an RtI model or other model).

School-Family-Community Connections

Parent-school communication may have a number of potential benefits for children's education. Parents as a visible presence in the school can reinforce the notion that education is a valued community goal. Parents can volunteer as classroom or school aides, freeing the teacher's time for instruction. Benefits may flow in the other direction as well. When schools actively promote parent involvement and communication, parents may become more involved and more aware of school and classroom activities and of their own child's instructional program. Strong relationships between schools and parents are associated with positive outcomes for children (Hoover-Dempsey and Sandler 1997; Gonzalez-DeHass, Willems, and Holbein 2005).

The ECLS-K:2011 collects information on the following topics to gauge school-family-community connections:

- School-based programs or services for parents and families; and
- Parents' school involvement.

School Programs for Particular Populations

Because the ECLS-K:2011 will provide longitudinal data on a nationally representative sample of children, including children with special educational needs, information will be needed on special programs in which children in the study may participate. Because programs serving particular populations can vary in content and organization—differences that may, in turn, have consequences for both children’s opportunities to learn and their progress in school—basic characteristics of these programs need to be documented. Services to families of children in special programs should also be documented. The use of specific staff (e.g., outreach workers, translators, and parent liaisons), parenting education, and other efforts to involve parents in support of their children’s success in school are among the topics included. Items on these topics will provide data to address issues of how schools can best serve parents of children with special needs.

Data from the ECLS-K were used to examine the association between the school resources for ELL children and ELL children’s academic growth from kindergarten through fifth grade (Han and Bridglall 2009). The authors found that the initial gap in math scores between ELL children and their *English*-speaking peers narrowed by fifth grade. This was especially true for ELL children in schools with either a high or low ELL student concentration. The ECLS-K:2011 direct assessments are specially designed to directly assess ELL children’s early English reading abilities, which was not possible in the ECLS-K. This feature will allow for a more thorough understanding of how services for these children relate to their reading growth, regardless of their initial English proficiency. The proportion of ELL children in the third grade and the total school, the number of children receiving bilingual education or ELL/ESL services, the types of programs in which those children participate, and the services provided to language minority (LM) families will be collected in the School Administrator Questionnaire.

Because baseline data were collected during the kindergarten year, a point when many children with disabilities have not yet been identified by schools, ECLS-K:2011 can help to shed light on how children come to be classified as having a particular disability over time. Information on where children with disabilities are served (i.e., in the classroom—“inclusion”—or in special pull-out classes) is also important information to be gathered in ECLS-K:2011. Enabling children to function effectively in a regular classroom setting is a goal of many special

education programs. Although some children spend all of their time in separate special education classes or schools, many children move in and out of a regular class daily, receiving services in pull-out classes and returning to the classroom for the rest of the day. The ECLS-K:2011 data on special education placement and practices will provide critical information about the range and effectiveness of options for special education delivery.

Another important program that many elementary schools offer is specialized instruction for students identified as “gifted and/or talented.” Adelson, McCoach, and Gavin (2012) analyzed ECLS-K data from grades 3 and 5 and found that gifted programming in math and reading (overall) had no effect on gifted students’ achievement and academic attitudes, and did not have detrimental effects on students not participating in these programs. Considered in light of prior research indicating benefits of specific gifted programs and the wide variety of program characteristics represented across the nation, the authors urged additional study to determine effective gifted program characteristics.

The ECLS-K:2011 data on special populations include:

- Delivery of instruction to English Language Learners (ELLs) and services for language minority (LM) families;
- Delivery of special education and related services to children with disabilities; and
- Programs for gifted and talented children.

Staffing and Teacher Characteristics

The ECLS-K:2011 school-level data on teacher characteristics will allow researchers to evaluate the importance of the following elements of the teaching staff for children, aside from the characteristics of their own teacher (which will be addressed on the teacher questionnaire):

- Total number of full- and part-time teachers, specialists, nurses, and paraprofessionals;
- Availability of specialists to support teachers in implementing reading/language arts, mathematics, and behavioral programs;
- Teacher mobility; and



- Monetary incentives for teachers.

Administrator Characteristics

School administrators have many roles and responsibilities: conveying and implementing state and district requirements and initiatives, assuming the role of inspirational leader for the staff, coordinating reform efforts, and managing the day-to-day operations of the school. Many administrators also have additional teaching or administrative duties. How administrators exercise these duties may influence teachers' motivation, enthusiasm, and commitment to education.

Although literature exists on how leadership skills create conditions conducive to effective schools, few studies addresses the influence of variations in administrators' characteristics, qualifications, and time use on student outcomes. The following information collected in the ECLS-K:2011 might help to explore the relationships between characteristics of school administrators and the outcomes for students in their schools.

- Administrator's sex, age, and race/ethnicity;
- Administrator's years at the study school;
- Administrator's years in the role of principal;
- Administrator's formal education and training;
- Administrator's use of a non-English language; and
- Administrator's familiarity with students.

C.4 General Classroom Teacher Questionnaires

The ECLS-K:2011 will collect information from the teachers of the sampled children. The primary purpose of these data is to help describe the children's classroom experiences which may relate to the children's social and academic development.

In addition, teachers will be asked to provide information on the study participants who are in their classes, completing one questionnaire for each ECLS-K:2011 child. The ECLS-K:2011 assessment battery provides an objective assessment of academic outcomes for the nationally representative sample of children. Teachers can provide another perspective, albeit a less objective perspective, on children's abilities and behavior because they spend a great deal



more time with the children under far more routine conditions compared to the ECLS-K:2011 assessors. While the ECLS-K:2011 assessment provides a snap-shot of what the child knows at the time of assessment, the teacher can provide a more complete overview of what the child knows based on experiences with the child in the classroom over the course of almost a full school year.

Because the ECLS-K:2011 collects a very broad range of information longitudinally, it is well-suited to study the relative influence of particular educational and school characteristics on important outcomes, particularly in comparison to the relative influence of family background on those outcomes.

The Teacher Questionnaire is broken into three separate documents. TQA will ask teachers to provide information on classroom and student characteristics, instructional and evaluation practices, and their teaching qualifications and background. TQS (“S” for subject) includes curriculum-level questions that focus on concepts and skills delineated by the “Common Core State Standards” in the case of reading/language arts and mathematics. The science-related items rely on the “Next Generation Science Standards.” These two sets of standards are nationally recognized and have been developed collaboratively by state departments of education. TQC contains child-specific questions such as enrollment, evaluation of skills and knowledge, services and programs received, and parent involvement.

C.4.1 Spring Third-Grade General Classroom Teacher Questionnaire

C.4.1.1 Spring Third-Grade General Classroom Teacher Questionnaire: Research Questions

- TQ1: How do instructional practices, content coverage, classroom resources, and methods of providing feedback differ across classrooms or schools? What is the relationship of those differences to children’s academic and social development?
- TQ2: How does diversity in the classroom regarding age, race/ethnicity, sex, and number of third-grade repeaters relate to other classroom characteristics? How do these class-level characteristics interact with children’s own characteristics for the development of academic and social skills?
- TQ3: How do teachers and schools handle the diversity of children’s skills? How are children with special needs (e.g., English Language Learners, gifted and talented students, students with IEPs) taught? How might instructional differences for these students relate to academic and social outcomes?
- TQ4: Do teachers’ characteristics including sociodemographic characteristics, views on school “readiness,” sense of efficacy, job

satisfaction, perceptions of school climate, their educational background, certifications, and teaching experience influence children's outcomes, on average and in interaction with children's sociodemographic backgrounds?

- TQ5: Do teachers' practices to involve parents result in higher levels of parent involvement?
- TQ6: How do teacher's relationships with individual students differ? What is the relationship of those differences to children's academic and social development?
- TQ7: What academic skills, socioemotional skills, and behaviors (including activity level) do teachers report children having as they progress through school? Do these skills and behaviors vary by family background characteristics? How do these skills and behaviors change over time?
- TQ8: To what extent do teachers and other school staff use assessments to monitor students' progress on specific skills and identify those students in need of interventions? What kinds of interventions are provided for struggling students and how much staff support and parent communication are there for these efforts?

C.4.1.2 Spring Third-Grade General Classroom Teacher Questionnaire, TQA: Construct Coverage

Classroom and Student Characteristics

The total number of children enrolled in a class is a widely used index of instructional quality at all levels of education. Though the findings are mixed for much of the existing research on class size, Project STAR in Tennessee has shown consistently positive gains resulting from smaller class sizes. The project was a carefully designed, random assignment study of some 6500 students in 330 classrooms (K through grade 3) in 80 schools across the state of Tennessee. In each of these grades, children in smaller classes (13 to 17 students) compared with children in larger classes (22 to 25 students) showed significantly improved performance on standardized and curriculum-based tests in reading, mathematics, listening, and word recognition scores (Mosteller 1995; Shin and Raudenbush 2011). In a follow up study through grade 8, students who were in small classes during K-3 continued to score significantly higher on standardized achievement tests than their peers who had attended regular-size classes or regular-size classes with a teacher aide (Pate-Bain et al. 1997).



The effort to educate all children in regular education programs presents challenges to teachers at all levels of education. Children with particular needs that may present challenges to teachers include those with physical and cognitive disabilities, as well as ELL and gifted and talented children. The ECLS-K:2011 is well-positioned to collect information on how these children are served and the different outcomes associated with treatment differences. The questionnaire includes items on the number of children receiving services for disabilities and the number receiving services for gifted/talented students. Further, in light of the growing number of ELL children in the country, the ECLS-K:2011 includes several items for the teacher about number of ELL children in the classroom, the languages spoken, and the number of those children receiving services targeted to ELL children.

A new construct has been added to this section of the questionnaire for third grade – student difficulties. These items, which ask what percentage of the students in the class demonstrate specific problem behaviors, are related to the existing item on overall behavior of the class. In addition, one construct used in kindergarten and grade 1 has been brought back into the questionnaire for third grade; that is use of the school’s library or media center.

Teachers will provide information about classroom and student characteristics including:

- Grade level(s) of classes the teacher teaches;
- Class demographics: class size, gender distribution, number repeating grade;
- Number of students who enter or leave during the school year;
- Number of language minority children and English-language learners (ELL) in the classroom;
- Number of children in the classroom receiving particular services or in special programs (e.g., special education services, a gifted and talented program, remedial services);
- Languages used in the classroom;
- Number of children above or below grade level in reading and mathematics;
- Numbers of children with disabilities;
- Number of children tardy or absent on an average day; and
- Overall behavior of the class, and prevalence of specific problem behaviors.

Instructional Activities, Structured and Unstructured Activities

The existing body of research is somewhat mixed on the issue of the best ways for children to spend their time during the school day – that is, how the day should be divided between instruction and structured activities, less structured activities, and free play and physical activity. Several studies in day care settings suggest that large amounts of free play and unstructured time are negatively related to preschool-age children’s cognitive and language development

(McCartney 1984; Ruopp, Travers, Glantz, and Goelen 1979). At elementary school ages, a large number of school-based studies have emphasized the importance of “time on task” or “student engagement” for student achievement in first and second grades (Greenwood 1991; Greenwood, Arreaga-Mayer, and Carta 1994; Wang, Haertel, and Walberg 1990). Children in second through fifth grades achieve more (as measured by achievement tests) in classrooms where a higher proportion of time is spent in academic instruction, where the teacher maintains both discipline and academic focus, and where they are engaged in their work with few interruptions or few periods of unoccupied time (Crocker and Brooker 1986). However, across these same age groups – preschool through fifth grade, unstructured activities, child-directed, imaginative play, and physical activity appear to promote social skills at the younger ages and health outcomes at least for girls through third grade (Singer and Singer 2006; Bergen and Fromberg 2009; Datar and Strum 2004).

Child development experts have noted that elementary school children today have less time to engage in physical education, physical activity, and free play than in years past because many schools have reduced physical education classes and recess time in favor of more instructional time and that this trend may have unintended negative academic consequences at least through first grade (e.g., Pelligrini and Bohn 2005) and physical consequences at least through third grade (Datar and Strum 2004). Datar and Strum showed that physical education programs helped girls who were overweight, or at risk for becoming overweight, avoid becoming obese. It further showed that the resulting reduction in weight for these girls by third grade led to improvements in reading and math achievement, approaches to learning, self-control, and interpersonal skills. In a study across ten years of a classroom-based physical activity program in kindergarten through fifth grades, (Kibbe et al. 2011) found that this integrated physical education program led to higher physical activity levels, reduced time off task during instructional time, and improved reading, math, and spelling composite scores.

While it is not possible to directly measure the actual “time on task” spent by children in this study or their level of engagement in the instruction, nor to observe the level of disciplinary control the teachers exert, the questionnaires include some proxy measures for these constructs as well as information about

the amount of time children spend in free play. For example, teachers are asked estimate the amount of time spent on instruction in various subjects and the amount of time spent in physical education, recess, and free play. Teachers also rate the level of behavior problems in their classrooms and estimate the amount of time they spend on discipline. These can provide data that may be useful to investigate this issue of how the children's school days are organized. To estimate the amount of time children may spend on academic subjects outside the school day, the teachers are asked about the frequency and amount of homework the teacher assigns in reading, math, and science.

The TQA includes items that characterize the organization of the school day and how children's time is spent in both academic and nonacademic activities.

- Use of class time, by subject area;
- Class activities outside of the regular class (lunch, free play, and recess);
- Amount of time spent on classroom discipline and handling disruptive behavior; and
- Frequency and amount of homework that the teacher assigns.

Resources/Materials

Among the resources related to student achievement and that may vary substantially across schools are school libraries or media centers and the availability and use of computers and other education-related technologies. According to the U.S. National Commission on Libraries and Information Science (www.nclis.gov), at least nineteen states have conducted studies over the past ten years to assess the effectiveness of their school libraries in improving student achievement. For example, a study in Illinois demonstrated a positive relationship between use of school libraries and academic achievement (percentages of fifth- and eighth-graders meeting or exceeding state reading and writing standards) (Lance et al., 2005).

Research on the use of computers in the classroom has shown mixed results both within and across studies. For example, Fuchs and Woessman (2004) found that both home and school computer use were related to positive achievement

outcomes, but when adjusted for family and school characteristics, the results were negative for home computer use and complicated for school use. That is, school computer use showed an inverted “U”-shape relationship with student achievement, meaning that both low and high levels of computer use were less effective than moderate use. Nevertheless, studies of more specific use of computers in the classroom show less ambiguous results. Gulek and Demirtas (2005) found that daily laptop use by middle-school students showed significantly higher achievement (including writing test scores, and state-mandated standardized test scores in reading and math) for these students than for students who did not have daily access to laptop computers. Kim and Chang (2010) found that playing computer math games had different effects on fourth-grade NAEP assessment scores depending on the characteristics of the students, with the highest positive effects for male students whose first language was other than English.

Classes are likely to vary in terms of the use of library resources as well as computers and other electronic devices. The following information is collected to characterize a classroom in terms of the use of such resources:

- Use of the school library or media center; and
- Use of computers and other electronic devices for instructional purposes.

Student Evaluation

Formal student evaluations include grades, progress reports to parents, portfolios, and report cards. Research in this area often focuses on teachers’ criteria for grading, the frequency of feedback, and whether constructive information about areas of strengths and weaknesses is included. Martínez, Stecher, and Borko (2009) used ECLS-K data and found third- and fifth-grade teachers’ ratings of students mathematics achievement correlated strongly with the direct assessments; however, this relationship varied by certain classroom assessment practices, which suggested that *teachers* evaluate student performance relative to other students in the school.

The following are aspects of student evaluation measured in the ECLS-K:2011:

- Factors in assessing children’s progress; and
- Uses of formal assessments in reading and mathematics.

Response to Intervention

While the School Administrator Questionnaire will provide information about school-wide implementation of Response to Intervention (RtI), the TQA will include items targeted at practices and procedures in the third-grade classrooms associated with RtI methodology. The questions are intentionally worded so that information about methods typically incorporated in RtI models will be obtained from the teachers without mentioning RtI by name. This is done so that the implementation of the methods and practices themselves can be measured regardless of the particular terminology adopted by the teacher or school (i.e., some teachers may incorporate RtI methods without referring to them as RtI).

Teachers will be asked to report on the following classroom practices for measuring performance and for delivering instruction to students who are struggling:

- Implementation of various RtI-type features for reading and mathematics (e.g., learning goals, benchmarks, criteria for intervention) in the school’s third-grade classrooms;
- Specialists in reading and math who provide instruction to students who are struggling;
- Professional development activities covering the use of assessment data for identifying struggling students and for guiding instruction in reading and mathematics;
- Frequency and purposes of assessing students in reading and mathematics;
- Completion of college courses addressing the use of data to inform the choice of academic and behavioral interventions; and
- Assistance and training from other staff for reading and mathematics instruction, delivery of behavior supports, and use of assessment data.

Parent Involvement

Research emphasizes the importance of parental involvement in children's education in explaining differences in student educational outcomes (Schneider and Coleman 1993; Hoover-Dempsey and Sandler 1997; Gonzalez-DeHass, Willems, and Holbein 2005). Information collected in this area in the ECLS-K:2011 includes the following:

- Number of parent-teacher conferences scheduled during the school year; and
- Parent involvement in school activities (volunteering, attending meetings, other activities).

Teachers' Views on Teaching, School Climate, and Environment

Teachers' satisfaction with the amount of autonomy afforded to them and the amount they feel supported has a strong effect on teachers' overall job commitment and interaction styles with children (Manlove 1993; Rosenthal 1991; Webb and Lowther 1993). A teacher's sense of professional efficacy is associated with student outcomes. In the ECLS-K:2011, teachers' autonomy, input into school policies, and sense of efficacy will be measured. These data can then be used to address questions having to do with how these factors relate to teaching practices and ultimately to child outcomes. The following topics are asked about in the TQA:

- School climate;
- Job satisfaction; and
- Teachers' sense of efficacy.

Teacher Background

Teacher demographic variables are mainly of interest in the ECLS-K:2011 in the context of fit with children's backgrounds. Teacher race/ethnicity and sex may interact with student background variables to produce interesting results on student achievement.

The differences in student outcomes that are found in relation to such typically-researched characteristics of teacher quality as highest degree earned and major

field of study are at best weakly related to student cognitive outcomes (Hedges, Laine, and Greenwald 1994). A teacher's years of teaching experience is generally considered by the education community to be an important influence on student outcomes, but there is some research that suggests teacher experience has only a weak relationship with student test scores (Hedges, Laine, and Greenwald 1994). Nonetheless, these indicators continue to be used as bases for salary differences and hiring decisions. Further, researchers and government agencies (for example, the "highly effective teacher" requirements under NCLB) continue to investigate these variables in attempts to isolate the factors that define teacher effectiveness.

The following demographic, training, and experience variables will be collected as part of the ECLS-K:2011:

- Teacher's sex, age, and race/ethnicity;
- Teaching experience, by school and grade;
- Teacher's education, including degrees and courses addressing specific topics; and
- Type of teaching certification held.

C.4.1.3 Spring Third-Grade General Classroom Teacher Questionnaire, TQS: Construct Coverage

Curricular Focus and Content Coverage for Language Arts, Mathematics, Science, and Social Studies Instruction

The ECLS-K:2011 curriculum-level questionnaire measures what skills and topics are taught in the areas of reading/language arts, mathematics, science, and social studies. In addition, for reading/language arts and mathematics, the questionnaire also measures how extensively each skill is taught. These content coverage questions for reading/language arts and mathematics are modeled on the "Common Core State Standards (corestandards.org)", which have been adopted by 45 states and the District of Columbia, as of April 16, 2013. Content coverage for science focuses on skills and concepts recommended by the "Next Generation Science Standards" (nextgenscience.org), endorsed by the National Science Teachers Association and the National Research Council and developed in conjunction with staff from 26 states.

The following information about content coverage in four curriculum areas will be collected as part of the ECLS-K:2011:

- Time spent on specific skills and concepts in reading/language arts;
- Time spent on specific skills and concepts in mathematics;
- Topics and skills taught in science; and
- Topics taught in social studies.

C.4.1.4 Spring Third-Grade Child-Level Teacher Questionnaire, TQC: Construct Coverage

Child-Specific: Enrollment Information

The teacher will provide child-specific information about the ECLS-K:2011 children's:

- Current grade level;
- Length of time child has been enrolled in the classroom; and
- Number of school absences during the current school year.

Child-Specific: Evaluation of Child's Skills, Knowledge, and Behavior

Teachers' reports of children's academic skills augment the information obtained in the direct cognitive assessments. Teachers will also rate the ECLS-K:2011 children in their classroom on social skills (including their ability to exercise self-control, interact with others, resolve conflict, and participate in group activities); problem behaviors (e.g., fighting, arguing, anger, depression, low self-esteem, impulsiveness, etc.); and learning dispositions or "approaches to learning" (e.g., curiosity, self-direction, and inventiveness).

These important social-emotional behaviors have been incorporated into a wide variety of research done with the ECLS-K data. For example, researchers have found significant relationships between approaches to learning and several other important variables (ability grouping in kindergarten through third grade, Catsambis and Buttaro 2012), (reading and math achievement in grades 3 and 5,

Bodovski and Youn 2011; Li-Grining et al. 2010), and bilingualism, Han 2010). Lim and Kim (2011) found that social behaviors measured in kindergarten were crucial to reading development through fifth grade. Morgan et al. (2008) confirmed their hypothesis that behavior problems and poor reading skills are risk factors for each other. That is, behavior problems in first grade predicted poor reading skills in third grade, and poor reading skills in first grade predicted behavior problems in third grade.

As mentioned above in the parent interview section (section C.2.1.2) above, while few studies on peer victimization have been done with children of the age of the ECLS-K:2011 sample, those that have suggest that such victimization is experienced by many children at all ages and that this experience is related to negative outcomes. Collecting teacher-report data in addition to parent-report data allow for the examination of peer victimization in different contexts and reduces the effect of mono-method bias in measuring this construct.

The ECLS-K:2011 will also include measures of executive function. As discussed in the parent interview section of this document, executive functions include working memory, attention, inhibitory control, and other self-regulatory processes. Executive processes work to regulate and orchestrate cognition, emotion, and behavior to enable a student to learn in the classroom. Of particular interest is new research on the importance of executive function for learning and academic achievement (e.g., Blair and Razza 2007; Posner and Rothbart 2006). These cognitive and behavioral processes are predictive of reading and math achievement (Blair and Razza 2007). Given the increased interest in executive functions, we have included items tapping attention focusing and inhibitory control in the TQC.

In addition to asking teachers to rate each student's overall language arts, mathematics, science, and social studies knowledge and skills, the child-level questionnaire also addresses the child's relative placement in reading and mathematics instructional groups, if those groups are formed on the basis of achievement (as opposed to having the students grouped heterogeneously). Compared with whole-class instruction, achievement grouping allows teachers to reduce heterogeneity and target instruction to match students' current level of knowledge and skills (Entwisle 1995; Karweit 1985; Lou et al. 1996; McCoach, O'Connell, and Levitt 2006; Slavin 1987). Children's achievement group placement can determine the amount and type of instruction children receive; it can influence the group process through the amount of disruptions and interruptions; and it can affect teachers' and parents' views of children. Entwisle (1995) and Slavin (1987) found these relationships with respect to reading achievement groups. Opponents of achievement grouping express concerns that teachers may develop lower expectations for children in low achievement groups, that children in low achievement groups will fall further behind their higher-achieving classmates and never catch up academically, and that children's self-esteem will be adversely impacted (McCoach, O'Connell, and Levitt 2006).

Teachers are also asked to rate the child's level of activity during structured play and during unstructured play. As discussed in section C.4.1.2, above, providing opportunities for physical activity has been shown by numerous researchers to lead to improved fitness, improved social skills, and increased academic achievement. In addition, in studies across third through fifth grades, a child's



level of physical activity and fitness have been shown to be related to improved assessment scores in reading, language, math, and social studies (Hollingsworth 2010; Wittberg et al. 2009; Castelli et al. 2007; and London and Castrechini 2011), and to reductions in antisocial behavior and resolution of interpersonal disputes (Branta et al. 1996).

Child-specific skills and behaviors covered in the child-level teacher questionnaires are child's:

- Overall rating of academic skills in reading, writing, oral language, mathematics, science, and social studies;
- Social skills and classroom behavior rating scales;
- Relationships with peers
- Experiences with peer victimization (as a victim or an aggressor);
- Attention focusing, memory and inhibitory control;
- Reading group placement;
- Mathematics group placement; and
- Physical activity level.

Child-Specific: Specific Services and Programs

Although some children spend all of their time in separate special education classes or schools, many children move in and out of a regular class daily, receiving services in pull-out classes and returning to the classroom for the rest of the day. The ECLS-K:2011 data on special education placement and practices will provide critical information about the range and effectiveness of various special services. These topics include:

- Receipt of specific services (individual tutoring, ELL services, speech or language therapy, other special education programs, programs for children with behavioral/emotional problems, gifted/talented instruction);
- Child's ELL status;
- Child's IEP/individualized family service plan (IFSP) status; and
- Testing accommodations and participation.

Child-Specific: ECLS-K:2011 Child's Parent Involvement

Parental involvement in children's education can have an important influence on school outcomes for children (Stallings and Stipek 1986; Hoover-Dempsey and Sandler 1997; Gonzalez-DeHass, Willems, and Holbein 2005). Teachers' report of

the study child's parents' participation at school and communication with the teacher can supplement parents' report of involvement in school to offer a picture of parent involvement from both perspectives.

The ECLS-K:2011 items that collect information on school-family-community connections from the teacher include:

- The specific study child's parents' involvement in the child's school and education.

Child-Specific: Teacher-Child Interactions

When child-teacher interactions are warm and free from conflict, children are most apt to have academic and social success in elementary school and this is especially true for children who might otherwise be at risk of academic or social problems in school (Pianta and Steinberg 1992; Peisner-Feinberg et al. 2001). The ECLS-K:2011 will include a measure of the teacher-child relationship which will be used to help researchers further understand the role that these important interactions play in children's adjustment to school and learning outcomes.

The teacher will answer questions about:

- Level of closeness between child and teacher; and
- Level of conflict between child and teacher.

C.5 Special Education Teacher Questionnaires

Teachers or related service providers who provide special education and related services to study participants will be asked to complete two types of questionnaires in the spring third-grade data collection. The first questionnaire gathers data on teacher background, training, experience, and teaching assignment; the items are parallel to those on the general classroom teacher classroom-level questionnaire. On the second questionnaire, special education teachers will be asked to provide information on the children with whom they work, completing one questionnaire for each ECLS-K:2011 child who has an IEP.

C.5.1 Special Education Teacher Questionnaires: Research Questions

- SEQ1: What are the types of service delivery models in place for special education? How do program variations relate to differences in children's academic and social development?
- SEQ2: What is the prevalence of different types of disabilities among children in elementary school? What types of services, instructional strategies, and assistive devices are provided to children with different types of disabilities?
- SEQ3: How is inclusion related to children's progress through the early grades?
- SEQ4: Do teachers' sociodemographic characteristics and their educational background and experience influence children's outcomes, on average or in interaction with children's sociodemographic backgrounds?
- SEQ5: How do teachers and schools handle the diversity of children's skills? How are children with special needs taught?
- SEQ6: Are teachers' practices to involve parents associated with higher levels of parent involvement?
- SEQ7: How are children identified for receipt of special education services?

C.5.2 Special Education Teacher Questionnaires: Construct Coverage

Special Education Teacher Background

Information on teachers' demographic background, education, certification, and teaching experience are of interest to researchers because they provide contextual information about the child's learning environment. Other teacher information, such as teacher reports of their professional efficacy and their workload (e.g., number of students they teach, teaching assignment, and position), may influence teachers' interactions with students and student outcomes.

The following demographic, training, and experience information will be collected from special education service providers of ECLS-K:2011 children:



- Teacher's sex, age, and race/ethnicity;
- Total years teaching experience;
- Total years as a special education teacher;
- Teacher's education, including degrees, credentials/licenses, certification, and coursework;
- Teaching position and assignment;
- Locations in which the teacher delivers services within the school;
- Teacher's job satisfaction and sense of efficacy; and
- Teaching student caseload (number of students with IEPs with whom the teacher works during a typical week).

Child-specific: Disabilities and Placement

Holt, McGrath, and Herring (2007) analyzed ECLS-K data to determine when most children entered special education in the early years of elementary school and how long they stayed in the program. Twelve percent of children received special education in at least one grade—kindergarten, first, and/or third grade¹⁴. Boys, poor children, and children from small towns (compared to children in cities) were most likely to be enrolled in a special education program. The percentage of children receiving special services was higher in third grade than in kindergarten and first grade and the most commonly identified primary disability changed across grade levels. These studies and others conducted with ECLS-K data point to the importance of further research on the relationship between children’s diagnosed disabilities and receipt of special services and programs. Such information is best collected from the child’s special education teacher because he or she is likely the individual most familiar with the child’s IEP plan and the types of services, accommodations, and assistive devices used with the child.

The child-level Special Education Teacher Questionnaire asks the teacher to provide the following student-level information:

- Whether the child is receiving special education services through an IEP;
- Teacher’s review of the child’s records related to special education services;
- Child’s disabilities;
- Goals contained in the child’s IEP;
- Type and amount of special education and related services the child receives;
- Child’s classroom placement;
- Teaching methods and curriculum materials used with child, including assistive technologies;
- Communications with other teachers about the child;
- Communication with the child’s parents;
- Individual evaluations to develop IEP goals;

¹⁴ ECLS-K did not collect data at 2nd grade.



- Extent to which the IEP goals have been met; and
- Extent to which child is expected to meet general education goals and participate in grade-level assessments.

C.6 Child Questionnaire

Prior to the start of the direct cognitive assessment, children in the third-grade round will be asked to complete a self-administered, computerized questionnaire. The Child Questionnaire (CQ) is administered on a computer using audio-CASI. Children will choose answers to the questions by selecting responses directly on the touch-sensitive screen of the laptop. Items in the CQ include those measuring children's interest in reading, mathematics, and science; relationships with peers; feelings of loneliness; occurrences of peer victimization; and overall happiness with different aspects of life (e.g., attention from parents, hobbies and free time activities)

C.6.1 Child Questionnaire: Research Questions

- CQ1: What are children's perceived competence and interest in reading, math, and science? How is perceived competence related to academic achievement in reading, math, and science? How is perceived competence related to cognitive, social, emotional, and behavioral child outcomes? What family, teacher, classroom, and school factors are associated with children's perceived competence and interest?
- CQ2: What is the relationship between the peer context and perceived competence and interest in the reading, math, and science? Are peer relationships and interactions associated with children's behavior in the classroom? What teacher, classroom, and school factors are associated with peer relationships and peer interactions? Is executive functioning associated with peer relationships?
- CQ3: How does social distress (as defined by fear of negative evaluation, reported peer victimization, and poor peer relationships) relate to academic, cognitive, social, and behavioral outcomes? How prevalent is social anxiety among elementary-aged children? How is social anxiety related to achievement? What child, family, and teacher characteristics are associated with social anxiety, peer victimization, and peer relationships?
- CQ4: How often do children perceive they are victims of peer victimization? What is the prevalence of different forms of peer victimization? How do child reports of peer victimization compare to teacher and parent reports? What child, family, teacher, classroom, and school characteristics are associated with peer victimization? Is reported peer victimization related to cognitive functioning, academic achievement, or child behaviors?

- CQ5: What child, family, teacher, classroom, and school characteristics are associated with the child's perception of his/her prosocial behavior? Is perception of prosocial behaviors related to the teacher-child relationship, child behaviors in the classroom, and performance in school?
- CQ6: How happy are children with their lives? Is life satisfaction associated with social, emotional, and cognitive development and health? How does psychological well-being (as measured by life satisfaction) related to the teacher-child relationships, child behaviors in the classroom, and performance in school? Does life satisfaction serve as a buffer against negative circumstances in the child's life?

C.6.2 Child Questionnaire: Construct Coverage

Interest and Perceived Competence in Reading, Math, and Science Subjects

A child's self-concept is important for success in school; children who believe that they have the ability to succeed in a particular situation are more likely to be successful. Research has shown that the child's perception of academic competence predicts reading and mathematics achievement (e.g., Kirsch et al. 2002). Students' beliefs about their competence are linked to how engaged they are in the classroom. Students who are engaged in learning are often involved in their work, persevere despite obstacles, and show pride in their accomplishments. A child's beliefs about the likelihood for success can also influence the child's emotional state. For example, a student who believes that he or she will not be successful may be anxious or fearful which may result in less engagement in the classroom.

The following types of subject-specific questions will be asked in the CQ:

- Interest in the three subjects;
- Level of ability in the three subjects; and
- Enjoyment of the three subjects.

Relationships with Peers

A child's relationships with peers are an important predictor of later social, emotional, and psychological adjustment (Parker & Asher, 1987) and significantly shape development (e.g., Rubin, Bukowski, and Parker, 2006). Within peer

contexts, children and adolescents acquire skills, attitudes, and experiences that affect adjustment, well-being, and health (Rubin, Bukowski, and Lauren, 2009). Peer relationships can contribute to putting a child on a trajectory toward maladjustment and psychopathology or on a path toward competence and health (e.g., Parker et al. 2006). Difficulties with getting along with peers can be problematic during early childhood and can lead to such problems as peer rejection, school disengagement, and underachievement (e.g., Coie and Kupersmidt, 1983; Ladd, 2006). Negative peer relationships can also lead to even more serious problems for adolescents and adults, including criminal behavior, mental illness, and underachievement (see Dodge, Coie, and Lynam, 2006; Parker and Asher, 1987). In contrast, positive peer relationships can increase opportunities for learning, increase self-esteem, influence attitudes toward school and learning, and improve academic achievement (Wentzel 2009).

The CQ includes questions on the child's perception of his/her peer relationships and friendships. Children to rate their agreement with statements such as:

- Having lots of friends;
- Making friends easily;
- Getting along easily with other children;
- Other children want the child as a friend; and
- Having more friends than other children.

Social Distress

A child's early positive interactions with peers have been shown to have effects on later social adjustment and development, as well as personal satisfaction and happiness. Group acceptance is an important facet of children's successful relationships with peers; reciprocal friendships are particularly valued. Unpopular children not only have fewer connections with other peers, but also experience increased feelings of loneliness (Asher et al. 1984). Children's feelings of loneliness can seriously undermine children's feelings of well-being and result in possible further isolation (Parker and Asher 1993).

Social anxiety often arises during the early elementary years and can continue throughout the adolescence. Particularly in the context of fear of negative peer evaluation, social anxiety has been shown to play a role in the development of later socialization skills. Children who excessively worry about that they are unlikable or are not accepted by others may also demonstrate lower self-worth and exhibit more behavior problems, and may be more susceptible to anxiety and depression (LaGreca and Stone 1993).

In the CQ, children provide information about the following types of fear of negative evaluation items:

- Concern of not being liked by other children; and
- Concern about what other children think about him/her.

Occurrences of Peer Victimization

As mentioned in the parent interview and teacher questionnaire sections above, research suggests that peer victimization can be experienced by children in their elementary years and that these experiences can be related to negative outcomes as children reach adolescence. Collecting self-reported data, in addition to teacher-report data and parent-report data, will allow for the examination of child's perception of peer victimization across different contexts.

In the CQ children indicate the frequency of being subjected to the following types of behavior by peers during the school year:

- Being teased or called names;
- Had lies or stories told about them;
- Been physically assaulted (e.g., pushed or kicked); and
- Been left out from play activities.

Life Satisfaction and Prosocial Behavior

Child attitudes and behaviors can serve as a protective factor and support development and health. Whereas children who have difficulties forming and maintaining friendships are at risk for later maladjustment, children who display prosocial behaviors are on a path toward social competence. Children who

engage in emphatic and altruistic behaviors are more likely to engage in positive interactions in the classroom and demonstrate high social competence with peers (e.g., Ladd and Profilet 1996). A child's tendency to engage in prosocial behaviors is a strong predictor of psychological health in childhood and adolescence (e.g., see Eisenberg, Fabes, and Spinrad 2006).

A child's emotional health is a function of the child's perceptions of the child's experience. One aspect of emotional health is the child's psychological well-being, which includes positive feeling states and life satisfaction (Salsman et al. 2010). Life satisfaction is one's cognitive evaluation of life experiences and, the case of children, is concerned with whether children are happy with their lives (Kallen et al. 2012). Emotion can either support or impair cognitive functioning (for a review, see Isen 1999), and positive emotions and psychological well-being can act as a buffer and enhance adjustment and health. It has been argued that the proper balance between emotion and cognition is believed to be important for successful adjustment in school (Blair 2002; Blair and Dennis 2010).

The CQ includes questions asking children to rate the following:

- Satisfaction with hobbies and free-time activities;
- Satisfaction with clothes, toys, and games;
- Satisfaction with the amount of attention from parents;
- Satisfaction with friends;
- Satisfaction with skills and talents;
- Satisfaction with the neighborhood and community;
- Likelihood of saying or doing nice things for classmates;
- Likelihood of cheering up classmates; and
- Likelihood of helping out other children.

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