## Early Childhood Longitudinal Study Kindergarten Class of 2010-11 (ECLS-K:2011) - Fall First Grade Data Collection

**OMB Clearance Package** 

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Prepared by:



#### National Center for Education Statistics

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# A.1 Circumstances Making Collection of Information Necessary

#### A.1.a Purpose of This Submission

The Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011) is a survey that focuses on children's early school experiences beginning with kindergarten and continuing through the fifth grade. It includes the collection of data from parents, teachers, school administrators, and nonparental care providers, as well as direct child assessments. Like its sister study, the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K),<sup>1</sup> the ECLS-K:2011 is exceptionally broad in its scope and coverage of child development, early learning, and school progress, drawing together information from multiple sources to provide rich data about the population of children who are kindergartners in the 2010-11 school year. As with the original ECLS-K, the ECLS-K:2011 is sponsored by the National Center for Education Statistics (NCES) within the Institute of Education Sciences (IES) of the U.S. Department of Education (ED). Fall and spring collections in the kindergarten year are being conducted for NCES by Westat, with the Educational Testing Service (ETS) as the subcontractor developing the child assessments. Clearances for studying the first ECLS-K cohort were granted in 1996 for the kindergarten data collection (OMB No. 1850-0719), in 1998 for the first-grade to fifth-grade data collections (OMB No. 1850-0750), and in 2005 for the spring 2006 field test data collection (conducted with eighth- and tenth-grade students and their teachers) and the spring 2007 national data collection (conducted with eighth graders (OMB No. 1850-0750). Clearances for studying the ECLS-K:2011 cohort were granted for the fall 2009 field test data collection and fall 2010 and spring 2011 kindergarten national data collections (OMB No. 1850-0750).

This submission requests an update of the most-recent previously obtained clearance for the ECLS-K:2011 national kindergarten data collections, approved on 5/5/2010 (OMB# 1850-0750 v.8), which granted a waiver of the 60-day federal

<sup>&</sup>lt;sup>1</sup> Throughout this package, reference is made to the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99. For ease of presentation, it will be referred to as the ECLS-K. The new study for which this submission requests approval is referred to as the ECLS-K:2011.



register notice for this current submission. This submission describes the procedures and instruments planned for a fall first-grade data collection. Similar to the fall first-grade data collection in the ECLS-K, this collection will include children in a 30 percent subsample of the ECLS-K:2011 schools (n=approximately 300 schools and 6,000 children). A primary purpose of this collection is to obtain information about children's summer experiences to examine summer learning, summer learning loss, and the transition between kindergarten and first grade. The collection will include a child assessment, a teacher questionnaire, and a parent interview. A primary purpose of the follow-up rounds of data collection for the ECLS-K:2011, including fall first grade, is to allow for examination of change over time within the ECLS-K:2011 cohort, as well as to allow for comparisons of the experiences, skills, and knowledge of this cohort and the cohort of children in kindergarten in 1998-99. Therefore, the instruments for the fall 2011 first-grade collection have been developed from the instrumentation used in the ECLS-K:2011 fall and spring kindergarten rounds as well as the ECLS-K fall first-grade collection (available at <u>http://nces.ed.gov/ecls/kinderinstruments.asp</u>), though changes have been made to the prior instruments in order to ensure that the items are gradeappropriate and capture information on summer learning and the transition between kindergarten and first grade.

This current submission also requests clearance for recruiting and tracking respondents for future collections up through and including the spring of second grade (spring 2013).<sup>2</sup> Specifically, this package describes the recruitment materials and burden of recruitment to (i) contact states and districts to remind them of the next waves of the ECLS-K:2011 study, (ii) remind schools and parents of the need for their participation, and (iii) recruit new schools to which ECLS-K:2011 students have transferred. NCES will use the same recruitment materials and tracking methods used for the kindergarten collection that were cleared on 3/20/09,<sup>3</sup> only updating them for the first and second grade collections (for example, by making changes to the referenced grade, the date, and the commissioner name and title, as needed).

<sup>&</sup>lt;sup>2</sup> Due to possible budget cuts, NCES may need to eliminate the currently planned fall second grade data collection.

<sup>&</sup>lt;sup>3</sup> These include respondent letters, newsletters, summary sheets, and birthday cards, which were included in Appendix F of the initial ECLS-K:2011 OMB package.



#### A.1.b Legislative Authorization

ECLS-K:2011 is conducted by NCES in close consultation with other offices and organizations within and outside the U.S. Department of Education. ECLS-K:2011 is authorized by law under the Education Sciences Reform Act of 2002 (20 USC § 9543):

"The Statistics Center shall collect, report, analyze, and disseminate statistical data related to education in the United States and in other nations, including -- (7) conducting longitudinal and special data collections necessary to report on the condition and progress of education;"

The Education Sciences Reform Act of 2002 (20 USC § 9573) further states that:

"All collection, maintenance, use, and wide dissemination of data by the Institute, including each office, board, committee, and center of the Institute, shall conform with the requirements of section 552a of title 5, the confidentiality standards of subsection (c) of this section, and sections 1232g and 1232h of this title.

#### A.1.c Prior Related Studies

The ECLS-K:2011 is part of a longitudinal studies program. The two prior ECLS studies pertain to two cohorts—a kindergarten cohort and a birth cohort. Together these cohorts provide the range and breadth of data required to more fully describe and understand children's education experiences, early learning, development, and health in the late 1990s and 2000s.

The birth cohort of the Early Childhood Longitudinal Study (ECLS-B) followed a national sample of children, born in the year 2001, from birth through kindergarten entry. The ECLS-B focused on the characteristics of children and their families that influence children's school readiness and first experiences with formal schooling, as well as children's early health and in- and out-of-home experiences.

The ECLS-K followed a nationally representative cohort of children from kindergarten through eighth grade. The base year data were collected in the fall and spring of the 1998-99 school year when the sampled children were in



kindergarten. A total of 21,260 kindergartners throughout the nation participated by having a child assessment and/or parent interview conducted during that school year. Five more waves of data were collected: in fall and spring of the 1999-2000 school year when most, but not all, of the base year children were in first grade; in the spring of the 2001-02 school year when most, but not all, of the base year children were in third grade; in the spring of the 2003-04 school year when most, but not all, of the base year children were in fifth grade; and in the spring of the 2006-07 school year when most, but not all, of the base year children were in eighth grade.<sup>4</sup>

## A.1.d ECLS-K:2011 Study Design for the Fall First-grade Data Collection

The sample for the ECLS-K:2011 is a nationally representative sample of children who were in kindergarten in 2010-11. The sample includes children enrolled in kindergarten for the first time and children repeating kindergarten. In the fall of 2010, 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 were selected, also with PPS with an oversampling of private schools. The third-stage sampling units were children in kindergarten or of kindergarten age (approximately 5 years old) in ungraded schools or classrooms. Children were selected within each sampled school using equal probability systematic sampling, with a higher sampling rate for Asians, Native Hawaiians, and Other Pacific Islanders, who were oversampled as one group, so as to achieve a minimum required sample size for this group. For the fall firstgrade data collection, data will be collected from a 30 percent subsample of the national sample, regardless of the grade in which the students are enrolled (i.e., students who repeat kindergarten, are advanced to second grade or higher, or who have become homeschoolers will not be excluded). Further discussion of sampling issues can be found in section B.1: Universe, Sample Design, and Estimation.

The fall 2011 first-grade data collection will include direct child assessments, height and weight measurement, parent interviews, and teacher questionnaires for regular

<sup>&</sup>lt;sup>4</sup> At each follow-up wave, a small percentage of children had been retained in a grade at some point prior to the wave of interest and therefore were in a grade lower than the target grade of that follow-up wave. In addition, a small number of children were found to be advanced to a higher grade.



classroom teachers. Computer assisted interviewing (CAI) will be the mode of data collection for the child assessments and the parent interviews. Teachers will complete a child-level, hard-copy, self-administered questionnaire about the participating children in their classrooms.

**Direct Child Assessments.** As in the kindergarten collections for ECLS-K:2011, a direct cognitive assessment will be used in the fall 2011 first-grade collection. The cognitive assessment will measure the domains of reading, mathematics, science, and executive functioning. It will be administered directly to the sampled children through a one-on-one assessment employing age- and grade-appropriate items. The structure of the ECLS-K:2011 first-grade cognitive assessment will be two-stage, the same as the ECLS-K:2011 base year (i.e., kindergarten) assessment. That is, for the cognitive assessments in reading, math, and science, all children first will be administered a routing test. Performance on the routing test will determine which one of three second-stage tests will be appropriate for the child's skill level; the child will then be administered the appropriate second-stage assessment form. The executive function tasks are not two-stage assessments. In addition to the cognitive assessment, the ECLS-K:2011 direct child assessments will include measures of the children's height and weight.

A majority of items in the two-stage ECLS-K:2011 reading and mathematics assessments will be the same as those used in the ECLS-K kindergarten/first-grade assessment in order to enable researchers to conduct cross-cohort analyses. While a science assessment was fielded in the ECLS-K, it was first fielded in third grade, so a new assessment appropriate for younger children was developed for the ECLS-K:2011. Science items were administered in the kindergarten and first grade waves of the ECLS-K as part of a general knowledge assessment; some of these items have been included in the ECLS-K:2011 kindergarten and first grade science assessments. The science assessment for fall first grade will also be a two-stage assessment, similar to the science assessments fielded in the third-, fifth-, and eighth-grade rounds of the ECLS-K. The assessment of executive functioning will be composed of the same tasks used in the ECLS-K:2011 kindergarten collection (i.e., Numbers Reversed and Dimensional Change Card Sort).

Procedures for determining whether children will be assessed in English or Spanish, or whether they will be routed out of the cognitive assessments due to language



barriers, will be similar to those used in the ECLS-K:2011 kindergarten data collections, though some changes are being made to reduce the assessment burden placed on children who demonstrated sufficient English proficiency by the spring of kindergarten to be assessed in English. In the kindergarten rounds, assessments for all children began with a language screener composed of two sets of tasks from the preLAS (Simon Says and Art Show) and an assessment of English basic reading skills. The language screener determined whether children whose primary home language was not English had sufficient proficiency in English to receive the child assessment in English. (Children whose primary home language was English were administered the cognitive assessments in English regardless of their score on the preLAS.) Children who did not achieve the publisher recommended cut score on the language screener did not complete the assessment battery in English beyond the assessment of English basic reading skills. Spanish-speaking children who did not achieve the publisher recommended cut score on the language screener were administered a test of their Spanish early reading skills and math and executive function assessments in Spanish, and they had their height and weight measured. Non-Spanish-speaking children who did not achieve the publisher recommended cut score on the language screener also did not take the remaining assessment battery in English; they just had their height and weight measured.

For the first-grade data collection, children who were assessed in English in either the fall or spring of kindergarten (either because their primary home language was English or because their primary home language was one other than English and they passed the language screener) will only be administered two preLAS items that contribute to the overall reading assessment score, rather than the full battery of Simon Says and Art Show preLAS items. Children whose primary home language was one other than English and who did not pass the language screener in kindergarten will be administered the full preLAS again in first grade. For these children, routing based on scores on the language screener will be the same as it was in kindergarten. Additionally, rather than administer the test of basic reading skills to all children, as was done in kindergarten, in first grade the basic reading skills items will be administered to a subset of children, specifically those who are administered the cognitive assessments in English and whose score on the firststage reading test routes them into the low or middle second-stage reading test. Children who perform well enough on the reading router to be administered the high second-stage test will not receive the basic reading skills items.



**Parent Interviews.** A parent interview will be administered to the parents/guardians of the children sampled for the fall first-grade data collection. The interview will be developed in English and Spanish. For parents who speak neither English nor Spanish, home and community interpreters will be used when available to administer the English-language version to parents, translating the English version to the parent's native language during the interview. The fall first-grade parent instrument will cover the following topics: where the child spent the summer; home environment, activities, and cognitive stimulation; and nonparental care arrangements. The parent interview includes the same types of questions (in terms of topics and format) that have been previously fielded in ECLS-K and other NCES studies (e.g., ECLS-B, National Household Education Surveys Program (NHES), Education Longitudinal Survey of 2002 (ELS:2002), and the National Education Longitudinal Survey of 1988 (NELS:88)).

**Teacher Questionnaires.** General classroom teachers will be asked to complete a child-level questionnaire for each of the sampled children in their classroom. The questionnaires will contain items about children's language and literacy skills, behaviors in the classroom, approaches to learning, social skills, achievement grouping placement, and assignments provided by the school for children to complete over the summer. These data obtained from teachers can be compared to the results of direct assessments administered to the sampled children. They also provide broader information about children's skills and behaviors than can be ascertained through the 60-minute direct child assessment. As results from additional years of collection become available, a picture of children's skills over time can be developed using both teacher reports and direct cognitive assessment results.

#### A.1.e ECLS-K:2011 Sample Tracking Activities

Tracking the sampled children, their parents, and their schools is a major part of maintaining high response rates. Many sample tracking tasks will be conducted by field staff during contacts with schools in the fall when we ask about sampled children who attended the school in the previous round. During this contact, we will determine whether the sampled children are still in the school and, if so, obtain information on the children's teachers for the year, their IEP status, and any



necessary assessment accommodations or exclusions. If we identify a sampled child who has transferred to a new school (referred to as a "mover"), we will ask the school staff if they have contact information for the child's new school. If so, we will call the new school to ascertain if the child is enrolled there. If, during the fall school contacts, we are told of any children who are now homeschooled, field staff will call the children's parents to confirm this. Households that cannot be located in the fall using information obtained from the school will be tracked by the contractor's Telephone Research Center in January and February (described further below).

A second method of tracking involves contact with children's households directly. Birthday cards are mailed at monthly intervals to all sampled children during the month of their birth. This helps the study maintain a connection with the family and provides a method for obtaining updated contact information for families if they move. When a family no longer resides at the address to which the card is mailed, the post office generally will either provide a forwarding address if one is available or return the card, indicating that the addressee is no longer at the given address. Also, sometimes parents inform the study about changes in their contact information by using the contractor's toll-free 800 number, study email address, website, or fax number. Receipt of a forwarded birthday card can serve as a prompt for them to do so. Any updated contact information received either from the post office or a parent will be entered into the study locating database so that the most current contact information available can be used when mailing letters to notify parents of an upcoming data collection (see Appendix A of this package for the parent notification letter that will be used for the fall first grade data collection). An additional contact will be made with parents when we send them the brief report to be published by NCES with initial results from the ECLS-K:2011 kindergarten data. This mailing, which will keep respondents apprised of the study findings, will also include a change of address card asking parents to let us know about any changes in the family's address or telephone number, or if the child has changed schools (see Appendix A of this package for the change of address card), thereby serving as another method of tracking. Lastly, updated contact information will be requested during the spring parent interviews.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> The approved spring kindergarten parent interview includes questions asking for updated contact information, and we plan to include the same items in the spring first-grade parent interview. The OMB clearance package for the spring first-grade data collection will be submitted for OMB clearance later this year.



Tracking activities in the data collection contractor's Telephone Research Center (TRC) will be conducted between the fall 2011 and spring 2012 rounds of national data collection (specifically in January and February 2012) for households for which new contact information was not obtained from schools, parents, or the post office.<sup>6</sup> Our ECLS-K experience was that 4 to 5 percent of household cases, on average, required some TRC tracking between rounds that were two years apart (e.g., between first and third grade). Our assumption is that the level of effort for ECLS-K:2011 tracing activities will be less than the effort employed for ECLS-K tracing because the data collection is annual and the more frequent contact with families will mean that we are better able to locate families who move between the short period between data collection rounds. However, the extent to which this is true may be affected by the economic downturn and the higher mobility rates that may have resulted from it.

## A.2 Purposes and Uses of the Data

The ECLS-K:2011 will provide a rich set of data that are designed to serve two purposes: descriptive and explanatory. It will provide descriptive data at a national level related to (1) children's status at entry into kindergarten and at different points in children's elementary school careers, (2) children's transition into school and into the later elementary grade levels, and (3) children's school progress through the fifth grade. Additionally, it will provide rich data that will enable researchers to test hypotheses about how a wide range of child, family, school, classroom, nonparental care and education provider, and community characteristics relate to experiences and success in school.

In addition to the descriptive objectives mentioned above, it will also be the goal of the data collection to describe accurately the diversity of young children with respect to demographic characteristics such as race/ethnicity, language, and school readiness. Such information is critical for establishing policies that are sensitive to this diversity. The longitudinal nature of the study will enable researchers to study cognitive, socioemotional, and physical growth, as well as relate trajectories of growth and change to variation in home, school, and before- and after-school care setting experiences in the elementary grades. Ultimately, the ECLS-K:2011 data set will be used by policymakers, educators, and researchers to consider the ways in

<sup>&</sup>lt;sup>6</sup> TRC tracking activities also will be conducted between the fall 2012 and spring 2013 rounds of national data collection (specifically in January and February 2013).



which children are educated in our nation's schools and to develop effective approaches to education. It will be particularly valuable to policymakers, as the ECLS-K:2011 is being launched a dozen years after the inception of the original ECLS-K. Analyses of the two cohorts will provide valuable information about the influences of changing policy and demographic environments on children's early learning and development.

The fall 2011 first-grade data collection will focus on summer learning and the transition from kindergarten to first grade. Additionally, summer learning, or learning loss, can have a considerable impact on children's educational progress. The ECLS-K:2011's fall first-grade data collection instruments will examine summer learning and the transition into first grade using multiple sources. Children's skills will be captured through the direct child assessment; comparisons between assessment scores in the spring of kindergarten and fall first grade will allow for analyses of the extent to which there is summer learning or learning loss and for whom. Parent interviews will examine educational activities in the household over the summer. Teacher questionnaires will provide ratings on children's social, language, and literacy skills, as well as children's achievement grouping placement and assignments provided by the school for children to complete over the summer.

### A.2.1 Research Issues Addressed in the ECLS-K:2011 Fall First-grade Data Collection

A main purpose of the fall first-grade data collection is to obtain information that will enable researchers to study factors that are associated with children's learning during the summer months between kindergarten and first grade. Studies find that the gap in achievement between disadvantaged children and advantaged children widens during the summer months (Alexander, Entwisle, and Olson, 2007; Burkam et al., 2004). The widening gap could be due to greater gains by advantaged compared to disadvantaged students or to a loss in learning that is greater among disadvantaged students or not present for advantaged students. Researchers using a sample of Baltimore students found that disadvantaged children experienced summer losses in what they had learned during the school year while advantaged children did not experience losses to the same extent (Alexander, Entwisle, and Olson, 2007). They also found evidence that summer learning loss cumulates over time to the detriment of disadvantaged children (Alexander, Entwisle, and Olson,



2007). Other research suggests that the extent of losses in learning varies by subject area and grade. In a study reported by the National Summer Learning Center, Cooper and colleagues (1996) conducted a meta analysis of studies from 1975 forward that looked at summer learning for children in multiple grade levels (including kindergarten through eighth grade). The authors found that while all students lost approximately two months of grade level equivalency in math and also lost important skills in spelling over the summer, family income was important in predicting the extent of summer reading loss: low-income students experienced losses in reading comprehension and reading recognition while middle-income students experienced slight gains in reading performance over the summer. In addition, the authors also found that grade level was related to reading achievement. Over the summer, children in the first and second grades showed gains in reading achievement relative to national norms, but they were not significant. Children in grades four through eight showed significant losses in reading achievement over the summer relative to national norms (Cooper et al 1996).

An important factor in examining summer learning is family resources. Parents with household incomes above the poverty line tend to be better educated and have more prestigious occupations than parents with household incomes below the poverty line (Duncan and Magnuson, 2005). Parents with higher socioeconomic status (defined by income, education, and occupation) are more likely to be married, provide higher quality care arrangements, live in better neighborhoods with better schools and other community resources, and encounter fewer family stressors than parents with lower socioeconomic status (Farkas, 2006). All of these factors have been shown to be associated with children's early learning (Farkas, 2006; Duncan and Magnuson, 2005). The family resources that children living in households with higher socioeconomic status enjoy could also enable their parents to provide outside enrichment activities during the summer months.

## A.3 Use of Improved Information Technology

When feasible, available technology will be used to improve data quality and reduce respondent and school burden.



The ECLS-K:2011 parent interviews and child assessments will be conducted using computer-assisted interviewing (CAI). Using CAI will increase data collection efficiency by permitting preloads of available data about the sampled schools and children, on-line editing of information as it is entered (e.g., correcting data entry errors caught through range and logic checks or correction of information provided in a previous round of data collection), and routing of respondents through complex question branching. These efficiencies also reduce respondent burden by producing faster interviews and reduce the need to recontact respondents to obtain missing information (which would occur, for example, when a field interviewer not using CAI does not follow a skip pattern correctly and items that should be asked are not). Field interviewers will conduct interviews with parents without telephones by making in-person visits to complete interviews; these interviews will also be conducted using CAI on laptop computers. The CAI system has important features that will improve the quality of the data and reduce the burden on respondents, as follows:

- Initial Contact: The CAI system will guide the ECLS-K:2011 field interviewer in making contact with the parent at the phone number or address provided by the school and with the child at the school and will include prompts to help the interviewer identify the correct respondent.
- Routing the Direct Child Assessment: The CAI system will be programmed so the initial routing tests at the beginning of the reading, mathematics, and science cognitive assessment subtests will be scored by the computer and the appropriate second-stage tests corresponding to the child's ability level will be administered. The benefits of such a two-stage assessment are increased adaptiveness, reduced burden for the child, and increased precision of measurement because the interviewers do not need to score the routing test and select the appropriate second-stage test themselves.
- Skip Patterns: The CAI system automatically guides interviewers through the complex skip patterns in the parent interviews, thereby reducing respondent burden, reducing potential for interviewer error, and shortening the interview administration time. This is because the respondent will not be asked inapplicable questions and the interviewers do not need to spend time determining which questions to ask.
- Copying Responses: The CAI system will be programmed to copy responses from one item to another and from one instrument to another to prevent unnecessary repetition of questions and to aid in respondents' recall. For example, information that is provided by the respondent early in the interview may be useful later in the interview; such information can



be displayed on the screen or used as a wording fill for relevant questions to assist the respondent. Additionally, information from the previous waves of data collection can be copied to the current wave's interview and be verified by the respondent, eliminating the need to collect the data again.

- Time Intervals: The CAI system also provides automated time and date prompts that are very useful in longitudinal studies to assist respondents in remembering specific time periods. The interview can also provide the specific time frame for the interval between the previous and the current wave of data collection, to help respondents recollect information without repeating what they had given at the previous data collection period.
- Receipt Control: The CAI system will automatically update the interview status of study participants (i.e., whether an interview is scheduled, whether it has been completed). This information will be used to produce status reports that allow timely and ongoing monitoring of the survey's progress.

The use of a CAI system for the ECLS-K:2011 is critical because of the intricate and sometimes difficult skip patterns that are part of complex survey instruments and because of the longitudinal nature of the data collection in which the same respondent is typically interviewed at multiple time points. Without CAI, the ECLS-K:2011 instruments would be difficult to administer over repeated measurement periods, and respondent burden would be increased.

A computer-based data management system will be used to manage the sample. The sample management system uses encrypted data transmission and networking technology to maintain timely information on respondents in the sample, including contact, tracking, and case completion data. This system will be particularly important as children move from one school to another over the course of ECLS-K:2011 study. The use of technology for sample management will maximize tracking efforts, which should have a positive effect on the study's ability to locate movers and achieve acceptable response rates.

## A.4 Efforts to Identify Duplication

The ECLS-K:2011 will not be duplicative of other studies. The original ECLS-K is the only other study to collect as detailed and extensive information as the ECLS-K:2011 for a cohort of young children and to follow them throughout elementary school. The ECLS-K:2011 will extend the information obtained by the ECLS-K to a new



cohort, will open up possibilities to investigate new research questions, and will allow important comparisons to be made between two kindergarten cohorts entering school a dozen years apart. In addition, the ECLS-K:2011 will collect data during the children's second and fourth grade years, which the original ECLS-K did not.

In preparation for the launch of the original ECLS-K, a review of other early childhood studies was conducted. At that time, the review found that a few largescale national studies had focused on children's early learning environments (e.g., the Office of Policy and Planning's National Transition Study, NCES's National Household Education Surveys Program), on parent and family involvement in education (the National Household Education Surveys Program), and on the structure of elementary schools (e.g., NCES's Schools and Staffing Survey), or had evaluated specific programs (e.g., PES's the Longitudinal Evaluation of School Change and Performance; Chapter 1: Prospects Study). However, these studies either did not provide the longitudinal child-level data that are needed to study the relationships between school experiences and child developmental outcomes and growth or were concerned primarily with only certain segments of the child population.

In the past 25 years there have been a few large scale studies that have looked at summer programs, summer child care, and/or summer learning, but they were either not national studies and were confined to limited geographic areas (e.g., the Beginning School Study (1982-2002) conducted in the Baltimore City Schools) or were national studies but were not based on nationally representative samples of kindergartners that were followed longitudinally (e.g., the National Survey of Families (1999); the Child Development Supplement (CDS) to the Panel Study of Income Dynamics (2002), or the Current Population Survey (CPS) (1996)). These studies are also not from as recent a cohort of children as the ECLS-K:2011 children are, thus the issues that they measured (e.g., participation in child care during the summer) may have changed since the earlier data were collected.

A literature search was conducted to identify and review research studies with the same study purpose and goals as those proposed for the ECLS-K:2011. To be included in the search the research had to be (1) a survey-based study of a population with a sample of 1,000 or more, (2) longitudinal in design, and (3)



focused on children's cognitive development in the elementary, middle, and/or secondary grades. Although similar studies were found, they were generally confined to limited geographic areas (e.g., Baltimore, Maryland; Greensboro, North Carolina) or, for the studies conducted on the national level (e.g., Prospects, Children of the National Longitudinal Survey of Youth [NLSY Child Supplement]), they were not based on probability samples of kindergartners. For example, Prospects began with first graders and targeted Title 1 recipients. NLSY79's Child Supplement targets the children of female sample members of a household-based 1979 sample of 14- to 21-year-olds. The Head Start Family and Child Experiences Survey (FACES), which is similar to the ECLS-K:2011 in terms of the included content and components, has followed several cohorts of children from preschool through early elementary school. However, FACES has not followed the progress of children in school beyond kindergarten or first grade, and the samples are limited to children served by Head Start. Studies such as the National Education Longitudinal Study of 1988 (NELS: 88) and Education Longitudinal Study of 2002 (ELS: 2002) began with students in the middle and high school grades. Another major finding of the literature review was that most studies used group-administered achievement tests, which, for young children, can be less reliable than individually-administered assessments. Individually administered assessments, like those used in the ECLS-K:2011, allow the assessor to establish rapport and offer motivation and supportive conditions so that each child performs to the best of his or her ability.

#### A.5 Method Used to Minimize Burden on Small Businesses

The respondents for ECLS-K:2011 fall first-grade round will include teachers. Also, private, not-for-profit, and proprietary elementary schools have been drawn into the sample. These proprietary and nonprofit schools will benefit from the study's burden-reducing strategies (e.g., instruction packets for participants, toll-free help lines, and prepaid business return envelopes), which were designed for all types of schools.

## A.6 Frequency of Data Collection

This submission describes and requests approval for the fall first-grade data collection of the ECLS-K:2011 and for the tracking activities for the spring first and



second grade data collections. The base year data collection began in fall 2010 and will continue in spring 2011. One of the main goals of the ECLS-K:2011 is to measure change in children's cognitive growth and noncognitive status, as well as changes in the contextual characteristics (i.e., school, classroom, family, and community factors) that can affect growth. The fall first-grade data collection is one of the periodic follow-ups that will collect information to be compared to baseline information, thereby allowing for analyses of change for elementary school children and their environments.

For the first-grade year, beginning-of-the-school-year data collection is needed in order to obtain baseline data on children at the very beginning of their exposure to the influences of the first-grade year. Through direct and indirect assessments, the first-grade fall data collection will provide measures of the skills, attributes, and knowledge of a subsample of children as they re-enter school and begin a new school year. The first-grade fall data collection will also provide information to measure summer learning and/or learning loss, when used in conjunction with the ECLS-K:2011's spring kindergarten data. The data collected at the end of the school year in the spring first-grade data collection will be used to examine changes after children have experienced nearly a year of first grade. After this year, the study design calls for follow-up collections in fall and spring of second grade and each spring from third through fifth grade. This frequency of data collection is linked to the rate of change that is expected for children of this age and the desire to capture information about children as critical events and transitions are occurring, rather than measuring these events retrospectively. Without data collection follow-ups, the study of children's cognitive, socioemotional, and physical development is hindered. Assuming the first-grade collections are as successful as the kindergarten collections have been to date, future clearance requests will be submitted for the follow-up collections in later grades.

## **A.7** Special Circumstances of Data Collection

No special circumstances for this information collection are anticipated.



## A.8 Consultants Outside the Agency

NCES has consulted with a range of outside agencies over the life of the ECLS-K, and such input also has informed the ECLS-K:2011 study design and instrumentation, since these draw heavily from the ECLS-K. During the early development of the ECLS-K, project staff met with representatives from a wide range of federal agencies with an interest in the care and well-being of children. Project staff also consulted several other organizations (see Table A-2) that have an interest in the care, well-being, and education of young children. The goal of this activity was to identify policy and research issues and data needs. Similarly, consultation with federal agencies has occurred and continues for the ECLS-K:2011. See Table A-1 for the representatives consulted for the ECLS-K and ECLS-K:2011.

Several of the early consultations with government agencies have resulted in interagency agreements funding supplemental questions or sections in the study instruments. Similar to its predecessor, the ECLS-K:2011 represents a collaborative effort by education and health and human services agencies. NCES supports the development of the core design of the ECLS-K:2011. Partner agencies continuing to support the inclusion of the supplemental questions or sections in the study instruments that enrich the ECLS-K:2011 include the Economic Research Services of the U.S. Department of Agriculture, the National Center for Special Education Research in the Institute of Education Services of the U.S. Department of Health and Human Services. New agency partners to the ECLS-K:2011 include the National Institute of Deafness and Other Communication Disorders and the National Eye Institute, both at the National Institutes of Health in the U.S. Department of Health and Human Services. Table A-1 lists the Federal agency consultants for ECLS-K.

In preparation for the ECLS-K:2011 kindergarten collections, the data collection contractor assembled expert panels, a Technical Review Panel (TRP) and Content Review Panels (CRP), to review and comment on issues related to the development of the study and survey instruments. The members include experts in research, policy making, and practice in the fields of early childhood education and development, elementary education, health, research methodology, special populations, and assessment.



The TRP had a 2-day meeting, held in November 2008. The meeting focused on major design and content issues, such as study periodicity, the benefits of including an assessment of science in kindergarten, the assessment of executive functioning and possible measures for it, and the content of a Spanish language assessment for native Spanish speakers who are English language learners. The TRP members also provided suggestions for specific questionnaire items to be included in the instruments in the full-scale collection. Table A-3 lists the ECLS-K:2011 TRP members.

There were five meetings of the CRP panels: reading (May, 2009), mathematics (May, 2009), science (May, 2009), English Language Learners (August, 2009), and executive function (November, 2009). For each of these specific domains, panel members provided critical review of the assessment instruments for inclusion in the field test and national data collections. The respective meetings focused on the appropriateness and adequacy of the specific instruments by considering features such as domain coverage, age appropriateness, technical quality, and the relationship of assessment items to elementary school curricula. Table A-4 lists the ECLS-K:2011 CRP members.



#### Table A-1.Federal agency consultants for ECLS-K and ECLS-K:2011

Diane Schilder<sup>1</sup> Government Accounting Office

Cindy Prince,<sup>1</sup> Emily Wurtz<sup>1</sup> National Education Goals Panel

Andy Hartman<sup>1</sup> National Institute for Literacy

Mary Queitzsch,<sup>1</sup> Larry Suter<sup>1</sup> National Science Foundation

Michael Ruffner,<sup>1</sup> Bayla White,<sup>1</sup> Brian Harris-Kojetin<sup>1</sup> Office of Management and the Budget

John Endahl,<sup>1</sup> Jeff Wilde,<sup>1</sup> Joanne Guthrie, Victor Oliviera<sup>1</sup> U.S. Department of Agriculture

Don Hernandez<sup>1</sup> U.S. Department of Commerce Bureau of the Census Marriage and Family Statistics

Tim D'Emillio U.S. Department of Education, OELA

Naomi Karp,<sup>1</sup> Dave Malouf,<sup>1</sup> Ivor Pritchard,<sup>1</sup> Marsha Silverberg<sup>1</sup> U.S. Department of Education, IES

Pia Divine,<sup>1</sup> Esther Kresh,<sup>1</sup> Ivelisse Martinez-Beck, Ann Rivera U.S. Department of Health and Human Services Administration for Children, Youth, and Families

Gerry Hendershot,<sup>1</sup> John Kiley,<sup>1</sup> Michael Kogan<sup>1</sup>, Mitchell Loeb, Patricia Pastor U.S. Dept. of Health and Human Services NCHS

Howard Hoffman National Institute on Deafness and Other Communication Disorders NICHD, U.S. Dept. of Health and Human Services

Mary Frances Cotch National Eye Institute NICHD, U.S. Dept. of Health and Human Tom Bradshaw,<sup>1</sup> Doug Herbert<sup>1</sup> National Endowment for the Arts

Jeffrey Thomas<sup>1</sup> National Endowment for the Humanities

Patricia McKee U.S. Department of Education OESE Compensatory Education Programs

Cathie L. Martin<sup>1</sup> U.S. Department of Education, OIE

Scott Brown,<sup>1</sup> Louis Danielson,<sup>1</sup> Glinda Hill,<sup>1</sup> Lisa Holden-Pitt,<sup>1</sup> Kristen Lauer,<sup>1</sup> Marlene Simon-Burroughs<sup>1</sup> U.S. Department of Education, OSEP

Lisa A. Gorove<sup>1</sup> U.S. Department of Education OUS, Budget Service, ESVA

Elois Scott<sup>1</sup> U.S. Department of Education OUS, PES, ESED

Richard Dean<sup>1</sup> U.S. Department of Education OVAE, Adult Literacy

Jaquelyn Buckley, U.S. Department of Education IES, NCSER

Jeff Evans,<sup>1</sup> Sarah Friedman,<sup>1</sup> Christine Bachrach,<sup>1</sup> Peggy McCardle<sup>1</sup> U.S. Department of Health and Human Services NICHD, Center for Population Research

Martha Moorehouse,<sup>1</sup> Anne Wolf<sup>1</sup> U.S. Department of Health and Human Services Office of Assistant Secretary for Planning & Evaluation, Children and Youth Policy

Katrina Baum<sup>1</sup> Bureau of Justice Statistics Department of Justice

Meredith A. Miceli, Ph.D. U.S. Department of Education



ServicesOffice of Special Education Programs<sup>1</sup> Consultant for the ECLS-K only. Affiliation listed is the affiliation at the time input on the study was provided.



Table A-2. Other organization consult	
Lynson Bobo	Keith W. Mielkek, Ph.D.
Project Associate	Children's Television Workshop
Resource Center on Educational Equity	
Council of Chief State School Officers	June Million, Sally McConnell, Louanne Wheeler
Susan Bredekamp	National Association of Elementary School
Barbara Willer	Principals
National Association for the Education of	•
Young Children	Evelyn Moore
-	Erica Tollett
Mary Jo Lynch, Ph.D. American Library Association	National Black Child Development Institute
Office of Research and Statistics	Thomas Schultz
	Director, Center for Education Services for
	Young Learners
	National Association of State Boards of
	Education

#### Table A-2. Other organization consultants for ECLS-K

#### Table A-3. ECLS-K:2011 TRP member list

Karl Alexander	Fred Morrison
Department of Sociology	Department of Psychology
Johns Hopkins University	University of Michigan
Jim Bauman	Charlotte Patterson
Center for Applied Linguistics	Department of Psychology
Washington, DC	University of Virginia
Maureen Black	Robert Pianta
Growth and Nutrition Department	The Center for Advanced Teaching and
University of Maryland Medical Center	Learning
	University of Virginia
Joanne Carlisle	
School of Education	Kit Viator
University of Michigan	Massachusetts Department of Education
Janet Fischel	
State University of New York at Stony Brook	
& University Medical Center	



#### Table A-4. ECLS-K:2011 CRP member list

Reading Panel				
Susan Conrad	Alba Ortiz			
Independent consultant, assessment development	University of Texas at Austin			
	Barbara Wasik			
Gloria Johnston Education National University	Temple University			
Mathem	atics Panel			
Doug Clements	Lizanne DeStefano			
State University of New York, Buffalo	University of Illinois at Urbana-Champaign			
Donna Compano Independent consultant, assessment development, math facilitator, elementary teacher	Leah Parker Journeys Academy, Gifted Education Specialist			
Scien	ce Panel			
Christie Bean JJ Ciavarra Elementary School	Christine Y. O'Sullivan Science Consultant			
Kathy DiRanna University of California - Irvine	Michael Padilla Clemson University			
Angela Eckhoff Clemson University				
English Language Learner Panel				
Jamal Abedi University of California at Davis	Eugene E. García Arizona State University			
Catherine Crowley Teachers College	Vera Gutierrez-Clellen San Diego State University			
Executive Function Panel				
Clancy Blair	Philip Zelazo			
New York University	University of Minnesota			
Megan McClelland Oregon State University				

## A.9 Provision of Payments or Gifts to Respondents

Obtaining high response rates is critical for all longitudinal studies. At the start of a longitudinal data collection, it is essential to establish the good will of respondents and to demonstrate that we value their participation in the study. Good will can be established by using well-designed respondent materials that inform respondents about the goals of the study and their role in it, the field staff establishing a rapport with the respondents, professionalism among the field staff, and a small token



incentive. The incentive plan for ECLS-K:2011 is similar to the approach approved by OMB for use in ECLS-K and in the base year (i.e., the kindergarten collections) of the ECLS-K:2011. The plan is designed to help respondents to recognize the merits of the study and thereby encourage high response rates.

#### A.9.a Teachers

In the base year of the ECLS-K:2011, teachers received \$7 per child-level questionnaire because they were acting as data collectors, recording their observations of their ECLS-K:2011kindergartners on the questionnaires. A check for the incentive was attached to the package of instruments the teacher received in the fall and in the spring. For the fall first-grade data collection of the ECLS-K:2011, we propose that classroom teachers again be offered \$7 per child-level questionnaire. On average, teachers will have 6 sampled children in their first-grade classrooms resulting in a total remuneration of \$42 for participating in the fall firstgrade data collection. A check for the incentive will be attached to the package of instruments the teacher receives in the fall.

NCES began the practice of providing the teacher incentive at the time of questionnaire distribution in the fifth-grade round of the ECLS-K; teachers responded positively to this method, as evidenced by their completing questionnaires on time, resulting in high response rates. We also attribute the high questionnaire response rates achieved in the eighth grade ECLS-K collection (school administrator at 93.3%; teacher questionnaire at 95.5%; special education teacher questionnaire at 94.2%) in part to the provided incentives. Given our experience with ECLS-K and other school-based, longitudinal studies with high institutional and respondent burden, NCES believes that remuneration is a necessary component of a successful ECLS-K:2011 data collection.

## A.9.b School Coordinators

School coordinators act as the study liaison with the school and, as such, they play a very important role in the ECLS-K:2011. They helped to enroll children in the study and will continue their role beyond the base year by communicating necessary information to parents, notifying teachers and encouraging their participation, arranging the assessment logistics (e.g., space to conduct the assessments), and



collecting hard-copy teacher and school administrator questionnaires. For this reason, school coordinators will be offered a \$25 incentive. The \$25 checks will be attached to the packets mailed to the coordinators in the fall. The study offered the same incentive to the school coordinators during the ECLS-K:2011 kindergarten data collection.

## A.10 Assurance of Confidentiality

The ECLS-K:2011 plan for ensuring the confidentiality of the project and participants conforms with the following federal regulations and policies: the Privacy Act of 1974 (5 U.S.C. 552a), Privacy Act Regulations (34 CFR Part 5b), the Education Sciences Reform Act of 2002 (20 USC § 9573), the Computer Security Act of 1987, the NCES Restricted-Use Data Procedures Manual, and the NCES Standards and Policies.

All adult respondents who participate in research under this clearance will be informed that the information they provide will be protected from disclosure to the fullest extent allowable under law (20 USC § 9573) and that their participation is voluntary. This information will be provided to parents as the guardians for their children. All adult respondents receive a letter that explains NCES's and the contractor's adherence to policies on disclosure (see Appendix A for the parent, teacher, and school administrator letters). In addition, the school coordinator will receive a letter (see Appendix A).

Since early spring 2010 (when preparations for the kindergarten data collections began), information about the protection of data from disclosure has been conveyed to state, district, and other school officials at the time their cooperation for the study was sought. As sampled children move to new schools, this information will be provided to the states and districts in which those schools are located, if necessary (i.e., if there are no participating schools in those states and districts already.) New schools in the study will receive the letter developed for schools to which sampled children transfer that can be found in Appendix A of this clearance request, as well as the general study materials that were approved in the previous OMB clearance package submitted on 2/2/10 (see Appendix H of that package).

During any in-person or telephone interviewing, respondents will be asked if they received the study's letter about the upcoming data collection. If the respondent



does not recall the letter, the interviewer will summarize the key elements of the data protection assurances; namely, that data will be combined to produce statistical reports, that no data will be published that link the respondent to his/her responses; that participation is voluntary; and that there is federal statute that protects the data from disclosure to the fullest extent allowable under law (20 USC § 9573).

All contractor staff members working on the ECLS-K:2011 project or having access to the data (including monitoring of interviews and assessments) are required to sign the NCES Affidavit of Nondisclosure (Exhibit A-1) and a Confidentiality Pledge (Exhibit A-2). They also are required to complete mandatory training on data confidentiality and the safe-handling of data. The contractor will keep the original notarized affidavits on file and submit PDF copies of all affidavits to NCES quarterly. In addition, contractor staff will complete background screening in compliance with ACS Directive (OM:5-101).



#### Exhibit A-1. NCES Affidavit of Nondisclosure

Affidavit of Nondisclosure		
(Employee Job Title)	(Date Assigned to Work on NCES Contract)	
(Organization Name)	-	
(Organization Address)	(Name of NCES Contract or File With Individually Identifiable Information)	
I,	, do solemnly swear (or affirm) that when given access to the subject NCES data or file, I will not -	
others, under the provisions of the Educ	fiable information furnished, acquired, retrieved or assembled by me or cation Sciences Reform Act of 2002 (20 U.S.C. § 9573) and Title V, 2002 (P.L. 107-347) for any purpose other than statistical purposes tract;	
	whereby a sample unit or survey respondent (including students and furnished by or related to any particular person or school under these	
(iii) permit anyone other than the indivi Education Statistics to examine the indi	iduals authorized by the Commissioner of the National Center for ividual reports.	
(Signature)		
[The penalty for unlawful disclosure is a fine of not more than \$250,000 (under 18 U.S.C. § 3571) or imprisonment for not more than five years (under 18 U.S.C. § 3559), or both. The word "swear" should be stricken out when a person elects to affirm the affidavit rather than to swear to it.]		
City/County of Commonwealth/State of	of	
Sworn to and subscribed before me this d	ay of	
, 20 Witness my hand and offic	zial Seal.	
(Notary Public/Seal)	– My commission expires	
	Form last revised 02/25/11	



#### EMPLOYEE OR CONTRACTOR'S ASSURANCE OF CONFIDENTIALITY OF SURVEY DATA

#### **Statement of Policy**

{Contractor} is firmly committed to the principle that the confidentiality of individual data obtained through {Contractor} surveys must be protected. This principle holds whether or not any specific guarantee of confidentiality was given at time of interview (or self-response), or whether or not there are specific contractual obligations to the client. When guarantees have been given or contractual obligations regarding confidentiality have been entered into, they may impose additional requirements which are to be adhered to strictly.

#### **Procedures for Maintaining Confidentiality**

- 1. All {Contractor} employees and field workers shall sign this assurance of confidentiality. This assurance may be superseded by another assurance for a particular project.
- 2. Field workers shall keep completely confidential the names of respondents, all information or opinions collected in the course of interviews, and any information about respondents learned incidentally during field work. Field workers shall exercise reasonable caution to prevent access by others to survey data in their possession.
- 3. Unless specifically instructed otherwise for a particular project, an employee or field worker, upon encountering a respondent or information pertaining to a respondent that s/he knows personally, shall immediately terminate the activity and contact her/his supervisor for instructions.
- 4. Survey data containing personal identifiers in {Contractor} offices shall be kept in a locked container or a locked room when not being used each working day in routine survey activities. Reasonable caution shall be exercised in limiting access to survey data to only those persons who are working on the specific project and who have been instructed in the applicable confidentiality requirements for that project.

Where survey data have been determined to be particularly sensitive by the Corporate Officer in charge of the project or the President of {Contractor}, such survey data shall be kept in locked containers or in a locked room except when actually being used and attended by a staff member who has signed this pledge.

- 5. Ordinarily, serial numbers shall be assigned to respondents prior to creating a machine-processible record and identifiers such as name, address, and Social Security number shall not, ordinarily, be a part of the machine record. When identifiers are part of the machine data record, {Contractor's Manager of Data Processing} shall be responsible for determining adequate confidentiality measures in consultation with the project director. When a separate file is set up containing identifiers or linkage information which could be used to identify data records, this separate file shall be kept locked up when not actually being used each day in routine survey activities.
- 6. When records with identifiers are to be transmitted to another party, such as for keypunching or key taping, the other party shall be informed of these procedures and shall sign an Assurance of Confidentiality form.
- 7. Each project director shall be responsible for ensuring that all personnel and contractors involved in handling survey data on a project are instructed in these procedures throughout the period of survey performance. When there are specific contractual obligations to the client regarding confidentiality, the project director shall develop additional procedures to comply with these obligations and shall instruct field staff, clerical staff, consultants, and any other persons who work on the project in these additional procedures. At the end of the period of survey performance, the project director shall arrange for proper storage or disposition of survey data including any particular contractual requirements for storage or disposition. When required to turn over survey data to our clients, we must provide proper safeguards to ensure confidentiality up to the time of delivery.
- 8. Project directors shall ensure that survey practices adhere to the provisions of the U.S. Privacy Act of 1974, and any additional relevant laws that are specified in the contract, with regard to surveys of individuals for the Federal Government. Project directors must ensure that procedures are established in each survey to inform each respondent of the authority for the survey, the purpose and use of the survey, the voluntary nature of the survey (where applicable), and the effects on the respondents, if any, of not responding.

#### <u>PLEDGE</u>

I hereby certify that I have carefully read and will cooperate fully with the above procedures. I will keep completely confidential all information arising from surveys concerning individual respondents to which I gain access. I will not discuss, disclose, disseminate, or provide access to survey data and identifiers except as authorized by {Contractor}. In addition, I will comply with any additional procedures established by {Contractor} for a particular contract. I will devote my best efforts to ensure that there is compliance with the required procedures by personnel whom I supervise. I understand that violation of this pledge is sufficient grounds for disciplinary action, including dismissal. I also understand that violation of the privacy rights of individuals through such unauthorized discussion, disclosure, dissemination, or access may make me subject to criminal or civil penalties. I give my personal pledge that I shall abide by this assurance of confidentiality.

Signature



During the course of data collection, interviewers will be equipped with laptop computers, which store any necessary preloaded data, as well as the information collected on a given day during the data collection round (interviewers transmit interview and assessment data to the contractor's home office via a secure, encrypted internet transmission on a daily basis). The interviewers will be instructed to keep the computers and any hard-copy case materials in a secure place in their homes when they are not being used. When the interviewer is in the field collecting interview or assessment data, he or she is instructed to keep all materials and the computer in his/her possession at all times. When driving a car to or from his/her appointments, the computer and all materials will be locked out of sight, so as not to provide an inviting opportunity for burglary. The interviewers will be instructed to transmit the electronic data for a case to a central database on the same day the case is completed. Any data transmitted electronically will be encrypted during transmission.

The laptop configuration will be designed with security and confidentiality considerations in mind. In order to access any of the applications, the interviewer must enter a project-specific password and an interviewer identification code, both of which are checked against encrypted versions of the same data; if the password or interviewer identification code is entered incorrectly repeatedly, the interviewer is "locked out" of the application. All data files will be encrypted on the computer hard disk.

In the event of a hardware failure in the field, the home office will swap the interviewer's laptop for a new one. The contractor will maintain a supply of "hot spares," i.e., laptop computers loaded with all necessary ECLS-K:2011 software, which require only the specific interviewer's identification code and assignment before being sent out.

All mailing of respondent materials, laptops, and hard-copy case materials used by assessors to manage their workload will be done using Federal Express, which has a sophisticated tracking system designed to locate any misdirected packages. All packages will require the recipient's signature for delivery. To the extent practical, the study name and logo will not be included on hard copy materials used by field staff to record school or respondent information. In the event of a loss of hard copy



materials, this procedure would make it more difficult for someone who finds the materials to associate a school or respondent with the study.

Finally, all computer assisted interviewing (CAI) applications will have an audit trail of the case data on the hard disk. This is so that if the main data files are corrupted, the data can be reconstructed from the audit trails.

After data collection, all personally identifiable data will be stored on a secure server and password protected with access limited to authorized project staff. Personally identifiable data will also be protected through the coding of responses so that no one individual respondent can be identified (specifically or by deduction) through reported variables in the public access data files. NCES will monitor the conduct of the contractor to ensure that the confidentiality of the data is not breached.

NCES understands the legal and ethical need to protect the privacy of the ECLS-K:2011 survey respondents and, with the contractor, has extensive experience in developing data files for release that meet the government's requirements to protect individually identifiable data from disclosure. The contractor will conduct a thorough disclosure analysis of the ECLS-K:2011 data when preparing the data files for researchers' use. This analysis will ensure that NCES has fully complied with the confidentiality provisions contained in 20 USC § 9573. To protect the privacy of respondents as required by 20 USC § 9573, respondents with high disclosure risk will be identified, and a variety of masking strategies will be used to ensure that individuals may not be identified from the data files. These masking strategies include:

- Swapping data on both the public- and restricted-use files;
- Omitting key identification variables such as name, address, telephone number, and school name and address from both the public- and restricted-use files (though the restricted-use file will include NCES school ID that can be linked to other NCES databases to identify a school);
- Omitting key identification variables such as state or ZIP Code from the public-use file;



- Collapsing categories or developing categories for continuous variables to retain information for analytic purposes while preserving confidentiality in public-use files; and
- "Topcoding" and "bottomcoding"<sup>7</sup> continuous variables in public-use files.

### A.11 Sensitive Questions

The ECLS-K:2011 is a voluntary study, and no persons are required to respond to the interviews and questionnaires or to participate in the assessments. In addition, respondents may decline to answer any question they are asked. This voluntary aspect of the survey is clearly stated in the advance letter mailed to adult respondents, the study brochure, and the instructions of hard-copy questionnaires, and it is stressed in interviewer training to ensure that interviewers are both communicating this to participants and following these guidelines. Additionally, assessors are trained that children may refuse to participate at the time they are visited for an assessment and assessors are to respect the child's wishes.

The following describes the general nature of the national data collection instruments that will be used during the fall first-grade data collection, as well as topics that may be sensitive for some respondents.

**Teacher Questionnaires.** The information collected in the child-level questionnaires could be regarded as sensitive, because teachers will be asked to rate the individual ECLS-K:2011 children's language skills and report on each ECLS-K:2011 child's achievement group placement. The purpose of the teacher ratings of children is to extend the range of domains assessed by assessing them in multiple ways (e.g., by gathering information on cognitive development that will complement results of the direct assessment).

Prior to their participation, teachers will be informed and assured that their information will be protected from disclosure to the fullest extent allowable under law and that their responses will not be shared with their employers or the parents of their students.

<sup>&</sup>lt;sup>7</sup> Topcoding and bottomcoding refer to the process of recoding outlier values to some acceptable end value. For instance, everyone with a personal income higher than \$200,000 may be recoded to \$200,001 or more to eliminate the outliers.

**Direct Cognitive Assessments.** The direct cognitive assessments are essential for determining children's performance levels at the time they start school each year and changes in their performance as they progress through school. Because schools often use different standards in their own assessments of children and a uniform set of assessment instruments and procedures is needed for the ECLS-K:2011, school-developed assessments cannot be used in the ECLS-K:2011. The items to be included in the direct cognitive assessments are not themselves sensitive in nature. However, direct assessments of children do raise certain concerns about the assessment procedures to be used. Of primary concern is the length of the assessments. The cognitive assessments are designed to be administered on average within a 60-minute time period. NCES has developed instruments appropriate to the ages of the participating children, and every effort will be made to staff the study with field assessors who have prior experience working with children. Issues specific to working with children will also figure prominently in assessor training.

**Parent Questionnaires.** Several topics that will be addressed in the parent questionnaire could be sensitive in nature for some respondents. Questions about how many weeks the child was away from home during the summer or where the child was when he/she was away from home could be sensitive depending on whether the reason the child was away was perceived as negative by the respondent (e.g., a child custody agreement). Also, if a parent did not do many activities with the child over the summer (and thinks that he/she should have), the parent could feel negatively about questions on these topics (e.g., if the parent reports that the school gave the child a book list to read over the summer, but the child did not read any books from it).

Questions about required or suggested summer school, therapy services received during the summer, and participation in summer special education programs could also be considered sensitive by some parents. These types of topics were included in the ECLS-K, however, and very few parents have objected to them. Results from previous rounds of data collection showed that there were very low levels of missing data in the parent interviews for all items, including the ones mentioned here. However, as they were in earlier rounds and like other study participants in the ECLS-K:2011, parents will be told that they can refuse to answer any questions they wish. Prior research indicates that parents' activities with children are positively correlated with their children's achievement and help to account for children's learning when the children are both in school and out of school during the summer (e.g., Shumow 2010, Burkam et al. 2004). Collecting data on these topics will allow researchers to go beyond descriptive analyses of variation in children's performance by basic background characteristics such as race/ethnicity and sex. Researchers will be able to test hypotheses about how a wide range of family characteristics relate to early success in school and learning during the summer months when children are not in school. Therefore, it is important to include questions on the sensitive topics in the parent questionnaires listed above.

Additionally, because it is imperative that respondents can be found at a later date for follow-up collections in a longitudinal study, the ECLS-K:2011 interview protocol requests locating information from parents. The locating information includes names, addresses, and telephone numbers of individuals who would always know the whereabouts of the respondents. Such information may appear sensitive to respondents who may be leery about providing contact information about people they know; again, they will have the option to refuse to answer these as well as all other questions.

#### A.12 Estimated Response Burden

The estimated respondent burden for the national fall first-grade data collection is summarized here and in Table A-5. Included in these estimates, where appropriate, is the time that a respondent would need to gather and compile the data and the clerical time needed to fill out the form.

The fall first-grade national data collection includes direct cognitive assessments with children, parent interviews, and classroom teacher child-level questionnaires. The total number of respondents for the national data collection, i.e., parents, teachers, and school coordinators is 34,800.<sup>8</sup> The parent, teacher, and school coordinator respondent burden translates into a cost amount of \$618,023 for 29,318 hours.<sup>9</sup> The sample of and the time children will spend completing the assessments

<sup>&</sup>lt;sup>8</sup> Schools are asked to assign a staff member to help coordinate the assessment activities at the school; these school coordinators are counted in the total number of respondents, and their burden hours are counted, but they do not complete any study instruments.

<sup>&</sup>lt;sup>9</sup> An hourly rate of \$21.08 was used to translate teacher, parent, and school coordinator response time into a dollar amount. <u>This rate is based on the National Compensation Survey. See U.S. Department of Labor (2007). *National Compensation*</u>

has not been included in the estimated burden, response, and respondent numbers because direct assessment is not subject to the Paperwork Reduction Act reporting.

The estimated response burden for this clearance package related to respondent recruitment and sample tracking is outlined in Table A-6. As described in section B.2.2, the processes and procedures for sample tracking are primarily internal and involve little contact with respondents outside of regular data collection. However, as described in section A.e.1, school coordinators will be asked to confirm the continued enrollment of children in their school or to provide updated contact information for children who have moved. To estimate respondent burden for sample tracking, we reference our experiences from ECLS-K. The table below includes 5 minutes per parent respondent to read the birthday cards we send to children to keep in touch with them and, if necessary, to fill out a change of address card and return it to the data collection contractor (postage will be paid by the data collection contractor). Recruitment burden time also includes the time necessary to read study materials sent to parents, teachers, and school administrators (i.e., the study letters found in appendix A), and time for school administrators in new schools to discuss participating in ECLS-K: 2011 with a school recruiter. Because the parent participants are expected to be the same across rounds, it would not be accurate to calculate a total sample or total number of respondents as a simple sum of the sample sizes and respondents for each round. Instead, to calculate a total, the table below uses the maximum estimated sample size for parents, or number of parent respondents, across all rounds. Specifically, the largest number of parents is expected to be contacted during recruitment for the spring first grade collection. This is the number used for parents in the calculation of total sample size and total number of respondents. Teachers, school coordinators, and school administrators may be different at each round, so the sample sizes for each round are factored into the calculation of the total.

	Samp	Respons	Number of respond	Hours per instrum	Number of instrumen ts per responde	Total	Total number of response
Respondent type	le n	e rate	ents	ent	nt	hours	S
Fall Direct Assessment	6,000	.90	5,400	1.00	1	5,400	5,400
Fall Parent Interview	6,000	.90	5,400	0.25	1	1,350	5,400
Fall Teacher Child-level	1,000	.90	900	0.25	6	1,350	5,400

Table A-5. National fall first-grade data collection respondent burden chart

Survey: Occupational Wages in the United States, March 1995.



Respondent type	Samp le n	Respons e rate	Number of respond ents	Hours per instrum ent	Number of instrumen ts per responde nt	Total hours	Total number of response s
Questionnaire (TQC)							
Fall School Coordinator assistance <sup>1</sup>	600	.90	540	0.20	NA	108	540
Study Total	7,60 0 <sup>2</sup>	NA	<b>6,840</b> <sup>2</sup>	NA	NA	<b>2,808</b> <sup>2</sup>	<b>11,340</b> <sup>3</sup>

NA Not applicable

<sup>1</sup> School coordinators are school staff members who help organize the logistics for the assessment visit. They do not complete a study instrument.

<sup>2</sup> The sample of students taking the direct assessment is not included in this count because it is not subject to the Paperwork Reduction Act reporting.

<sup>3</sup> Total number of responses represents the total number of respondents \* the total number of instruments they fill out. The sample of the students taking the direct assessment is not included in this count because it is not subject to the Paperwork Reduction Act reporting.

#### Table A-6. Respondent burden recruitment and sample tracking

			Number of		Number of		Total
	Sample	Response	responde	Hours per	instruments per	Total	number of
Respondent type	n	rate	nts1	instrument	respondent	hours	responses
Tracking for Fall First Grade <sup>1</sup>							
Parent	6,000	100%	6,000	.084	1	504	NA
School Coordinator	600	100%	600	1.00	1	600	NA
Tracking for Spring First Grade							
Parent	12,630	100%	12,630	.084	1	1,061	NA
School Coordinator	1,082	100%	1,082	1.00	1	1,082	NA
Tracking for Fall Second Grade <sup>1</sup>							
Parent	6,000	100%	6,000	.084	1	504	NA
School Coordinator	600	100%	600	1.00	1	600	NA
Tracking for Spring Second Grade							
Parent	8,636	100%	8,636	.084	1	725	NA
School Coordinator	2,031	100%	2,031	1.00	1	2,031	NA
Recruitment for Fall First Grade <sup>1</sup>							
Parent	6,000	100%	6,000	.25	1	1,500	NA
Teacher	1,000	100%	1,000	.50	1	500	NA
School Administrator	600	100%	600	1.00	1	600	NA
Recruitment for Spring First Grade							
Parent	18,630	100%	18,630	.25	1	4,658	NA
Teacher	3,105	100%	3,105	.50	1	1,553	NA
School Administrator	1,082	100%	1,082	1.00	1	1,082	NA
Recruitment for Fall Second Grade <sup>1</sup>							
Parent	6,000	100%	6,000	.25	1	1,500	NA
Teacher	1,000	100%	1,000	.50	1	500	NA
School Administrator	600	100%	600	1.00	1	600	NA

Justification

Respondent type	Sample n	Response rate	Number of responde nts <sup>1</sup>	Hours per instrument	Number of instruments per respondent	Total hours	Total number of responses
Recruitment for Spring Second Grade							
Parent	14,636	100%	14,636	.25	1	3,659	NA
Teacher	2,439	100%	2,439	.50	1	1,220	NA
School Administrator	2,031	100%	2,031	1.00	1	2,031	NA
Study Total	34,800 2	NA	<b>34,800</b> <sup>2</sup>	NA	NA	26,51 0	NA

NA Not applicable

<sup>1</sup> Reflects a smaller sample due to a planned subsampling.

<sup>2</sup> The total sample size represents the maximum total possible. It is expected that the parent respondent will be the same at all rounds, so the largest n for parents (recruitment for spring first grade) is used in the calculation of the total. Sample sizes for teachers, school administrators, and school coordinators at each round all contribute to the total.

#### A.13 Estimates of Cost

There are no costs to the respondents to participate beyond the time needed for them to read the study materials, for parents to answer the interview questions and, if necessary, complete a change of address card, for teachers to complete the childlevel questionnaire, and for the children to participate in the cognitive assessments. No equipment, printing, or postage charges will be incurred by the participants.

### A.14 Annualized Cost to the Federal Government

The fall first-grade information collection activity has been developed in performance of NCES contract ED-04-CO-0059/0023. The period of performance for this ECLS-K:2011 contract, which includes the kindergarten through second-grade field test, kindergarten national data collection (approved in the previous OMB package submission), and fall first-grade data collection, runs from May 2008 through April 2013. The total cost to the government for contractor and subcontractor costs is \$26,646,959. This cost estimate includes two kindergarten data collections, one field test, design enhancements, and data file delivery and documentation.

The sample tracking procedures through the spring second-grade information collection activity has been developed in performance of NCES contract ED-IES-10-C-0048. The period of performance for this ECLS-K:2011 contract, which includes the sample tracking procedures through the spring second-grade data collection, and the spring first-grade, fall second-grade, and spring second-grade national data collections, runs from August 2010 through February 2015. The total cost to the government for contractor and subcontractor costs is \$27,627,801. This cost estimate includes sample tracking activities, all data collection activities from spring first through spring second grade, design enhancements, and data file delivery and documentation. Table A-7 provides the study costs by year of the contract.

Year	Contract ED-04-CO- 0059/0023 Amount	Contract ED-IES-10-C- 0048 Amount
2008	\$387,531	
2009	\$3,127,469	
2010	\$10,098,492	\$359,030
2011	\$10,790,615	\$2,083,373

Table A-7.	Study of	costs	per y	year
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2012	\$2,052,074	\$14,094,823
2013	\$190,778	\$10,224,407
2014		\$866,169
Total	\$26,646,959	\$27,627,801

Therefore the annual cost to the federal government for this study is 7,753,537 ((26,646,959 + 27,627,801)/7 = 54,274,760/7)

# A.15 Reasons for Changes in Response Burden and Costs

The increase in cost relative to the last clearance request for the kindergarten national data collections is due to the fact that a contract has since been awarded for the first and second grade collections and the cost of that contract is now included here.

The decrease in the burden requested for this collection as compared to what was last approved is due to the fact that the last OMB approval included the base year main study data collection, while this request includes data collection for the first follow-up, which is a sub-sample of the base year.

Estimates for tracking and recruitment burden are somewhat higher than originally estimated for this collection and the distribution of hours across respondents differs for several reasons. First, in the previous submission, parents who are tracked and recruited for the fall collections were also counted in the estimates for tracking and recruitment in the spring collections. Parents who are tracked and recruited for fall will not need to be tracked and recruited again for spring, so this double counting of such parents has been eliminated from the estimates. Second, the prior submission did not include burden for the school coordinator associated with the role the coordinator plays in confirming continued child enrollment and providing updated contact information when such information is available. Finally, the sample sizes for school administrators were calculated as a 30 percent subsample of the base year sample size for schools (Kindergarten n=900) and did not account for an expected increase in the number of schools in the sample due to sampled students transferring to new schools. The sample sizes used for school administrators in table A-6 now (n=600) reflect an increase in the number of schools in the sample between kindergarten and first grade and between first and second grades. The expected increases are based on experiences in the ECLS-K.

### A.16 Publication Plans and Time Schedule

Publications relevant to the data collection will be part of the reports resulting from the fall first-grade data collection. Fall first-grade data will be made available to researchers in a public-use data file, along with data collected in second grade, after the conclusion of the spring second-grade data collection. Fall first-grade data will be made available to researchers in a restricted-use data file, along with data collected in spring first grade, after the conclusion of the spring first-grade data collection. Researchers who are approved by NCES's data confidentiality office for a restricted-use license can access restricted-use data files, which include more sensitive items and items that pertain to smaller numbers of children (e.g., information about the presence of specific disabilities). To be approved for a restricted-use license, researchers must demonstrate that they have a research question that cannot be answered with the public-use data and that they have the infrastructure to keep the data secure to prevent loss or unauthorized use. Codebooks and user's manuals will be produced for use with the public- and restricted-use data files. All data will be merged at the child level. Data files will include all instrument variables (except for those that gather directly identifying information, such as the names of household members) and any relevant associated variables, such as composites or assessment scores. Data will be released through Electronic Code Book (ECB) software that allows users to create customized data files in standard statistical software packages (SPSS, SAS, and Stata) and view codebook information. A file record layout will also be provided so that analysis packages other than SPSS/PC, SAS/PC, and Stata/PC (e.g., analysis packages for Apple computers) can be used to analyze the ECLS-K:2011 data.

The ECLS-K:2011 reports and publications will include detailed methodological reports describing all aspects of the data collection effort and psychometric reports outlining properties of the assessment instruments, as well as reports that describe the population of children who are kindergartners in the 2010-11 school year as they progress through school.

The operational schedule for the ECLS-K:2011 fall first-grade data collection is shown in Table A-8. The operational schedule for the sample tracking activities for the first-grade and second-grade data collections is shown in Table A-9.

 Table A-8.
 Operational schedule for ECLS-K:2011 fall first-grade data collection

Activity	Start date	End date
ECLS-K:2011 Fall First-Grade Data Collection		
Select school sample	12/1/2010	1/15/2011
Print/program assessment	4/15/2011	7/20/2011
Prepare/print/program questionnaires	3/1/2011	7/20/2011
Train data collectors	6/1/2011	8/16/2011
Fall data collection	8/9/2011	12/30/2011
Process data	9/15/2011	1/15/2012
Construct data files, user's manual	8/15/2011	10/25/2012
Methodology/psychometric reports	8/6/2010	1/11/2013

Table A-9.Operational schedule for ECLS-K:2011 sample tracking activities for first-grade<br/>and second-grade data collections

Activity	Start date	End date
Sample Tracking for First-Grade Data Collection		
Mail birthday cards	6/1/2011	6/1/2012
Preassessment call	8/9/2011	12/20/2011
Tracking movers and updating field management	8/9/2011	12/20/2011
system		
Parent, teacher, school administrator, school coordinator mailings	2/15/2012	4/16/2012
Spring first-grade data collection	3/15/2012	6/30/2012
Sample Tracking for Second-Grade Data Collection		
Mail birthday cards	6/1/2012	6/1/2013
Preassessment call	8/9/2012	12/20/2012
Tracking movers and updating field management system	8/9/2012	12/20/2012
Parent, teacher, school administrator, school coordinator mailings	2/15/2013	4/16/2013
Spring second-grade data collection	3/15/2013	6/30/2013

# A.17 Approval for Not Displaying the Expiration Date for OMB Approval

No exemption from the requirement to display the expiration date for OMB approval of the information collection is being requested for the ECLS-K:2011.

#### **A.18** Exceptions to the Certification Statement

No exceptions to the certification statement identified in item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I apply to the ECLS-K:2011.