Impact Study: Lessons in Character Program (LIC)

CONTRACT NO. ED-06-CO-0014

Request for OMB Approval

February 4, 2010

Submitted by:

<center>**PART A. JUSTIFICATION**</center>

A1. Circumstances Making Collection of Information Necessary

We are requesting six extra months to complete the data collection that was approved on 5/16/2007 and expires 5/31/2010. The study was updated once to be part of a contamination study on 1/25/08, increasing the burden hours from 15,418 to 15,460 annually. Our study was delayed because it took an additional school year than expected to recruit the full sample. The currently approved burden will not change and there are no other changes to the study or collection package.

This information collection is being conducted as one of the Task 2 Studies (Rigorous Applied Research and Development) of the 2005-2010 Regional Education Laboratories Program. The current authorization for the Regional Educational Laboratories program is under the Education Sciences Reform Act of 2002, Part D, Section 174, (20 U.S.C. 9564), administered by the Institute of Education Sciences' National Center for Education Evaluation and Regional Assistance.

Importance of Study

Partially in response to unacceptably high levels of student misbehavior and concern about the low levels of endorsement of values consistent with good character — honesty, responsibility, and respect for self and others — character education has become one of the fasting growing reform movements in K–12 education today (Williams, 2000). The majority of states mandate or recommend some aspect of character education and such programs have high levels of support from parents, teachers, and administrators. Relatively few prospective randomized trials have been conducted to examine the impact of character education programs on student behavioral and academic outcomes.

The goal of this proposed study is to evaluate the effectiveness of a promising English Language Arts-based character education program — the *Lessons in Character Program* (LIC) — on student academic performance, school behavior and motivation, and endorsement of values consistent with character education among elementary students. Since 1995, the LIC program has been implemented in over 15,000 schools in every state except Alaska. The core of the LIC program consists of literature-based supplementary curricular material designed to integrate easily into the existing English Language Arts (ELA) curriculum. The lessons are aligned with state ELA standards. The infusion of LIC lessons into the ELA curriculum, and the resulting ease of implementation, distinguishes the LIC from other character education programs.

The primary rationale for character education is the promotion of the ethical, social, and personal integrity of students. Proponents of character education argue that the nation benefits when its citizens subscribe to the ideals of respect for others, fairness and justice, honesty, responsibility, and civic participation. Character education programs are also promoted as a partial solution to the growing problem of student misbehavior at school, and the effect of such misbehavior on student learning. Correlational evidence drawn from years of research has shown that adolescent substance use, violence, crime, and antisocial behavior are closely connected with academic success and other school-related factors including reduced attention spans, lower investment in homework, more negative attitudes toward school, lower motivation, and increased absenteeism (see Hanson, Austin, & Bayha, 2004). Such factors may also adversely affect academic performance

by influencing teaching and learning processes in the classroom. For example, Lochman, Lampron, Gemmer, and Harris (1987) found that students who were disruptive and aggressive in the classroom had a negative impact on their classmates' education by diverting teachers' attention and reducing instruction time (*c.f.* Bowen & Bowen, 1999). Character education may also enhance student learning and achievement through its effects on the skills and habits necessary for academic achievement. Systematic character education programs typically focus on traits and behaviors – such as responsibility, accountability, perseverance, self-respect, and problem solving resources – that have been logically linked to academic performance. By influencing the skills necessary for students to achieve in schools, character education may improve academic achievement. Character education program also typically aim to foster greater attachment to school and connectedness with teachers. Numerous studies suggest that school connectedness and caring relations with teachers are related to higher levels of school engagement, educational aspirations, achievement motivation, and academic achievement (Anderman 1999, Connel & Halpern-Felsher 1997, Murdock, Anderman, & Hodge 2000, Resnick et al. 1997, Ryan & Patrick 2001). Wentzel (1997) found that students who reported that their teachers care about them increased their work effort over the next year.

Because character education in general and the LIC curriculum in particular are logically and conceptually linked to a) knowledge, attitudes, and values related to good character; b) pro-social and anti-social behavior; and c) academic engagement and performance — we focus on program effects in each of these dimensions in the impact evaluation. More specific, this study is guided by the following research questions:

1. Is participation in LIC effective at raising student achievement, improving attendance, and reducing disciplinary referrals?

2. Do students who participate in LIC demonstrate more positive character traits and behaviors, and greater social skills, compared to control group students?

A2. Purpose and Uses of the Data

In order to answer the above research questions, this study will implement a randomized controlled trial (RCT) to examine the impact of LIC on student academic performance, attendance, school motivation, and endorsement of universal values consistent with character education. Detailed research design, data collection procedure and timeline, and data analysis is presented below.

Research Design

Design Overview and Timeline. **Exhibit 1** below and **Appendix A** show general and detailed timelines for the study. The LIC impact evaluation is a four-year study that began in spring 2007, when recruitment of Cohort 1 sites, refinement of the design, and finalization of instrumentation took place. Cohort 1 implementation was scheduled to take place in the 2007/08 and 2008/09 academic years, with teacher professional development and coaching scheduled for early Fall 2007. Cohort 2 schools were recruited in spring 2008, with implementation scheduled for the 2008/09 and 2009/10 academic years. A two-cohort design was used because recruitment was delayed in spring 2007. Cohort 1 and Cohort 2 will be pooled in the data analyses. The study population consists of approximately 15,000 2nd-5th grade students served by 600 teachers in 50 schools in

California. No LIC professional development activities or coaching will take place during the second year of implementation (2008/09 for Cohort 1; 2009/10 for Cohort 2). The final six months of the study will be devoted to data analyses, manuscript preparation, and dissemination activities.

Exhibit 1. Overview of Study Timeline

July 06 – Sept 06	Oct 06 – March 07	April 07 – May 07	Aug 07 – June 08	Aug 08 – June 09	Aug 09 – Dec 10
Revise Study Design, Develop Instruments, Revise Protocol, OMB & IRB Submission	Cohort 1 School Recruitment, Informed Consent	Cohort 1 Baseline Student and Teacher Data Collection, Random Assignment	1st year Implementation, Process Data Collection, Post-intervention Data Collection Cohort 2 School Recruitment, Informed Consent Cohort 2 Baseline Student and Teacher Data Collection, Random Assignment	Cohort 1 2nd Year Implementation, Post- intervention Data Collection Cohort 2 1st year Implementation, Process Data Collection, Post-intervention Data Collection	Cohort 1 2nd Year Implementation, Post- intervention Data Collection Final Analyses/Report

To maximize the student sample size available in the estimation of multi-year exposure impacts, all 2nd-5th grade teachers will be recruited in each of the 50 schools recruited. All potential participating schools will have to agree to the data collection activities described below and to make available routinely collected student data on standardized test scores, attendance, and disciplinary referrals. In addition, teachers randomly assigned to the control group must agree to refrain from implementing character education interventions.
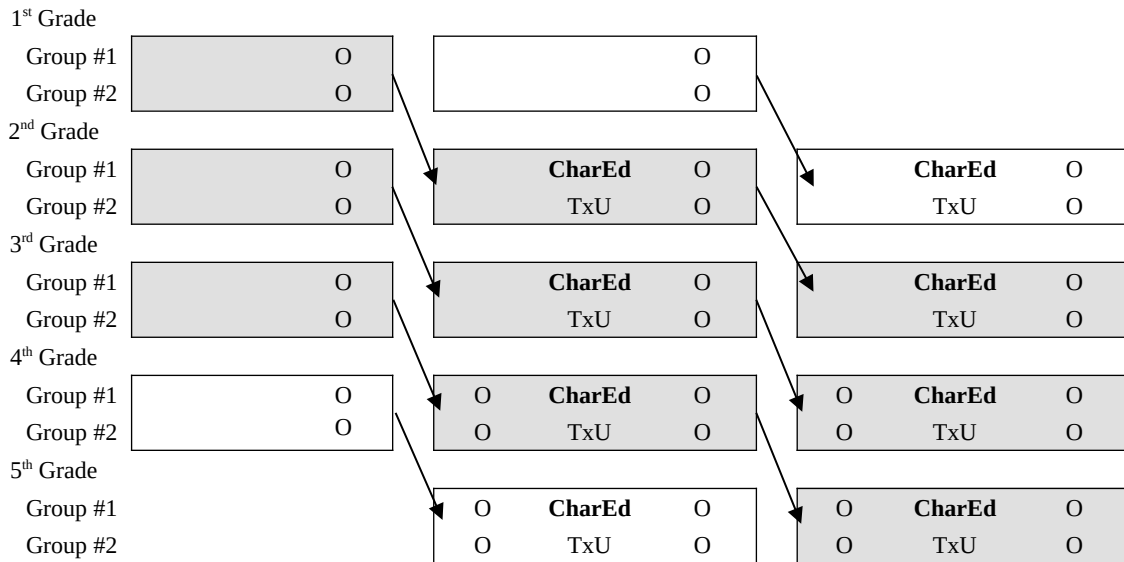
Exhibit 2 below depicts the research design. As mentioned above, 50 schools will be randomly assigned to treatment or control conditions. Schools will serve as the unit of randomization. Although the bulk of the LIC program is tightly infused into the English Language Arts curriculum, because schools serve as the unit of random assignment, school-wide aspects of the program, such as the integration of character education into the school discipline policy, will likely be fully reflected in the impact estimates.

The bottom panel of **Exhibit 2** depicts the design with respect to *students*. The design enables estimation of single-year program impacts for each grade, and estimation of multi-year LIC exposure impacts for students who were in the 2nd, 3rd, or 4th grade during Year 1.

Exhibit 2. Lessons in Character (LIC) Experimental Design

	Year 0[A]		Year 1[A]		Year 2[A]	
	Fall	Spring	Fall	Spring	Fall	Spring
Teachers						
1st Grade		O		O		
2nd Grade						
Group #1		O	**PD+CharEd**	O	**CharEd**	O
Group #2		O	TxU	O	TxU	O
3rd Grade						
Group #1		O	**PD+CharEd**	O	**CharEd**	O
Group #2		O	TxU	O	TxU	O
4th Grade						
Group #1		O	**PD+CharEd**	O	**CharEd**	O
Group #2		O	TxU	O	TxU	O
5th Grade						
Group #1		O	**PD+CharEd**	O	**CharEd**	O
Group #2		O	TxU	O	TxU	O

	Year 0[A]		Year 1[A]		Year 2[A]	
Students						
1st Grade						
Group #1		O		O		
Group #2		O		O		
2nd Grade						
Group #1		O	**CharEd**	O	**CharEd**	O
Group #2		O	TxU	O	TxU	O
3rd Grade						
Group #1		O	**CharEd**	O	**CharEd**	O
Group #2		O	TxU	O	TxU	O
4th Grade						
Group #1		O	O **CharEd**	O	O **CharEd**	O
Group #2		O	O TxU	O	O TxU	O
5th Grade						
Group #1			O **CharEd**	O	O **CharEd**	O
Group #2			O TxU	O	O TxU	O

[A] Years 0, 1, and 2 correspond to 2006/07 (pre-intervention), 2007/08, and 2008/09 for Cohort 1, respectively; and 2007/08 (pre-intervention), 2008/09, and 2009/10 for Cohort 2.

O = Observations or measurement points
PD = Prof Development/Coaching Condition in *Lessons in Character*
CharEd = *Lessons in Character* implementation
TxU **=** Treatment as Usual Condition
Shaded areas correspond to student cohorts tracked/analyzed across two years of program exposure/non-exposure to *Lessons in Character*

As discussed in more detail in Part B of this document, the study is powered to detect grade and cohort-specific small program impacts. The study relies on mixed-modeling

procedures (see Impact Analysis section below) to detect treatment effects on student outcomes. **Exhibit 3** summarizes the study characteristics.

The control group represents the treatment-as-usual conditions. Control group members will be exposed to the regular ELA curriculum in their schools, and will be barred from implementing LIC in their classrooms. It is possible that schools or teachers may change practices because they were assigned to the control condition. A monitoring system will be put in place to assess professional development activities, curriculum practices, and/or other "intervention-like" activities in both treatment and control conditions to better interpret observed program impacts, or lack thereof, as well as to document the treatment contrast.

Exhibit 3. LIC Study Characteristics

Study F Design	Cluster-randomized trial
Unit of Assignment	Schools
Sample Characteristics	15,000 students/ 50 schools – schools assigned to the intervention condition will implement LIC in grades 2-5.
Statistical Power Estimates	For Type 1 error = .05, 80% or higher power to detect MDES of 0.23 for academic outcomes and 0.17 for behavioral outcomes within each school grade; MDES of 0.23-0.28 for subgroup analyses.
Implementation begins	Winter 2007

***Study Outcomes*.** The evaluation relies on school archival data, student surveys of 4th and 5th graders, parent surveys, teacher surveys, and teacher interviews to measure student outcomes and implementation fidelity. **Exhibit 4** describes the outcome measures used in the analysis. With the exception of survey items asking specific questions about LIC implementation, all measures will be collected in both treatment and control sites.

Standardized Achievement Tests. Students' standardized ELA and Mathematics achievement data from district-administered (or state-mandated) standardized tests for all students will be collected for the years *before* and *during* exposure to the study teachers. Unfortunately, Arizona and California administer different tests to 2nd-5th grade students. Arizona administers the Terra Nova and Arizona's Instrument to Measure Standards (AIMS) to its elementary school students, while the California Standards Test (CST) is administered to elementary students in California, respectively. Although these tests measure the same general constructs, they are different in terms of content emphasis, item sampling, and item difficulty. To convert the scores to an identical metric so that test score data from all of the sites can be analyzed together, all the test score data will be standardized by subtracting the state mean from each student's score and dividing by the state standard deviation (at baseline). This is analogous to techniques used in meta-analysis to pool the results of studies using alternative measures of similar constructs. However, this technique is far from ideal.

Course Grades, Attendance, and Disciplinary Referrals. School and district records on course grades, student attendance, and disciplinary referrals will be gathered across all sites. Prior to collection of data from school and district records, a form designed to

inventory student information kept in school records will be distributed to appropriate staff. Data from this form will be used to determine which records are available for all schools in the sample.

Character Traits and Behavior Survey. A 35-minute survey assessing behaviors, attitudes, and values consistent with the goals of character education will be administered to all 4th and 5th graders during the spring semester of the year prior to implementation and at the end of both implementation years. Using items and subscales from existing validated instruments, the survey will assess student empathy (Funk et al. 2003), altruism (Characterplus 2002), school engagement (Furrer & Skinner 2003), aggression (Opinas & Frankowski 2001), delinquent behavior (Kisker et al. 2004), autonomy and influence, and competence (Characterplus 2002).

Social Skills Rating System (SSRS). Teacher and parent reports on the SSRS (Gresham & Elliott, 1990) will be used to assess student social skills, problem behaviors, and academic competence. The SSRS-Teacher and SSRS-Parent are 57-item multidimensional instruments assessing student social and academic functioning. The instruments have good psychometric properties, good change sensitivity, and the SSRS-Teacher has shown positive results in an evaluation of the Responsive Classroom character education program (Elliott, 1995). The SSRS assesses the sub-domains of cooperation, responsibility, empathy, self-control, externalizing problems, and internalizing problems. Teacher and parent SSRS reports will be obtained from a random sample of 12 students in each classroom.

Teacher Surveys. We also plan to survey all intervention and control group teachers prior to random assignment during the spring of Year 0 (pre-test) and in the spring of Year1 and Year 2 (post-test). The pre-test survey will assess teacher education, professional development experiences in language arts and character education, and the language arts curriculum used. The post-test survey will also contain questions about additional professional development that the teachers participate in during the implementation year. Teachers in the intervention condition will be asked how they prepared and followed up with their lessons, and the frequency with which lessons were delivered.

Teacher Implementation Logs. Teachers assigned to the treatment group will fill out weekly logs that assess the frequency with which LIC, DOL, and WWC lessons were delivered.

Teacher Interviews. For a sample of 10-14 teachers in the treatment group, a semi-structured interview (by phone) will be conducted during the spring of each implementation year to assess implementation fidelity, including changes made and barriers encountered, and descriptions of the ways they and their students may have benefited (or not) from the program. For this sample of teachers, we will develop a set of case studies to document changes in practices resulting from program participation.

Parent Surveys. In addition to the SSRS-Parent questionnaire, a brief baseline survey will be administered to the primary caregivers of students to assess demographic and socioeconomic characteristics.

Administrator Interviews. Using an analogous procedure as that used in the Social and Character Development Impact Evaluation being conducted by Mathematica Policy

Research, Associate Principals or others who are most knowledgeable about school-wide programs in both treatment and control schools will be interviewed to gather information about school activities closely aligned with character education, including the implementation of other character education programs, substance use and violence prevention programs, life skills programs, civics and/or citizenship programs, conflict resolution programs, and related activities.

Exhibit 4. Measurement Matrix of Outcome Variables used in the Evaluation

Construct	Items	Source	Alpha Reliability	Reference
Student Outcome Measures				
Standardized Achievement Tests	NA	School Records	NA	NA
Course Grades	NA	School Records	NA	NA
Attendance	NA	School Records	NA	NA
Disciplinary Referrals	NA	School Records	NA	NA
Empathy (reactive & anticipatory)	16	Student	0.72	Funk et al (2003)
Altruism	5	Student	0.86	Characterplus (2002)
School Engagement (two scales)	10	Student	0.75, 0.86	Furrer & Skinner (2003)
Aggression	11	Student	0.88	Opinas & Frankowski (2001)
Delinquent Behavior	13	Student	0.71	Kisker et al (2004)
Students' Feelings of Belonging	12	Student	0.87	Characterplus (2002)
Students' Feelings of Belonging	12	Teacher	0.89	Characterplus (2002)
Autonomy & Influence	5	Student	0.79	Characterplus (2002)
Competence	9	Student	0.76	Characterplus (2002)
Academic Competence	9	Teacher	0.95	Gresham & Elliott (1990)
Assertion	10	Teacher/Parent	0.86 / 0.74	Gresham & Elliott (1990)
Cooperation	10	Teacher/Parent	0.92 / 0.77	Gresham & Elliott (1990)
Responsibility	10	Parent	0.65	Gresham & Elliott (1990)
Self-control	10	Teacher/Parent	0.91 / 0.80	Gresham & Elliott (1990)
Externalizing	6	Teacher/Parent	0.88 / 0.75	Gresham & Elliott (1990)
Internalizing	6	Teacher/Parent	0.78 / 0.71	Gresham & Elliott (1990)
Classroom/Teacher Measures				
School Expectations	5	Student	0.87	Characterplus (2002)
School Expectations	5	Teacher	0.94	Characterplus (2002)
Parent & Staff Relations	7	Teacher	0.88	Characterplus (2002)
Staff Culture of Belonging	10	Teacher	0.91	Characterplus (2002)

Data Collection Procedure and Timeline

This evaluation study relies on three sources of outcome data: 1) routinely collected district and school archival standardized test scores, attendance, and disciplinary referrals data; 2) Character Traits and Behavior surveys administered to all 4th and 5th graders during both implementation years; and 3) teacher- and parent-reported SSRS data collected from 12 randomly sampled students per class in all 1st-4th grade classes. To enable longitudinal tracking, 1st-4th grade students with positive parental consent will be sampled for the SSRS during the Year 0 spring semester, with the exception of a new cohort of 1st grade students that will be tracked beginning in spring Year 1. We expect to obtain valid pre-intervention and post-intervention data for at least 80% of SSRS focal

students sampled. We will also collect data from teachers to monitor the fidelity of implementation and to monitor conditions in control-group classes. Exhibit 5 depicts the data collection schedule.

Collection of Student Archived Data. Course grades, attendance, and disciplinary referrals will be collected for each student participating in the study. A memorandum of agreement will be obtained by WestEd in which the districts agree to provide archival student records to WestEd for the purposes of research. The district data specialist will be contacted at the beginning of the study to alert them about which data variables are needed. It is anticipated that the district will be able to provide an electronic database containing attendance, course grades, and disciplinary infractions for students identified for the study. WestEd will request copies of the standardized test scores data disks provided to the districts by the state in the late summer/early fall each year.

Collection of Student Survey Data. Recruitment of 4th -5th grade students will begin approximately 45 days prior to survey administration. Active parent and student consent will be required for participation. For the spring Year 0 survey administration (and the subsequent year administrations), parental consent forms will be distributed to on-site coordinators to distribute to sampled students. Students will be instructed to return parental consent forms to coordinators, who, in turn, will send accumulated consent forms to WestEd via express mail at selected intervals prior to survey administration. Return of consent forms by students in their classrooms has been found to yield higher rates of consent form return and agreement to participate than mailing consent forms to parents' homes and having parents mail them back (McMorris et al. 2004). Such a strategy also results in fewer IRB and district policy complications brought about by obtaining student address information. All consent forms will be immediately input into WestEd's online *Consent Manager* database program using bar code technology. Developed to facilitate WestEd's extensive number of survey research and evaluation projects using written parent consent, this program reduces the labor required to monitor consent, helps improve the positive consent rate, and reduces the error rate. For students not returning parental consent forms, follow-up distribution will occur at weekly intervals. Phone calls (up to three attempts) and direct mailing will be performed if there is no response to research consent by the 20th day prior to scheduled survey administration. School staff will <u>not</u> be involved with survey administration.

Survey administration will proceed as follows. Two or more staff will administer the surveys. Follow-up administration for students absent will occur within 2 days, and at periodic intervals thereafter if necessary. Each student (with parental consent) will be provided with a consent letter prior to filling out the survey. By signing the consent letter, students affirm their willingness to participate in the survey. Survey staff will retrieve student consent forms before survey administration and students will place the completed questionnaire in an unmarked envelope collected by survey staff.

Given the longitudinal nature of the study, it is necessary to link data across survey administrations. To track students, a unique, arbitrary numeric code will be placed on the student consent form and on the survey in the form of an infrared barcode. Following survey administration, survey assistants will use participant rosters from the *Consent Manager* database, which include student identification numbers, and the signed student assent letters to match the survey data to student identification numbers. Non-respondents will be identified immediately for follow-up scheduling. Participants will be assured of

the confidentiality of their responses. This procedure has been used successfully in other projects at WestEd using school-based surveys.

Collection of Parent Report Data. On-site coordinators will also distribute parent questionnaires and SSRS-P forms (combined in one survey) in sealed envelopes to students in the SSRS sample, who will deliver forms to parents. Parents will mail completed questionnaire and SSRS-P forms to WestEd using a postage paid envelope. Follow-up distribution will occur at bi-weekly intervals. If there is no response after one month of the original distribution, we will conduct two follow-up attempts by mail with the option for parents to complete the report by phone offered during the second attempt. Parents will be notified on the cover letter of the parent report that a phone interview can be arranged at a time of their convenience to complete the report. They will be asked to provide contact information on self-addressed envelopes. .

Collection of Teacher SSRS and Survey Data. Teachers will fill out surveys and SSRS-T forms for sampled students during the three-day period in which student surveys are being administered. We estimate that an average of 3 hours will be needed to complete both the surveys and SSRS-T forms. Teachers will be provided with postage-paid express mail envelopes to deliver SSRS-T forms if they have been unable to complete the forms during the scheduled 3-day period. Follow-up (three attempts) will occur with a two-week interval in between each attempt

Collection of Teacher Implementation Logs. Teachers assigned to the treatment group will fill out checklists that assess the frequency with which LIC, DOL, and WWC lessons were delivered. The first set of completed data forms will be returned to WestEd via express mail two-weeks after classroom implementation has begun, and then every two months thereafter. The two-week data collection will be used to ensure that teachers are filling out the forms appropriately from the start.

Collection of Teacher Interview Data. In treatment schools, a sample of 10-14 teachers implementing LIC will be invited to participate in an interview designed to collect qualitative data about their experience with the program. These interviews will be scheduled through the on-site coordinator at the end of each school year to coincide with student survey data collection efforts. Two data collectors will conduct the telephone interviews at times teachers have identified as being a convenient time for them. One data collector will ask the questions and the second data collector will take notes. Additionally, teachers will be asked permission for the phone interviews to be audio taped. The audio tapes will be transcribed by the data collector who conducted the interviews and entered into an electronic data file.

Collection of Principal/Administrator Interview Data. In both treatment and control schools, in-person interviews with school principals / administrators will be conducted during the school visits made by data collection staff. These interviews will be conducted to gather information about school activities that are related to character education, including the implementation of the LIC program itself.

Exhibit 5. Data Collection Schedule

	Year 0[A]	Year 1[A]	Year 2[A]
Student Outcome Measures			
Standardized Achievement Tests	Spring	Spring	Spring
Course Grades (ELA, Mathematics)	Spring	Fall/Spring	Fall/Spring
Attendance/Disciplinary Referrals	Spring	Spring	Spring
Character Traits Survey		Fall &Spring	Fall &Spring
Teacher SSRS	Spring	Spring	Spring
Parent SSRS (including parent demographic information)	Spring	Spring	Spring
Teacher Practice/Fidelity Measures			
Teacher Surveys	Spring	Spring	Spring
Teacher Implementation Logs		Spring	Spring
Teacher Interviews		Spring	Spring
Administrator Interviews		Spring	Spring

[A] Years 0, 1, and 2 correspond to 2006/07 (pre-intervention), 2007/08, and 2008/09 for Cohort 1, respectively; and 2007/08 (pre-intervention), 2008/09, and 2009/10 for Cohort 2.

Impact Analyses

The analysis of program impacts will depend on the random assignment research design as a primary source of inference. Adjusted post-intervention outcomes for students in the treatment group will be compared to the outcomes for their counterparts in the control group. The primary hypothesis-testing analyses will involve fitting conditional multilevel regression models (i.e., HLM – hierarchical linear modeling), with additional terms to account for the nesting of individuals within higher units of aggregation (e.g., see Goldstein, 1987; Raudenbush & Bryk, 2002; Murray, 1998). The study involves school-level random assignment and delivery of training courses to teachers within treatment schools, who in turn incorporate 24 supplementary lessons into their classroom instruction during the academic year. The design thus involves clustering at the school and classroom levels, as students are nested within teachers and teachers are nested within schools. A random effect of school site and a fixed effect of teacher will be included in the model to account for the nesting of observations within schools and teachers, respectively. Other fixed effects include treatment group, baseline (pre-test) measures of outcome variables, strata, and other individual and aggregate school-level covariates. The purpose of including statistical controls is to minimize random error and to increase the precision of the estimates.

As an illustrative example, consider the following two-level HLM for a continuous outcome:[1]

$$\text{Charact}_{i:j} = \alpha_0 + \beta_1 \text{Pre}_{i:j} + \beta_2 \text{Tx}_j + \sum \beta_I I_{i:j} + \sum \beta_T T_{i:j} + \sum \beta_S S_j + \mu_j + \varepsilon_{i:j} \qquad \textbf{[1]}$$

where subscripts *I* and *j* denote student and school, respectively; the nesting is reflected by the colons (:); *Character* represents the student outcome variable; *Pre* represents the baseline measure of the outcome variable; *Tx* is a dichotomous variable indicating student attendance at the school assigned to the treatment condition; *I* represents a vector of student-level control variables measured prior to random assignment; *T* represents a set dichotomous variables representing fixed effects for teachers, and *S* is a set of school-

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[1] For binary outcomes, a conditional mixed-effects logistic model will be estimated.

level control variables (e.g., strata). Lastly, $\varepsilon_{i:j}$ and μ_j are error terms for individual sample members and schools, respectively. In this model, the intervention effect is represented by β_2, which captures treatment/control school differences in changes in the outcome variable between pretest and posttest.

Simple extensions to model **[1]** allow us to examine differential effectiveness across subgroups by including interactions between treatment status and one of the variables in *I* or *S*. Model **[2]**, for example, shows how we can estimate separate program effects for boys and girls:

$$\text{Charact}_{i:j} = \alpha_0 + \beta_1 \text{Pre}_{i:j} + \beta_{2B} \text{Tx}_j \text{Boy}_{i:j} + \beta_{2G} \text{Tx}_j \text{Girl}_{i:j} + \sum \beta_I I_{i:j} + \sum \beta_T T_{i:j} + \sum \beta_S S_j + \mu_j + \varepsilon_{i:j} \qquad \textbf{[2]}$$

The only difference between this model and **[1]** is that the term $\beta_2 Tx_j$ is replaced by two terms that interact program variable Tx_j with dichotomous variables boys and girls. Program impacts on boys and girls are captured by the coefficients β_{2B} and β_{2G}, respectively. By statistically testing the hypothesis $\beta_{2B} = \beta_{2G}$, we can then establish whether program impacts are statistically different for boys and girls. Similar subgroup analyses will be possible across school-level variables. However, the statistical power of such higher-level subgroup analyses is very limited. Although we have no *a priori* hypotheses regarding differential impacts, such subgroup analyses will be important for yielding information on program effectiveness for students of varying SES levels, ethnicity, and gender. Moreover, interactions between pretest scores and the program variable will allow us to capture where in the distribution of student outcomes program-related gains come from.

A3. Use of Information Technology to Reduce Burden

Technology will be used in a variety of ways during the data collection process. Basic contact information about the schools in which teachers work will be gathered on an electronic database created by the WestEd evaluation team. The evaluation team will use this database to keep track of school / teacher contact information and other information used to manage the study. Technology (e.g., *Consent Manager*) will also be used to link student data from surveys directly to analytic datasets without re-keying data. This saves time and reduces that chance of errors during data input.

Second, communication between the evaluation team and selected school officials and/or teachers will occur through email, fax, and conference calls that take advantage of information technology and reduce burdens associated with paperwork. The communication will cover initial inquiries, the exchange of preliminary information, the scheduling and planning of site visits, and the review of draft reports.

Throughout the study, a toll-free number and email addresses will be available to respondents to allow them to contact the evaluation team with any questions or requests for assistance. This information, along with the names of contact persons on the evaluation team at WestEd will be printed on all data collection instruments.

A4. Efforts to Identify Duplication

Each instrument will be carefully reviewed to make sure that we only collect the most necessary information needed for this study. The secondary information such as student standardized test scores will be accessed and collected through the electronic database at the school (or district) level.

A5. Methods to Minimize Burden on Small Entities

The evaluation team will collect data from few small entities, as most of the data sources will be from teachers and students. The few small entities are likely to be associated with the external technical assistants and consultants who may assist with data key-in and help with scoring the instruments. Only minimal information will be needed from these small entities, and so no significant impact on small entities is expected.

A6. Consequences of Not Collecting the Data

The data collection efforts in this study will allow researchers to study the impact of LIC on student academic performance as well as student character traits and behaviors. As indicated earlier, character education has become one of the rapidly growing reform movements in K–12 education due to unacceptably high levels of student misbehavior and concern about the low levels of endorsement of values consistent with good character. Various character education programs have been implemented for the majority of states, and such programs have high levels of support from parents, teachers, and school administrators. However, relatively few prospective RCTs have been conducted to gather evidence about the effectiveness of LIC program. An experimental design is considered to be the strongest design when the interest of the study is in establishing a causal relationship (p.189, Trochim, W. M. K., 2001). The current study as an example of RCT aims to provide such relationship between LIC program and various student outcomes. Failure in collecting data based on this line of experimental design will greatly limit our capability of making the cause-effect inferences of LIC implementation.

A7. Special Circumstances Related to Information Collection

This information collection fully complies with 5 CFR 1320.5(d)(2).

A8. Federal Register Comments and Persons Consulted Outside the Agency

A notice about the study will be published in the *Federal Register* when the final OMB package is submitted.

The evaluation team will seek the expertise of persons outside the agency through the creation of a Technical Working Group (TWG). The TWG will provide consultation on the design, implementation and analysis of this study, as well as the entire portfolio of Regional Educational Laboratory West (REL West)

studies. They are expected to consult with REL West for five days per year through a combination of in-person and teleconferenced meetings. An honorarium of $1200 will be paid to each TWG member. This amount of honorarium is the daily rate required to retain TWG members. These are senior faculty members who are distinguished in their fields and extremely knowledgeable about the methodological and statistical requirements of randomized controlled trials. The rate and the contracts have been approved by IES.

 The TWG will play an important role in providing insight and guidance in support of a successful evaluation. The TWG members are listed below:

• Professor Jamal Abedi, CRESST, University of California, Davis
• Dr. Lloyd Bond, Carnegie Foundation for the Advancement of Teaching
• Professor Geoffrey Borman, University of Wisconsin
• Professor Brian Flay, Oregon State University
• Professor Tom Good, University of Arizona
• Dr. Corinne Herlihy, Manpower Demonstration Research Corporation (MDRC)
• Dr. Joan Herman, CRESST, University of California, Los Angeles
• Professor Heather Hill, University of Michigan
• Dr. Roger Levine, American Institutes for Research (AIR)
• Dr. Jason Snipes, Council of the Great City Schools

A9. Payments to Respondents

Lessons in Character training and curricular materials will be provided to participating teachers (both treatment and control groups) at no cost (valued at approximately $380/classroom). In addition, teachers will be provided with $100 (in a form of merchandise gift card) in compensation for the time it takes (3 hours) to fill out the child assessments each year. Parents will be compensated $10 (in a form of merchandise gift card) for each of three rounds of data collection.

A10. Assurance of Confidentiality Provided to Respondents

WestEd staff will comply with the Privacy Act for all individual and school/teacher/parent data collected in the study. All data will be carefully handled in a responsible manner so they are not seen by or released to anyone not working on the project. Data will be reported in a summary fashion so no specific individuals or schools/teachers/parents may be identified. Finally, all data will be maintained in secure and protected files that do not include personally identifying data.

No information will be collected that would identify individual participants. Participants will not be referenced by either their name or their position title. An explicit statement regarding confidentiality will be communicated to any and all participants.

The data security protections for this study receive continuing review by WestEd's Institutional Review Board. Below is an overview of WestEd's data security policy.

Policies for Class 1 Data (Confidential data with identifying information)

(1) Can never leave WestEd premises.
(2) Always kept in a secure place.
(3) Only authorized persons can access and use.
(4) Must be properly disposed of or transferred.

Exhibit 6. Procedures for Handling Class 1 Data

	Electronic Data	**Paper Data**
Receipt and tracking of Class 1 materials	• Notify office manager if expecting to receive confidential data • Catalogue all data received	• Notify office manager if expecting to receive confidential data. • Catalogue all data received
Can never leave WestEd premises	• Must work on WestEd premises with these data	• Must work on site at WestEd with these data
Create separate working analysis file	• Strip individual-identifying information for analysis files, which can then be stored in access-limited folders on WestEd's LAN	
Always kept in a secure place	• On data server or in locked cabinet in locked room (CD or other disk media) • Must not be left unattended in public view (e.g. on desk or screen) • May not be stored on laptop	• Locked cabinet in a locked room • Must not be left in public view (on desk or in common-use areas)
Only authorized persons can access and use	• Limit access to the data server by use of passwords • The minimum number of people who absolutely need to use the data should be given access	• Key to locked cabinet to be kept securely by authorized persons • The minimum number of people who absolutely need to use the data should be given access
Must be properly disposed of or transferred	• Update catalogue whenever data are disposed of or transferred • Mail data in a password protected and/or encrypted form on an unmarked diskette and CD • Require recipient and delivery verification. • If absolutely necessary to transfer via email or internet, create encrypted, password-protected files; transmit password verbally (by phone). Do not include password in email.	• Update catalogue whenever data are disposed of or transferred • When mailing, require recipient and delivery verification. • Shred any paper with confidential data before disposing

Policies for Class 2 (Proprietary data and documents that are not Class 1) are:

> (1) Only authorized persons can access and use.
> (2) Must be used and stored under responsible person's oversight. Must not be left in public view (e.g. sitting out on a desk, open on computer monitor).

A11. Justification of Asking Sensitive Questions

No questions will be asked that are of a sensitive nature.

A12. Estimate of the Hour Burden of Information Collection

The estimated total response burden is about 46,380 person-hours assuming there is no data attrition across three years of program implementation (so the burden estimates presented here represent the maximum burden). This total represents the sum of the estimated burden for all portions of the study. **Exhibit 7** aggregates the estimated total hours and costs to participants of this study.

Exhibit 7. Aggregate Respondents and Hour Burden

Task	Number of Respondents	Hour Burden	Monetary Burden
Sampling/Gaining Cooperation	49,269	14,877	$300,885
Student Data Collection	30,000	17,500	$0
Teacher Data Collection	1,950	6,153	$198.090
Parent Data Collection	23,400	7,800	$156,000
Administrator Data Collection	100	50	$1,800
TOTAL	104,719	46,380	$656,775

Sampling and Gaining Cooperation. At the outset of the study, the process of data collection will be initiated with sending a listserv message or a letter to all school districts in both California and Arizona serving students in grades 1 through 5 and to all Title IV coordinators notifying them about the study and requesting participation from schools within their respective districts and counties. We believe that this approach will increases efficiency during the study and reduces the overall burden during the recruitment process. Responses to the listserv message will be reviewed to ensure schools meet the criteria for selection into the study as will be described later in B1, "Respondent Universe / Sampling Methods." The evaluation team will contact the principals of qualifying schools to ensure that sufficient numbers of teachers within the school are willing to participate in the study and that student-level data on school grades, attendance, and state achievement tests will be made available for the evaluation team. In addition, the evaluation team will

provide specific information about the process of obtaining parental consent (so that the evaluation team will be able to gather student level data through various surveys). A list of required commitments from schools and school districts is included in **Appendix C**.

Exhibit 8 lists the estimated time and cost of burden associated with each task during the sampling and gaining cooperation process. The number of principals/teachers/parents corresponds to the number of schools that will be recruited based on the study design and power estimates.

Exhibit 8. Estimated Burden for Sampling and Gaining Cooperation

Task	Type of Respondent	Number	Time Estimate (in hours)	Total Hours	Hourly Rate	Estimated Cost of Burden
Sampling Tasks	District administrators	10	1	9	$45	$405
Gaining Cooperation	School Principals	50	.8	40	$36	$1,440
Gaining Cooperation	Teachers	600	.4	240	$30	$7,200
Obtaining Consent from Parents	Parents	15,000[2] (year 0)	.3	14,580	$20	$291,600
		18,600[3] (year 1)				
		15,000[2] (year 2)				
Gaining Cooperation	District Data Specialists	10	.8	8	$30	$240
TOTAL	-	49,269	-	14,877	-	$300,885

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[2] For students in grades 1-4.
[3] For students in grades 1-5.

Student Data Collection. Student data from various sources over the course of three years of study will be collected as specified in **Exhibit 5**. **Exhibit 9** lists the estimated burden for student data collection.

Exhibit 9. Estimated Burden for Student Data Collection[4]

Task	Type of Respondent	Number	Time Estimate (in minutes)	Total Hours	Hourly Rate	Estimated Cost of Burden
Student Data Collection in the Fall of Year 1 (2007/2008)	Students	7,500	35	4,375	$0	$0
Student Data Collection in the Spring of Year 1 (2008/2009)	Students	7,500	35	4,375	$0	$0
Student Data Collection in the Fall of Year 2 (2008/2009)	Students	7,500	35	4,375	$0	$0
Student Data Collection in the Spring of Year 2 (2009/2010)	Students	7,500	35	4,375	$0	$0
TOTAL	-	30,000	-	17,500	-	$0

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[4] There will be no new student data collection in the spring of 2007; for 4th and 5th grade students only.

Teacher / Parent / Administrator Data Collection. Similarly, teacher / parent / administrator data will be collected as indicated in **Exhibit 5**. **Exhibits 10-12** provide the estimated burden for teacher / parent / administrator data collection.

Exhibit 10. Estimated Burden for Teacher Data Collection

Task	Type of Respondent	Number	Time Estimate (in minutes)	Total Hours	Hourly Rate	Estimated Cost of Burden
Teacher Data Collection in the Spring of Year 0 (2007/2008)	Teachers	750	180	2,250	$30	$67,500
Teacher Data Collection in the Spring of Year 1 (2008/2009 -- 1st Grade only)	Teachers	150	190	475	$30	$14,250
Teacher Data Collection in the Spring of Year 1 (2008/2009 -- 2nd-5th Grade)	Teachers	286	205 (treatment)[5]	1,989	$30	$59,670
		14	265 (treatment)[6]			
		300	190 (control)			
Teacher Data Collection in the Spring of Year 2 (2009/2010)	Teachers	286	195 (treatment)[5]	1,889	$30	$56,670
		14	255 (treatment)[6]			
		300	180 (control)			
TOTAL	-	1,950	-	6,153	-	$198,090

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[5] Treatment teachers without interview data collected.
[6] Treatment teachers with interview data collected.

Exhibit 11. Estimated Burden for Parent Data Collection

Task	Type of Respondent	Number	Time Estimate (in minutes)	Total Hours	Hourly Rate	Estimated Cost of Burden
Parent Data Collection in the Spring of Year 0 (2007/2008)	Parents	7,200	20	2,400	$20	$48,000
Parent Data Collection in the Spring of Year 1 (2008/2009)	Parents	9,000	20	3,000	$20	$60,000
Parent Data Collection in the Spring of Year 2 (2009/2010)	Parents	7,200	20	2,400	$20	$48,000
TOTAL	-	23,400	-	7,800	-	$156,000

Exhibit 12. Estimated Burden for Administrator Data Collection

Task	Type of Respondent	Number	Time Estimate (in minutes)	Total Hours	Hourly Rate	Estimated Cost of Burden
Administrator Data Collection in the Spring of Year 1 (2008/2009)	School Administrators	50	30	25	$36	$900
Administrator Data Collection in the Spring of Year 2 (2009/2010)	School Administrators	50	30	25	$36	$900
TOTAL	-	100	-	50	-	$1,800

A13. Estimate of Cost Burden to Respondents

Respondents will mainly come from students and teachers/parents. The hourly rate for each respondent is outlined in section A12. There are no other additional respondent costs aside from those outlined in section A12.

A14. Estimate of Annual Cost to the Federal Government

The total cost for the study is $1,348,367 over five years. The average yearly cost is about $269,673. Most of the costs for the study are incurred in years 2007 through 2010 as data collection efforts are under way.

A15. Program Changes or Adjustment

This request is for an extension of the information collection.

A16. Plans for Tabulation and Publication of Results

We plan to produce one technical report in which evaluation results will be presented. Following IES approval, the report will be posted on the IES public Web site. The report is expected to be finalized in December 2010.

A17. Seeking Approval to Not Display the OMB Expiration Date

No request is being made for exemption from displaying the expiration date.

A18. Explanation of Exceptions

This collection of information involves no exceptions to the Certification for Paperwork Reduction Act Submissions.