

Kids in Transition to School (KITS) Year 1 Evaluation Report

Submitted to:

United Way of Lane County

Submitted By:

Beth L. Green, Ph.D.
Director of Early Childhood & Family Support Research
Center for Improvement of Child and Family Services
Portland State University
April 25, 2017

Kids in Transition To School (KITS)

Year 1 Evaluation Report

Executive Summary

Grantee Information

- **Grantee:** United Way of Lane County
- **Sub grantees:**
 - Bethel Education Foundation
 - Eugene Education Foundation
 - Lane Education Foundation
 - Springfield Education Foundation
- **Evaluator:** Portland State University
- **Evaluation Study/Project Period:** Year 1, March 1, 2016- March 31, 2017

Evaluation Overview

Program, intended outcomes/impacts

In 2016, the United Way of Lane County, was awarded a grant from the Social Innovation Fund to replicate and expand the Kids in Transition to School (KITS) program in 13 school districts in Lane County, Oregon. KITS is a brief but intensive kindergarten readiness program designed to help prepare high risk children and their parents for the entry into elementary school. It focuses on teaching children literacy, numeracy, prosocial and self-regulation skills that are critical for school readiness and positive school adjustment. Additionally, parents participate in workshops in which they learn skills for supporting learning at home, promoting positive child behaviors, and becoming involved in their child's school. The KITS Program has been tested in 3 Randomized Controlled Trials (RCTs: Pears, Kim & Fisher, 2012; Pears, Healey, Fisher, Braun, Gill, Mar Conte, Newman & Ticer, 2014; Pears, Kim, Healey, Yoergreger & Fisher, 2015) with different populations of children. Results from those studies have laid a promising foundation for the evidence base. Positive effects on literacy and self-regulation have been found across populations and longer term effects on social skills and self-competence have been demonstrated.

The ***Center for the Improvement of Child and Family Services***, a research, training, and education center within the School of Social Work at Portland State University, has been contracted by the United Way of Lane County to evaluate the recently funded expansion of the Kids in Transition to School (KITS) Program. This report summarizes findings from the Year 1 Feasibility Study, and sets the stage for work during Year 2 to implement a rigorous outcome study to establish a moderate level of evidence for the KITS model. The goals of the Feasibility Study were to:

1. Assess the feasibility of using a random assignment lottery system for selecting KITS participants and as a basis for a randomized controlled trial.
2. Assess the ability of a variety of different recruitment strategies to identify and engage program and study participants.
3. Assess the resources needed, and success of, a variety of methods for collecting key participant and control outcome data.
4. Identify procedures needed to obtain and link KITS study participant to statewide Oregon Kindergarten Assessment (OKA) data.
5. Collect exploratory outcome data on KITS and comparison parents and children.

Evaluation Design, Methods & Measures

Year 1 used a mixed-method, quasi-experimental comparison group design including open-ended interviews with key stakeholders (school district administrators, principals, KITS teachers, assistant teachers, parent group facilitators, community partners, and parents); focus groups with KITS parents; web-based surveys with KITS training participants; pre-and post KITS surveys with KITS participants and a quasi-experimental comparison group; and direct child assessments done pre- and post- KITS with a small group of KITS and comparison group children. In addition, detailed records were kept regarding recruitment and data collection strategies and results.

Study Sample

For the Feasibility SEP, although we were not able to over-recruit and implement an RCT, we successfully collected baseline surveys from n=272 KITS families (74% of enrolled) and n=66 Comparison group families. Of these, n=203 KITS families (75% follow-up) and n=51 comparison families (77% follow-up) completed follow-up surveys as part of the feasibility/exploratory outcome study. N=23 KITS children and n=30 comparison children completed baseline assessments; 20 (87%) of KITS children completed follow up and 25 (83%) of comparison children completed assessments. There was little evidence of differential attrition based on participant characteristics, although KITS families with more education and higher rates of full time employment were somewhat more likely to complete follow up assessments.

Comparison families were recruited from the group of parents who expressed interest in KITS but: (1) were unable to participate because of scheduling conflicts; (2) whose children did not attend a KITS-eligible schools; and/or (3) were not able to be reached in time to enroll in the KITS program. For the process/feasibility component, we collected Implementation Surveys from n=66 KITS teachers, facilitators, and coaches in September 2016; interviewed n=56 school administrators, KITS teachers, coaches, and other stakeholders; conducted 4 parent focus groups, and interviewed 18 KITS parents by telephone.

Measures

Measures used for the process/feasibility component were developed to address specific aspects of program and research implementation (e.g., open-ended interview protocols). Two methods were used for the feasibility outcome data collection; (1) parent surveys, and (2) child assessments. Parent surveys were collected either in pencil-and-paper format or using a web-based interface at baseline (pre-program) and program end (November,

2016). Child assessments were conducted by trained assessors in one-on-one meetings with families. Parent surveys included the following outcome measures: **1. Social Skills Rating System** (Gresham & Elliott, 1990) subscales (Self Control, Externalizing, cooperation, and Hyperactivity); **2. Parent Discipline Questionnaire** (Capaldi, 1995, Poor Discipline Subscale); **3. Arnold Discipline Survey** (Arnold, O’Leary, Wolf, & Acker, 1993; Laxness subscale); **4. Parent Child Activities Scale** (Love et al., 2002); **5. Parent-Teacher Involvement Scale** (Conduct Problems Prevention Research Group, 1995); **6. Frequency of reading to child**; **7. Kindergarten Readiness Activities** (parent report of participation in other kindergarten readiness activities) ; and **8. Family demographics**. Direct child assessments included the following standardized assessments: **1. The Head Toes Knees Shoulders (HTKS)** assessment (McClelland et al., 2007); and **2. The Oregon Kindergarten Assessment** (Easy-CBM Initial Sound Fluency, Letter Names, and General Math; Child Behavior Rating Scale, Bronson, Goodson, Layzer & Love, 1990).

Analysis

Qualitative data was entered into Atlas Ti and content coded and analyzed by two members of the research team. Outcome data were analyzed using multiple linear regression (continuous outcomes) and multiple logistic regression (categorical outcomes). Time 2 outcome scores were used as dependent variables, controlling for Time 1/pretest scores and covariates (child gender, child participation in formal preschool/child care; mother race/ethnicity, household employment, and mother’s education status) and including KITS group (comparison vs. KITS), Time 1 score X group interactions as predictors.

Key findings

Feasibility and Process study findings suggested identified a number of project successes and challenges during the first implementation Year. In terms of successes, the evaluation documented the following:

1. The KITS program was well-received by both KITS teachers and participating families;
2. The KITS training and implementation support/coaching provided by OSLC was a key driver of implementation success.
3. KITS teachers described potentially meaningful impacts of the KITS training on their own professional development as teachers.
4. Preliminary data suggests that most KITS groups were implemented at a fairly high level of fidelity.

Challenges included:

1. The short timeline for recruitment of families, hiring, and start-up;
2. Inability to recruit a randomized comparison group.
3. Challenges recruiting Hispanic/Latino and other potentially higher risk families;
4. Challenges implementing parent groups with Spanish-speaking families, and need to enhance the cultural appropriateness of the KITS model.
5. Attendance, especially for parent groups and for both groups during Fall sessions;
6. The steep learning curve regarding KITS curriculum and approaches;
7. Technical challenges with KITS group videotaping;
8. Logistical challenges related to facilities and transportation;

In terms of exploratory outcome findings, at follow up, KITS families reported significantly less permissive (“lax”) parenting compared to comparison families. Further, on the measures of Child School Readiness and Discipline Results, results showed significantly more improvement over time (lower scores on the Discipline Results sub-scale indicate better discipline skills) for KITS participants compared to controls. One finding favored the comparison group, which showed more growth in Cooperation Skills as measured by the Social Skills Rating Scales – Parent Report. Further, there were a few significant overall differences in outcomes both between the subgroups of families with particular characteristics. However, the sample sizes for subgroups within the comparison group were generally very small which may have limited statistical power to detect these differences.

Finally, we conducted multiple regression analyses using child attendance rates as a predictor of Time 2 parent/caregiver survey outcomes, controlling to T1 scores and demographic characteristics as outlined above. As shown in Table 11, children’s attendance in the School Readiness Group significantly predicted developmentally supportive activities (Parent-Child Activities Scale), frequency of reading in the home, quality of parent-teacher interactions, parents’ endorsement of the school, parents’ satisfaction with information from the school, the child’s self-control, and parenting discipline skills above and beyond demographic characteristics and T1 scores on these outcomes. Better attendance resulted in better supports for learning at home, parent-teacher interaction, and disciplinary styles and results.

Key updates related to evaluation timeline/budget

The evaluation budget and timeline have not been substantially modified. We have made changes to the evaluation plan based on feasibility study findings in regards to resources needed to collect direct child assessments. The feasibility study made it clear that collecting direct child outcome assessments was more resource intensive than would be possible given available evaluation resources. Therefore, our current Impact SEP does not include the evaluation team collecting these assessments. Instead, we will use parent report of child outcomes as well as OKA data.

We are on track with the planned timeline with two exceptions. First, we are still in the process of obtaining Oregon Kindergarten Assessment data (OKA) as part of the preliminary outcome study. This was due to delays in obtaining Data Use Agreements (DUAs) with participating Districts. At this time, all Districts have signed DUAs and we are working with the Lane County Education Services Districts to obtain the needed data elements out of their centralized database. Second, due to the need to recode KITS session videos for the fidelity study, the evaluation team was not able to obtain fidelity information for individual KITS sessions until March 2017; these data are currently being cleaned, entered, and analyzed.

Key changes to program or evaluation team

There are no planned changes to the evaluation team at this time. However, given information collected through the Year 1 Feasibility Study, the following modifications were made to program recruitment processes and structure.

1. Enhanced community recruitment efforts, starting earlier, and using a more centralized recruitment system managed by OSLC;

2. Modification of the Fall component of the model, to increase the number of summer sessions and reduce the length and intensity of Fall sessions;
3. Increasing the level of resources and supports for parent attendance, including more emphasis on flexibility and delivery of “make up sessions”

Key next steps for evaluation/program

At this time, we are well underway to successful implementation of the more rigorous evaluation planned for Year 2 as outlined in the Impact SEP. We have conducted our first round of randomization in three school districts that that are already over-recruited for their KITS programs. In the upcoming months (April-June) we will be supporting recruitment, contacting and recruiting families for the research study, and planning for summer data collection, which will begin in late June. We are working to wrap up the final components of the Year 1 study by incorporating group-level fidelity and other information into outcome models, and examining outcomes for the Year 1 study participants with the Oregon Kindergarten Assessment data.

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Introduction

This report summarizes the first year of evaluation for the Kids In Transition to School (KITS) program being implemented in Lane County, Oregon. While the ultimate goal of the evaluation is to conduct a randomized controlled trial (RCT) to establish a moderate level of evidence for the program, the first year was approved as a Feasibility Study to set the stage for future efforts. Thus, this report is for the first year Feasibility Study of the KITS program. This report is intended to be an internal progress report submitted to the SIF program officers to detail first year findings and use of the findings during the feasibility stage to lay a foundation for a more rigorous outcome study in Years 2-5.

Prior Research

For decades it has been recognized that the gap in school achievement between socio-economically advantaged and disadvantaged children is apparent as early as school entry (Entwistle, Alexander, & Olsen, 1997; U.S. Department of Health & Human Services, 2000). Children from low SES backgrounds tend to enter school with poorer literacy and social skills than their peers (Foster, Lambert, Abbott-Shim, McCarty, & Franze, 2005; Hair, Halle, Terry-Humen, Lavelle, & Calkins, 2006). Deficits in school readiness increase risks for academic and social failures which, in turn, may lead to lower rates of educational and occupational attainment, and higher rates of drug use, delinquency, and mental health difficulties (e.g., Fothergill et al., 2008; Shochet, Dadds, Ham, & Montague, 2006; Wiesner & Windle, 2004).

Recently, a number of state governments have begun to invest in early education programs to address deficits in school readiness. The State of Oregon has embarked on an ambitious mission to improve the early learning resources across the state as well as to increase accountability for positive early education outcomes including school readiness. To increase accountability in education, the state developed a statewide kindergarten readiness assessment system in 2013 to provide ongoing performance data. Results from the first year of statewide testing suggested that, on average, 33% and 37% of children were at high risk for reading failure given their scores on letter naming and letter sounds, respectively (http://www.oregonlive.com/opinion/index.ssf/2014/03/kindergarten_assessment_makes.html#incart_story_package). Thus, at minimum, a third of all children may fail to learn to read fluently by third grade and will be at high risk for school dropout (Hernandez, 2012). These numbers, though highly concerning, should not be surprising, in that Oregon had the 46th worst graduation rate out of 47 states in 2012 (Stetser & Stillwell, 2014).

The Kids in Transition to School (KITS) Program represents a potential model for addressing these gaps in early school readiness. KITS is a relatively brief (16-week) program designed to help prepare high risk children and their parents for the entry into elementary school. It focuses on teaching children literacy, numeracy, prosocial and self-regulation skills that are critical for school readiness and positive school adjustment. Additionally, parents participate in workshops in which they learn skills for supporting learning at home, promoting positive child behaviors, teaching new skills, and becoming involved in their child's school. The KITS Program has been tested in 3 randomized controlled trials (RCTs) with different populations of children including children in foster care, children with developmental disabilities and behavior problems and children from low income backgrounds. Results from those studies have laid a promising foundation for the evidence base. Positive effects on literacy and self-regulation, as well as on parenting behavior and involvement in school, have been found

across populations and longer term effects on social skills and self-competence have been demonstrated. The purpose of the funded SIF project is to support a substantial “scale up” effort of the KITS model across multiple school districts and schools in a large county in Oregon. The purpose of this evaluation is both to understand what factors support successful replication, and to provide at least a **moderate level of evidence** regarding program effectiveness.

KITS Program Model Description

The Kids in Transition to School Program was designed to be a high-intensity, short-term school readiness intervention (24 child sessions over 16 weeks; 8 parent sessions over 8 weeks) delivered in the summer before and first 2 months of kindergarten. The KITS intervention is designed to increase school readiness prior to kindergarten entry and to promote better subsequent school functioning (Pears et al., 2013). To that end, the program occurs in two phases. The *school readiness phase* (two thirds of the curriculum) covers the 2 months before kindergarten entry and is focused on preparing children and families for school. The *transition/maintenance phase* covers the first 2 months of kindergarten and is focused on supporting a positive transition to school. The program is based on the idea that a high-intensity, short-term intervention delivered just before and during the transition to kindergarten is likely to result in an immediate increase in school readiness, which will improve child school adjustment in kindergarten and first grade (Pears et al., 2013). The model (described in more detail below) includes intervention directly with children to help them build early literacy, numeracy, and self-regulatory skills as well as parenting education and support to enhance parenting skills and parent efficacy related to school involvement.

Three principles underlie the KITS Program. The first is that efficacious interventions have to be *developmentally timed* to occur at the critical transition to school. Pianta and Cox (1999) argued that this period is optimal for intervention for two reasons: (a) children are in the process of reorganizing their competencies and might be particularly open to influence and (b) this transition might set the trajectory of the child’s later school career. Additionally, at transitions, it might be easier to perceive and intervene on between-group skill gaps (Entwistle, Alexander, & Olson, 2005).

The second underlying principle of the KITS Program is a *focus on self-regulatory skills* (i.e., the capacities to voluntarily regulate and control emotions and behaviors in different situations) in addition to early literacy and social skills. This emphasis is based on the recognition that self-regulatory skills are essential for school success (Blair & Diamond, 2008). Exposure to poverty appears to be a consistent predictor of poor prekindergarten self-regulatory skills (Rhoades, Greenberg, Lanza, & Blair, 2011). Further, growth in the self-regulatory skills of low-income children during the prekindergarten year predicts growth in both literacy and numeracy skills, leading some researchers to suggest that prekindergarten programs should incorporate training in self-regulation (Welsh, Nix, Blair, Bierman, & Nelson, 2010). However, many programs to address school readiness in high-risk children do not feature such a focus (Welsh et al., 2010).

The third principle is the provision of *high-density learning opportunities*. Within many typical early learning settings, children might spend less than half of their time in instructional activities, and general instructional supports can be of fairly low quality (Hamre & Pianta, 2007). The KITS curriculum is designed to provide as many

learning opportunities as possible with specific foci on critical early literacy, social, and self-regulatory skills within the ecologically valid context of the classroom. Additionally, instruction occurs within a framework of a manualized set of empirically based instructional and positive behavior management strategies. Didactic instruction and modeling techniques are used to teach skills and multiple opportunities for the children to practice those skills are embedded in the program activities.

KITS consists of two primary components: a 24-session school readiness group (SRG) focused on promoting early literacy and social-emotional skills in children and an 8-session parent group (PG) focused on promoting parent involvement in early literacy and school. The intervention covers the 2 months prior to kindergarten entry and the first 2 months of kindergarten.

School readiness group structure and curriculum.

Like a typical kindergarten schedule, school readiness sessions have a highly structured, consistent routine with many transitions between activities. The routine includes circle times at which students engage in games and musical activities designed to promote language, rhyming, and self-regulation skills, instructional periods during which the students focus on learning social and early literacy skills, project times during which children complete art and science activities designed to reinforce the literacy and social-emotional target skills, and snack time during which children practice their conversational and other social skills. The sessions were held in classrooms in the schools.

The curriculum objectives are clearly specified for each session regarding the early literacy, prosocial, and self-regulatory skills to be emphasized. The activities are designed to promote specific skills. Instruction is also strategically sequenced to teach the simplest skills first and build toward more complex skills over subsequent sessions. A lead teacher and two assistant teachers conduct the groups of 20 children. The high staff-to-child ratio provides children with high levels of support and feedback. A key component of the school readiness groups is the classroom behavior management system. Teachers are trained to use evidence-based behavioral support strategies. The early literacy activities include a letter of the day (letter naming and letter-sound knowledge), a poem of the week (phonological awareness, concepts about print, and language), and storybook and dramatic activities (understanding of narrative). Two components of socioemotional readiness are targeted in the KITS curriculum: prosocial skills (sharing, making a new friend, joining a game, cooperating, recognizing intentions and feelings, choosing prosocial responses to peer provocation) and self-regulatory skills (being a good sport, handling feelings, problem-solving, and using work-related skills). These skills are taught using a blend of direct instruction, role-playing, and activity-based intervention; the children receive feedback and guided practice in using the target skills. Multiple opportunities for using inhibitory control, maintaining attentional focus, and practicing newly acquired social skills are embedded across activities.

Parent group structure and curriculum.

The parent group meetings coincide with the school readiness group meeting times during session 1-4 during the summer and again after the start of school. Food is provided, and childcare is available for siblings of intervention children. Each group is led by one or two facilitators. Each facilitator presents information pertinent to preparing children for school such as how to practice literacy activities in the home and how to establish

routines that will ease the transition to school and support positive adjustment. The parents are also taught evidence-based, positive behavior management skills that parallel those used in the school readiness groups. The facilitator leads structured group discussions of the materials and addresses questions. Parent groups are typically held during the day, most often while children are participating in the child workshops, although depending on the particular school, these groups are sometimes held at different times/days. If parents' work schedules don't allow them to participate in the workgroups, KITS parent facilitators work with them to develop an individualized plan for them to receive the materials, sometimes meeting them at home or in a mutually agreed-upon location to provide and review materials. Skill acquisition is reinforced via role-plays and opportunities to practice new skills. For primarily Spanish speaking parents, there is an interpreter who translates the discussion simultaneously. Parent group handouts are also available in Spanish. If a parent misses a group session, the facilitator visits or calls the parent to deliver the missed curriculum.

The KITS school readiness group teachers and parent group facilitators complete a standardized 40-hr training program. At weekly intervention team meetings, the progress of individual families within the three school readiness domains is discussed, and strategies to address behavioral and literacy needs within the broader curriculum are planned. More information about the development of the curriculum may be found in Pears et al., 2013.

Year 1 Program Implementation

During Year 1 of KITS program implementation, 16 schools hosted 24 KITS groups within 12 school districts implementing the KITS program. In total, 31 school catchment areas were served by the 24 groups. A total of 370 children and 310 parents/caregivers were enrolled and participated at least once in the KITS program. SRGs met twice per week for 8 weeks during the summer, and once per week after the start of school for 8 additional weeks. PGs met once per week for 8 weeks during the summer and once every other week for 8 weeks after the start of the school Year 1 Feasibility Study Description

This evaluation of the SIF-funded KITS program ultimately seeks to establish at minimum a moderate level of evidence for the effectiveness of the scaled up KITS model, as well as conduct a comprehensive implementation and process evaluation to understand those factors that support successful implementation with fidelity of the "scaled up" model. However, due to the timeline during this first phase of the SIF project, the first year of the evaluation involved a feasibility study to explore the opportunity for conducting a randomized controlled trial during Year 2. The Year 1 study was designed to collect information regarding:

- 1. Feasibility of using a random assignment lottery system** for selecting KITS participants, and specifically the factors supporting (or hindering) over-recruitment by schools in which the number of potentially eligible KITS kindergarteners exceeded the number of KITS slots funded at the school. As mentioned previously, as of the start of the KITS program in June, it was clear that schools had not been able to meet this goal, thus the study focused on collecting information to understand how to improve the recruitment process during Year 2 and thus facilitate a randomized study.

2. Methods for recruiting families into the evaluation study, including both KITS participants and control and/or comparison families.

3. Methods for collecting outcome data from two primary sources from both KITS program participants and control/comparison families:

3a. Parent surveys that include both parent and child outcomes. Our goal for the feasibility phase was to collect parent surveys from all (consenting) participating KITS parents (originally targeted sample size, n=320), as well as from those assigned by lottery to the comparison group (approximate n=300). Because no lottery was conducted, we used alternative sources to recruit a quasi-experimental comparison group (described below).

3b. Direct child assessments of key child-level outcomes related to early literacy, numeracy and self-regulation. Because this aspect of data collection is considerably more resource intensive and potentially more difficult, we proposed to collect child assessments from a subsample of n=30 KITS children and n=30 control children in two participating schools.

The Feasibility Study thus included two primary components: (1) a Feasibility Implementation Evaluation component; and (2) a quasi-experimental Outcome Evaluation Component using a pre-post design and quasi-experimental comparison group. The outcome component included:

- Pre-post surveys of KITS participants using parent surveys collected at Baseline and after KITS program completion (Nov/Dec 2016)
- Pre-Post surveys from a quasi-experimental comparison group of parents not participating in KITS;
- Direct child assessments conducted at baseline and following program completion from a small sample of children who participated in KITS (program group) and comparison group children comprised of a subset of those whose parents completed the baseline parent survey.

It is important to note that the outcome component was intended primarily as an aspect of the Feasibility Study and was not designed to have sufficient power or sample size to contribute to increasing the overall level of evidence.

Year 1 Feasibility Study Research Questions

The Feasibility study addressed the follow key questions about the process of recruiting, randomly assigning, and assessing parents and children. Results from the feasibility phase have been used to inform planning for the Year 2 Impact and Implementation Study (Impact SEP Approved 3/30/2017). Results have been organized to address each question.

1. Random assignment lottery and program recruitment process (FQ1)

- a. Are schools able to successfully over-recruit families for the KITS model and implement a lottery based random assignment process?
- b. What recruitment strategies, materials, and supports are most effective and efficient in

supporting program recruitment?

- c. What are the barriers to over-recruitment and how can these be better addressed?

2. Research Study Recruitment Process (FQ2)

- a. What percent of families who agree to participate in KITS also provide a “consent to contact” for the research study?
- b. What strategies are most effective and efficient in securing these consent to contact forms?
- c. What strategies are most effective for successfully recruiting families into the KITS evaluation study?

3. Baseline Data Collection Process (FQ3)

- a. What types of activities, events, or other strategies are most useful for facilitating control-group data collection?
- b. What types events, activities, or other strategies are most effective for facilitating KITS participant data collection?
- c. How much time is needed for child-level data collection and what strategies might increase the efficiency of these assessments?
- d. How much time and other staff resources are needed for multi-site simultaneous data collection at all implementing KITS schools for parent survey data collection?

4. Preliminary assessment of selection bias in the research study sample (FQ4)

- e. Are the baseline characteristics of KITS program families who consent to participate in the evaluation different from those of comparison families who consent to participate in the data collection?
- f. Are families who consent to participate in KITS representative of the schools from which they are recruited in terms of demographic characteristics?
- g. Are families who consent to participate in the research study representative of the families who consent to participate in the KITS program in terms of their demographic characteristics?

Feasibility Study Design & Methods

Changes to Study Design During Feasibility Phase

The goal of the Feasibility study was to build a better understanding of the resources and supports needed for successful recruitment and data collection from children and families, and in particular to assess the feasibility of a randomized controlled design. The original Feasibility Study goal was to implement a randomized design, and to collect baseline and follow up data that would not only inform the Feasibility questions, but which could constitute a Year 1 impact sample. However, due to significant delays in contracting and staffing for KITS programs and the evaluation, as of program start up in June 2016 it was clear that insufficient numbers of families had been recruited to allow random assignment (which was dependent on the idea of enrolling more incoming kindergarten students than could be served by funded program slots). In essence, it was clear that the answer to Feasibility Question #1A, “Are schools able to successfully over-recruit families for the KITS model and implement a lottery based random assignment process?” was, at least for Year 1, “no”. However, as described

below, much was learned about the processes that needed to be in place, the timing of recruitment efforts, and barriers and facilitators of successful recruitment and outreach. Thus, our goal for Year 2 as described in the pending Impact SEP, remains to conduct a randomized outcome study.

That said, the design for the Year 1 Feasibility Study was a quasi-experimental, mixed methods design that included an Implementation/Process Study and a Quasi-Experimental Outcome study. Design, measures, and data collection procedures for these components are detailed below. We elected to move forward with this quasi-experimental design as we felt it would provide important information about sample and study recruitment and data collection protocols, as well as provide data that could inform decision making regarding Impact study design should random assignment not prove a feasible option for Years 2 and beyond.

Data Collection Methods: Implementation & Process Study

The Implementation and Process study used a mixed-method design including key stakeholder interviews, quantitative surveys, records review, and observation of program fidelity. These are detailed below; a few minor changes from the approved Feasibility SEP are noted where applicable.

KITS Key Stakeholder Summer Phase Implementation Interviews.

Telephone interviews were conducted in Fall 2016 with 31 persons involved in the startup phase of the KITS expansion in Lane County. Those interviewed included 18 KITS Site Supervisors, 8 KITS Coordinators, 3 Principals, 5 KITS Coaches, one United Way staff, and two OSLC/ODI implementation leads. In several instances, respondents occupied more than one role, e.g., a respondent might be both Principal and Site Coordinator, or both Site Coordinator and Site Supervisor. All participants were interviewed by telephone by a trained member of the research team. Interviews were recorded and notes verified prior to analysis. Interview notes were maintained and analyzed using Atlas.Ti, a qualitative data analysis software. A copy of the stakeholder interview is included in Appendix A.

KITS Coach & Teacher Survey.

KITS School Readiness Group Lead Teachers, Assistant Teachers, Parent Group Facilitators, and KITS Coaches completed web-based surveys using Qualtrics in August, 2016. The survey was sent to all potential respondents via email, with regular follow-up to ensure high response rates. Individuals completing the surveys were given a \$15 gift card. The purpose of the surveys was to describe the characteristics of KITS staff and their perceptions of the nature and quality of KITS implementation after the first 8-week summer session. Ninety-one percent (91%, n=59) of KITS Teachers and Facilitators participated in the survey. Seven KITS Coaches (100%) completed the survey. A copy of both surveys are included in Appendix B.

KITS Parent Focus Groups.

To learn more about the KITS program from the perspective of participating families, four focus groups were held with parents who participated in KITS. Four schools were chosen for the parent focus groups (two small, rural locations and two larger more urban school districts). Parents were recruited during the PG sessions by evaluation staff, and the focus groups were held in conjunction with children's summer KITS graduation to

facilitate participation. A total of 44 parents participated in the groups. Focus groups were conducted in English, and 3 Spanish-speaking parents participated in 2 of the groups. Translation was provided for Spanish speaking parents who participated¹. Groups were facilitated by members of the KITS evaluation team and recorded and transcribed for analysis. Focus group questions were designed by the evaluation team to learn more about families' experience with the KITS program (e.g., the enrollment process, attendance supports, etc.), about the benefits of the program for parents and children, and about any challenges encountered with the program. A copy of the focus group protocol is included in Appendix C.

KITS Parent Interviews

Parent interviews were conducted to learn more about barriers to participation in the KITS program. Purposive sampling was used to identify families who were: (1) "non-enrolling", defined as parents who had initially agreed to participate in KITS but were never actually enrolled; (2) "low participating" defined as parents whose children attended fewer than 8 classes and who themselves attended fewer than 5 parent group sessions; and "low parent participation," defined as families in which children attended more than 8 classes but parents participating in fewer than 5 parent group sessions. Lists of potential families meeting these criteria were developed by the research team based on KITS attendance information and samples randomly selected for participating in the interviews. A total of 14 parents (5 non-enrolling parents; 3 non-participating parents; and 6 low parent participation parents) were interviewed by telephone by members of the evaluation team. In addition, n=4 Spanish speaking parents were interviewed to learn more about their perceptions of the translation and interpretation processes for KITS. Parents were provided with a \$20 gift certificate in return for participating. Interviews were recorded and recordings used to verify detailed interview notes, which in turn were entered into Atlas.Ti for analysis. A slightly different set of interview questions was developed for each respondent group; these are included in Appendix D.

Post-Program Stakeholder Interviews: KITS Teacher, Parent Group Facilitator, and Parent Group Interpreter Interviews.

Interviews were done with 9 KITS lead teachers, 4 assistant teachers, 6 Parent Group facilitators, and 5 Parent Group interpreters [some respondents occupied more than one role], after the end of the program. These interviews were developed to gather teacher, facilitator and interpreter perceptions of the effectiveness of the KITS program, as well as barriers to implementation with fidelity, and resources and supports that were most helpful in supporting fidelity. A copy of these interview questions is included in Appendix E. Interviews were conducted by telephone by trained evaluation staff; recordings were used to verify notes, which in turn were entered into Atlas.Ti for analysis. Staff were given a \$20 gift certificate for participating.

Fidelity Data

Two key sources of data to assess program fidelity are routinely collected by OSLC and/or KITS staff and were provided to the PSU team for the evaluation.

- 1. Attendance and Dosage.** Parent and child attendance at each workshop session was recorded on the

For more information, contact Beth Green at: beth.green@pdx.edu.

School Readiness and Parent Workshop Attendance Sheets (OSLC, 2006) by the Lead Teacher/Facilitator.

2. Measures of Implementation Fidelity. Videotapes were made of each KITS child and parent class (with some exceptions due to technological difficulties in recording). These tapes were then be reviewed by trained staff at OSLC, and used to provide feedback during coaching sessions with KITS teachers. Checklists developed by OSLC are used to record content fidelity (School Readiness Group Content Specific Implementation Fidelity Checklist; Bronz, Heywood, & Pears, 2006), noting whether the teachers presented the specific curriculum components for a given session. Content specific checklists are unique to each SRG session. Quality of implementation of teaching and behavior management strategies are rated using the same form (the School Readiness Group Teaching Strategies Implementation Fidelity Checklist; Bronz et al., 2006) for each SRG.

Parent workshops were rated on whether the specified curriculum components were covered using the Parent Group Content Specific Implementation Fidelity Checklist (Pears & Healey, 2012) and how well the interventionists used strategies to facilitate group process and encourage participation using the Parent Group Process Implementation Fidelity Checklist (Pears & Healey, 2012).

Videotapes were reviewed by OSLC staff and coded using the checklists described above. While originally, it was intended that the KITS coach would provide the fidelity ratings for each group, to improve inter-rater reliability, OSLC instead used other staff (e.g., not that Coach assigned to that particular group) to review and code each session. Checklists based on these ratings were provided to the PSU team for analysis. **However, due to the need to re-do coding of videotapes and delays in preparing the fidelity data, these data were not available in time for this report and will be included in a subsequent update.**

Data Collection Methods: Quasi-Experimental Outcome Study

Participant Recruitment & Data Collection

Schools were responsible for initial recruitment of families into the KITS program. As part of this process, parents completed a “KITS Interest Form” that, for most school districts, included a question asking for permission for the school to share the families’ contact information with PSU for purposes of the evaluation. Schools recorded family information, including whether they provided this “consent to contact” into their own local data systems. These lists of families were provided to the evaluation team for study recruitment. In school districts where consent to contact was not received through the KITS Interest Form, attempts to attain consent to contact was done through the following: a check box on the OSLC KITS website, discussed during follow up calls from the KITS Administrative Coordinator, discussed during KITS Program calls from the KITS Site Supervisor or KITS Administrative Coordinator, and a check box or question on KITS enrollment forms. Some school districts did not consistently collect consent to contact through any of these methods.

Because one of the goals of the Feasibility Study was to explore the resources and success of various recruitment strategies, parents were recruited in several ways, described below.

KITS Program Group Recruitment & Data Collection Strategies

- 1. Evaluation Materials Mailing.** All parents/caregivers who provided consent for PSU to contact them about the evaluation, either on the interest form and/or through follow up phone calls by KITS staff, received a packet of materials for the evaluation. These materials included: (1) a flyer introducing the evaluation with contact information for PSU staff; (2) 2 copies of the consent form – 1 to sign and return, 1 to keep for their records; (3) the baseline parent/caregiver survey to complete and return; (4) a self-addressed, stamped envelope in which they could return a signed consent form and the baseline parent/caregiver survey. For families residing in the school catchment areas where PSU was piloting child assessments, a slightly different version of the consent form, explaining the assessment portion of the evaluation, was included in the packet.

- 2. Distribution of Evaluation Materials by KITS Teachers.** During KITS Program training, PG facilitators were given packets of evaluation materials that included the same materials as those described above. PG facilitators were asked to distribute these packets to participating parents/caregivers during the first PG session in the first week of the KITS Program. Further, parents/caregivers received information about the KITS evaluation through program staff prior to face-to-face interactions between parents/caregivers and PSU data collection staff.

- 3. Face-to-Face Recruitment at Initial KITS Classes.** The Portland State University evaluation team worked with KITS program staff, including the KITS Administrative Coordinator, the Site Supervisor, and the KITS SRG teachers and PG facilitators, to arrange a time to visit the SRG or the PG within the first two weeks of the program. The purpose of the visit was to introduce the evaluation and invite parents/caregivers to participate. PSU data collection staff attended the first sessions of 7 SRGs and 13 PGs. In one school district (hosting 4 KITS SRGs and PGs), the PSU team set up a table in the entryway of the school and talked with parents/caregivers before and after the groups. At the SRGs, PSU data collection staff talked with parents/caregivers about the evaluation as they dropped their children off at the group and/or picked them up. At the PGs, PSU data collection staff were given 15-30 minutes at the beginning or end of the group to introduce the evaluation and invite parents/caregivers to participate in the study. During all face-to-face interactions with parents/caregivers, for parents/caregivers that were interested in participating, PSU data collection staff walked through the consent form, introduced the baseline parent/caregiver survey, and distributed gift cards to parents/caregivers who took the time to complete the consent form and survey at that time. In the 2 KITS groups where child assessments were piloted, PSU staff also explained the assessment process, which was structured like games for children. The PSU staff person visiting the KITS group was usually also a child assessor, so parents/caregivers got to meet some of the staff that would be doing the assessments and ask questions about the process. For parents/caregivers that wanted to take the forms home to review and complete, PSU staff provided them with a self-addressed stamped envelope.

- 4. Individual Outreach & Recruitment by PSU Staff.** Parents who did not attend the initial KITS PG sessions or who did not provide a consent form via mail or in-person were also contacted

individually by PSU research staff members. For these families, the following recruitment steps were taken:

- a. A letter and/or email introducing the study purpose, including copies of the consent form and the baseline parent/caregiver survey were sent;
- b. Following this, PSU data collection staff made attempts to contact the family by telephone, email, and/or text.

Upon reaching the families, participants were invited to participate in the study. Participants were told that the study involved collecting information from parents before and after the program, child assessments structured like games to assess early literacy and self-regulation skills (in 2 KITS groups) and gathering information from children's school records from Kindergarten through the third grade. To incentivize participation in the evaluation, parents/caregivers were told that they would receive a \$20 gift card for participating in each of the two planned parent survey data collection points: Baseline (July) and Post-KITS Program (November). For parents/caregivers residing in the catchment areas where child assessments were piloted, PSU staff also explained the assessment process and answered questions that parents had about the assessment process.

KITS Comparison Group Participant Recruitment Strategies – Parent Survey Only and Parent Survey/Child Assessment School Catchment Areas

Comparison group parents/caregivers were identified through 2 mechanisms: (1) KITS Administrative Coordinators or Site Supervisors sent a list of parent/caregiver names and contact information for families that were interested in KITS but were unable to participate (e.g., had other summer plans, didn't live in the school catchment area, could not commit to attending SRGs twice per week and/or PGs once per week in the summer) was sent to the PSU evaluation team and (2) OSLC sent a list of parent/caregiver names and contact information for families that signed up for KITS on the OSLC website but did not reside in an eligible school catchment area was sent to the PSU evaluation team. Recruitment of comparison families was similar to that of KITS families.

Comparison parents/caregivers received a packet of evaluation materials that included (1) a flyer introducing the evaluation with contact information for PSU staff; (2) 2 copies of the consent form – 1 to sign and return, 1 to keep for their records; (3) the baseline parent/caregiver survey to complete and return; (4) a self-addressed, stamped envelope in which they could return a signed consent form and the baseline survey.

For parents/caregivers that did not return the consent form/survey within a week of the mailing, PSU staff contacted them via phone, text message, and/or email.

All comparison family baseline surveys included a question that asked parents/caregivers if they were interested in meeting with PSU data collection staff at a time convenient to them and allow PSU to conduct an assessment with their child. This survey item noted that parents/caregivers would receive an additional \$20 gift card for meeting with PSU staff to conduct the child assessment (in addition to the \$20 gift card they would receive for completing the baseline parent survey). Parents/caregivers that indicated that they were amenable to meeting with PSU staff for the child assessment and resided in the school catchment area where the pilot assessments

for KITS children were taking place were contacted by a PSU staff person via phone, text message, and/or email. Through these communications, the child assessments were described, questions about the assessments were answered, and the assessment was scheduled at a time and location convenient to the parent. Assessments were typically scheduled at the family's home or at the public library; a few assessments took place at a local coffee shop or other location in the community.

Contact logs detailing recruitment attempts made by the research team for study recruitment were kept. These logs included time/date of contact, type of contact, and result of contact including whether consent was ultimately obtained and if so, using what recruitment method. This information was reviewed as part of the Feasibility Study.

Parent Survey Data Collection Procedures.

Parent surveys were collected in tandem with consent during the recruitment process, described above.

Child Assessment Data Collection Procedures – KITS Participants

In addition to parent/caregiver surveys, PSU piloted child assessments with two KITS School Readiness Groups last year. Similar to KITS participating parent/caregiver survey data collection at baseline, KITS child assessments were most easily completed during the KITS School Readiness Groups. The PSU evaluation team worked closely with the KITS Administrative Coordinators, KITS Site Supervisors, and KITS School Readiness Teachers to pull children out of the KITS School Readiness Groups individually. Children were taken by a PSU child assessor to a quiet room near their KITS classroom to complete the assessments. The assessments took between 5 and 15 minutes to complete, and once finished, the child would return to his/her classroom.

At follow up (i.e., KITS program-end), some children did not attend the final few KITS School Readiness Groups. For these children, the data collection team contacted and coordinated with the parent/caregiver to meet up at a convenient location (e.g., public library, child's home).

Child Assessment Data Collection Procedures - KITS Comparison Group

Baseline assessments for the comparison group occurred in August 2016. Most assessments took place at a local library (about 83%), some assessments took place at another public location (coffee shop, school, about 5%) or in the family's home (12%). Follow-up assessments for the comparison group occurred later that year in November and December. Similar to baseline assessments, follow-up assessments generally took place wherever family's had met assessors during the summer, although somewhat more happened at the family's home at the time of follow-up (27%).

Parent Survey Measures

The parent/caregiver survey included the following measures of key program outcomes (unless otherwise indicated, all items were collected at both Baseline and Follow Up):

1. **Parent Discipline Strategies: The Poor Discipline subscale of the Discipline Questionnaire (Capaldi, 1995) (Parent Survey)** was used to assess behavioral strategies taught in KITS and other parenting programs related to boundary setting and consistency of discipline strategies. This subscale includes 9 items rated on a 5-point scale from “Never/Almost Never” to “Always/Almost Always.” It has been shown to be a good measure of key changes in parenting among KITS participants with acceptable internal consistency ($\alpha=0.69-0.71$; Pears et al., 2015). Additionally, the measure has been used in several studies on the transmission of intergenerational externalizing behavior and parenting (e.g., Kerr, Capaldi, Pears, & Owen, 2009). In the Feasibility study baseline sample, alpha for the Poor Discipline total score was adequate, $\alpha=.78$.
2. **Arnold Discipline Survey, Arnold, O’Leary, Wolff, & Acker, 1993, (Parent Survey):** The Laxness scale of the Arnold Parenting Discipline Survey was used to assess the lack of strictness in the household. The 11 Laxness scale items include a question stem and two anchor points that relate to parenting “mistakes” and “effective strategies” (Arnold, O’Leary, Wolff, & Acker, 1993). Parents rate their parenting practices on a 7-point scale based on the two anchor points. The Laxness scale has shown good internal consistency ($\alpha=0.83$) and good validity (Arnold et al, 1993). In the Feasibility study baseline sample, alpha for this scale was good; $\alpha=0.80$.
3. **Developmental Supports at Home: The Parent Child Activities Scale (PCAS; Love et al., 2002) (Parent Survey).** Frequency of developmental supports at home was measured using the Parent-Child Activities Scale. The PCAS asks parents to report how often they engage in a variety of developmentally supportive activities on a 6-point Likert scale (ranging from *not at all* [0] to *more than once a day* [5]). Activities include: singing songs/nursery rhymes, telling stories, playing outside, playing peek-a-boo or other games, and going on outings. Higher scores indicate greater frequency of activities that support child development. The PCAS has been shown to have good internal consistency (Green, Furrer, & McAllister, 2007; = .778) and to be associated with positive child outcomes including scores on the Bayley Mental Development Index (Love et al., 2002). In the baseline Feasibility study, alpha for this scale was adequate, $\alpha=.74$.
4. **Frequency of reading to children (Entering Kindergarten Parent Survey, 2014) (Parent Survey)** was assessed by asking parents how often they read to their young child. Reading to one’s child has been found to be a key precursor to early literacy development (Kuo, Franke, Regalado, & Halfon, 2004). Specifically, parents were asked how often in the past month they had read or looked at books with their child (*Not at all, Seldom, A few times, 3-4 times per week, About once a day, or More than once a day*). This item was selected for consistency with a large-scale survey of entering kindergarten parents conducted by over 20 school districts in Oregon and developed by the PSU KITS study team.
5. **Child Social Skills: The Social Skills Rating System (SSRS; Gresham & Elliott; 1990) (Parent Survey).** The SSRS is a widely-used and well-validated tool for assessing positive and negative social behaviors in young children (Gresham, Elliott, Vance & Cook, 2011; Mashburn, Pianta, Hamre, Downer, Barbarin, Bryant, et al., 2008). For the KITS outcome study, four subscales was completed by

parents as part of the Parent Survey (see below). Subscales used during the Feasibility phase included: (1) Cooperation (8 items); (2) Self-Control (7 items); (3) Externalizing behavior (7 items); and (4) Hyperactivity/Inattention (7 items). These scales will serve as a second source of (parent-reported) data related to children's self-regulation skills that can be measured both before and after program participation. Items are rated on a 4-point scale from "Never" to "Almost Always". The SSRS parent version has been found to have good internal reliability (α ranging from 0.83 to 0.90 on the four subscales) and inter-rater reliability (correlation ranging from 0.58 to 0.67 on the four subscales) (Gresham et al., 2011). We also examined the reliability of these items for the KITS baseline sample and found good reliability: SSRS Cooperation $\alpha=.87$; SSRS Self-Control, $\alpha=.89$; SSRS Externalizing $\alpha=.82$; and SSRS Hyperactivity $\alpha=.82$).

6. **Parent Involvement: The Parent and Teacher Involvement Scale- PATI-P; Conduct Problems Prevention Research Group, 1995) (Parent Survey, November Follow-Up only).** The parent version was used to assess key aspects of how parents are involved in children's schooling at the end of the KITS program (November only). This 21-item measure was developed to assess facets of parent and teacher involvement. The measure assesses the amount and type of contact that occurs between parents and teachers, the parent's interest and comfort in talking with teachers and the parent's degree of involvement in activities (e.g., volunteering at school, attending school events). The answers are coded on item-specific 5-point scales where 0 represents no involvement and 4 represents high involvement. Miller-Johnson & Maumary-Gremaud (1995) identified four factors within the measure and constructed corresponding subscales: (1) Quality of the Relationship between Parent and Teacher (7 items); (2) Parent's Involvement and Volunteering at School (6 items); (3) Parent's Endorsement of Child's School (4 items), and Frequency of Parent-Teacher contact (4 items)). The subscale alphas for the combined normative/high-risk sample were: .89 for Quality of Teacher Relationship, .79 for Parent Involvement and Volunteering, .89 for Parent Endorsement, and .67 for Frequency of Contact. We do not yet have reliability information on the Feasibility sample as this measure was only included at the post-program (Follow Up) assessment.
7. **Family Demographic information (Parent Survey).** Parent surveys will also include questions about demographic characteristics, such as family income, the parents' highest levels of education, parent and child ethnicity, housing stability, languages spoken by parents, family size, and parent marital status.

Child Assessment Measures

Child direct assessments were collected by PSU staff as described above, and included the following measures:

1. **Child Literacy skills**—Two basic literacy skills that are considered to be foundations of early reading was measured using the easyCBM (Curriculum Based Measurement assessment, Anderson, Alonzo, Tindal, Farley, Irvin, Lai, Saven, & Wray, 2014). The easyCBM was used to align the KITS evaluation child level assessments of early literacy with the state Kindergarten Assessment which uses these subscales to assess literacy (and numeracy, below) at kindergarten entry for all students. To assess

children's letter-naming skills the easyCBM Letter Name Measure (LN) measure was used during which children are asked to identify as many letters as possible from a randomly ordered array of upper- and lower-case letters. The score is the number of correct letters identified in 1 min. This subtest shows moderate to strong alternate form reliability, with correlations ranging from $r = .61$ to $r = .90$ (Wray, Lai, Saez, Alonzo & Tindal, 2014). The easyCBM LN is highly correlated with the DIBELS LNF measure ($r = .86$, Lai, Alonzo & Tindal, 2013).

To assess children's initial sound recognition, the Easy CBM Initial Sound Fluency (ISF) measure was used. The child is asked to orally produce the initial sound of a word that corresponds to a stimulus picture. The total score is the number of correct initial sounds produced in 1 min. Alternate form reliability estimates range from $.88$ to $.93$ (Good, Simmons, & Kame'enui, 2001) and the subtest shows predictive validity with measures of early reading such as oral reading fluency and sight reading (Burke et al., 2009).

2. **Child Early Numeracy Skills** – While prior studies of KITS have not examined impacts on early numeracy skills, increasingly research has shown that numeracy, perhaps even more than literacy skills, are predictive of later third grade reading and math achievement (Duncan et al., 2007). Thus, we will include an assessment of early numeracy to examine an exploratory impact research question in the KITS evaluation. The easyCBM numbers and operations subtest was used at baseline and post program to assess early literacy skills. The general math assessments on easyCBM were developed to assess students' mastery of the knowledge and skills outlined in the National Council of Teachers of Mathematics (NCTM) Focal Point Standards. They were designed to focus more on students' conceptual understanding than on basic computational skills. The Numbers and Operations scale was used to assess early numeracy and addresses basic operations (addition, subtraction, multiplication, division) appropriate for each grade level (University of Oregon, 2016). It has been shown to have good test-retest and inter-rater reliability, although longer term (predictive) studies are not yet available (Irvin, Saven, Alonzo, Park, Anderson, & Tindal, 2013).
2. **Child Self-Regulatory Skills**—Children's self-regulatory skills were assessed using the Head Toes Knees and Shoulders (HTKS) Test (McClelland et al., 2007). This direct measure of behavioral regulation focuses on attention, working memory, and inhibitory control. For the HTKS, children play a 5- to 10-min game that requires them to do the opposite of what the experimenter says. For the first part of the task, which consists of 10 items, children are instructed to touch their toes when the experimenter says "Touch your head" and to touch their head when the experimenter directs them to "Touch your toes". In the second half of the task (10 items) the children are additionally directed to touch their shoulders when the experimenter says "Touch your knees" and their knees when the experimenter says "Touch your shoulders". Children receive 2 points if they touch the correct body part, 1 point if they first touch the wrong part but then self-correct, and 0 if they do not touch the correct body part. For this study, the proportions of times that the child touched the correct body part (i.e., scored 2 points) were averaged across the two parts of the task. Recent research has shown that the HTKS is a reliable and valid measure of children's regulation in diverse populations,

including Spanish-speaking children (McClelland et al., 2007; Ponitz et al., 2007) with high levels of interrater reliability ($Kappa = .91$; Ponitz et al., 2007). The HTKS is significantly associated with teacher ratings of classroom behavior over time (Ponitz et al., 2007) and predicts language and math achievement (Wanless et al., 2011).

Oregon Kindergarten Assessment Administrative Data

The Oregon Kindergarten Assessment (OKA) is used statewide in Oregon to assess kindergarten readiness at school entry and includes the same measures used as part of the Direct Child Assessments (described above). In addition, the OKA includes the **Child Behavior Rating Scale (CBRS)** (Bronson, Goodson, Layzer & Love, 1990), a kindergarten teacher-report measure that includes 20 Likert-type items that fall into two subscales, emotional regulation and interpersonal skills. This measure was collected in the Fall of the child's kindergarten year by kindergarten teachers. Cronbach's alpha has been reported as .96 and test-retest (fall to spring) reliability of scores as .67 (Layzer, Goodson & Layzer, 1990).

The OKA is conducted on all incoming kindergarteners within 6 weeks of the first day of school and is administered by school staff. The evaluation designed originally called for these data to be obtained directly from the Oregon Department of Education; however, after project start-up we learned that the Lane Education Service District, a county-wide agency, maintained a centralized "data warehouse" that was being compiled and used by all Districts in Lane County. Further, the staff person responsible for maintaining the data warehouse was able to work with participating Districts to add a field to the local District systems that would indicate for each incoming kindergarten student whether they had (or had not) participated in KITS. Thus, the evaluation will have access not only to the sample of study participants who explicitly provided study consent, but to a (de-identified) larger dataset that will potentially allow for a large matched comparison group to be constructed. However, progress in both setting up these indicators and in obtaining needed signatures for a data sharing agreement has been slow. This was in part because of initial information that was provided to the evaluation team that because the data did not need to include identifiable information that a formal data-sharing agreement would not be required. Additionally, in March 2017, we learned that a formal agreement, including each of the participating school districts, would be required for data transfer to PSU. Thus, at this time the final data sharing agreement is pending, with execution expected in April. This has not delayed obtaining the actual data, however, in that OKA data were not made available to the Districts until February 2017; these data are being linked by Lane Education Service District staff at the present time and will be available to the research team in late April/Early May for analysis.

Feasibility Study Results

Feasibility Question 1: Random assignment lottery and program recruitment process

FQ1A: Are schools able to successfully over-recruit families for the KITS model and implement a lottery based random assignment process?

As noted previously, schools were not able to accomplish "over-recruitment" that was foundational to random assignment. Additionally, a number of KITS groups were actually under-enrolled. Out of 24 total KITS groups, a little more than a third ended up filling most or all of their KITS slots (20 children per classroom was considered "full;" smaller, rural classrooms were full with somewhat fewer children). A few sites ended up having more

interested families than they could serve, but due to drop-out prior to program initiation, ended up filling those slots with families from the control/waiting list. Close to two-thirds of KITS groups appear to have been under-enrolled. To explore the reasons for this under-enrollment, respondents were asked about perceived barriers to recruitment.

There were a number of unforeseen challenges to the efforts to over-recruit for a comparison group in the first year roll-out of the KITS program. First, and most significantly, although schools received contracts and were funded to begin their local outreach and recruitment efforts in late February 2016, most did not have the materials or staff they needed to begin their outreach efforts until March, or even April, prior to the planned KITS start up in late June. Many schools missed the most critical opportunity for family recruitment (late winter “kindergarten round-up” meetings) and were significantly hampered in their ability to identify an initial list of potentially interested families for KITS. Further, delays in hiring meant that many were insufficiently staffed until much later in the spring to engage in the level of one-on-one outreach to families that the model recommends. Second, schools were largely unable to establish their KITS programming and transportation schedules until May (and in some cases, June) of 2016, resulting in a number of families being unable to commit and/or attend due to other prior summer arrangements. This, in turn, led to the inability of PSU to conduct randomization as schools were, understandably, unwilling to randomize families when it meant that program slots would go unfilled.

Below we provide a summary of findings that provide key information about what was successful (e.g., “What Worked”) to get the word out and successfully recruit families (FQ1B) as well as perceived barriers and challenges to recruitment (FQ1C).

FQ1B: What recruitment strategies, materials, and supports are most effective and efficient in supporting program recruitment?

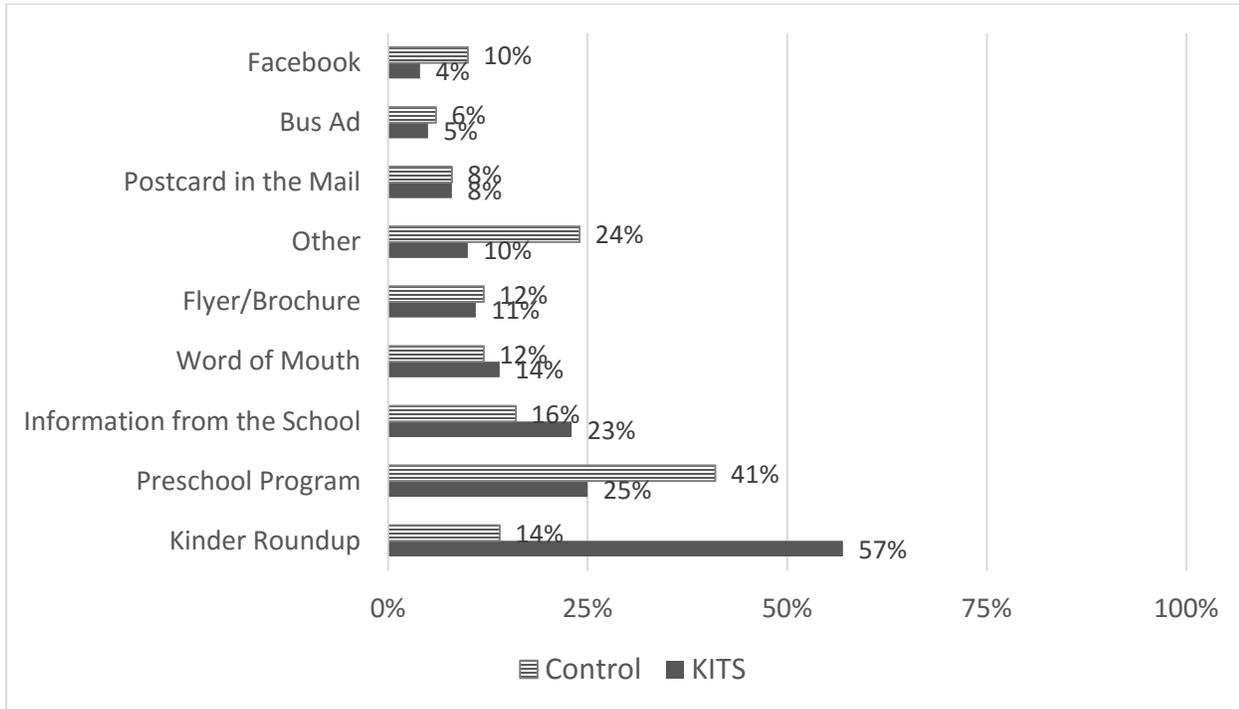
Four primary sources of data provided information to address this question (Parent Surveys [both KITS participants and comparison families], Parent Focus Groups, Parent Interviews [both KITS participants and non-participants], and Key Stakeholder Interviews). Key themes from each are summarized below. This information provides important information for next year in terms of the type of outreach and communication strategies that were most effective. Key themes are summarized below. Appendix F provides the Brief Reports summarizing these data that have been shared with KITS implementing Districts, the United Way, and/or KITS program developers during Year 1 to inform planning for Year 1.

1. Capitalize on Key Recruitment Opportunities

One question on the KITS parent survey asked families (including both the KITS participants and the comparison families) where they had heard about KITS. As can be seen in Figure 1 below, recruitment at “kindergarten round-ups” were a key venue for successful outreach, especially for families that participated in KITS. Kindergarten round-up is the spring kindergarten information/orientation sessions held by each school to encourage early registration for incoming kindergarteners. This is a natural and opportune moment to connect with eligible families.

The second most frequent avenue for program recruitment for KITS families (and most frequent for comparison group families this year) was through partnerships with early learning providers.

Figure 1. Percentage of parents reporting where they first heard about KITS (Parent survey, n=336)



Individual interviews with parents, both participating and non-participating, echoed the primacy of the kindergarten round-up in getting the word out about KITS. By far, the greatest percentage of parents reported that they had learned of KITS at the round-up; about a quarter were unsure where they had heard of KITS, and a handful said they learned of KITS through an early learning provider. Finally, district/school staff also identified attending kindergarten round-ups and working with community partners as the two most successful recruitment strategies. As noted above, however, many schools did not have KITS recruitment/enrollment information when their round-ups took place during Year 1, so they were not able to capitalize on this key recruitment opportunity. Earlier planning and recruitment efforts will be crucial to supporting over-recruitment in Year 2, as will a stronger focus on partnerships with early learning programs.

A number of district/school respondents also mentioned the media campaign sponsored by UWLC/OSLC, consisting of bus ads and radio spots, as an effective recruitment strategy. Other strategies identified included KITS banners and posters, mass mailings, announcements on school websites/Facebook pages, inclusion in school newsletters, and word of mouth. Responses to the Parent Survey likewise indicated that parents heard about the KITS program via a wide range of avenues.

Overall, district/school staff emphasized the **importance of personal contact**: face-to-face introductions, follow-up with families, and championship by those organizations/individuals already trusted by families, e.g., Family Resource Centers, preschools, friends/family.

2. Capitalize on What Appeals to Parents

When asked what families seemed to find most appealing about KITS, the majority of school/district respondents reported that families were interested in preparing their children for kindergarten. For children/families whose KITS classroom was located at the same school they would be attending in the fall, respondents also mentioned the opportunity to become familiar with the school.

“Most families were interested in getting their children ready for the rigors of the kindergarten day.”

“I think the practice for incoming kindergarten before school started, before all the kids were here, I think that was what they were most excited about. They got to try it out a little at a time.”

Interviews with parents confirmed this perception. Parents mentioned a number of perceived potential benefits related to school readiness, including opportunities to:

- Practice kindergarten (routines, bus)
- Enhance social skills
- Become familiar with the school
- Meet other parents and kids prior to kindergarten
- Provide extra support/practice for kids with disabilities

Similar to English-speaking parents, Spanish-speaking parents reported that they were interested in KITS as a way to prepare their child for kindergarten. In particular, Spanish-speaking parents seemed especially concerned about their child's social skills. Three out of four parents interviewed reported having a "very shy" child.

“It was interesting to me because my first son, who went to the program four years ago, was very shy and the program helped him a little, and it took away the fear of the school, and he became more confident, and felt more comfortable with the teachers.”

“That my son was going to get to know other kids. I was worried about my son because he’s very shy, and I knew that if he participated in the program he would feel good about school.”

“Because I knew my son was going to start kindergarten, I needed to know how to help him. My son is very shy. I was very concerned about my son because he is so shy and because he did not have any interest in the letters.”

Very few families mentioned academic readiness as a motivator for enrolling in KITS, although school/district respondents reported that some families found KITS insufficiently academic:

“At least 2 families complained that they were disappointed in the program – that it taught skills that their children had already learned. These were children who had preschool and day care experience, and their parents have high expectations for education and their kids do well in school.”

School/district respondents also indicated that KITS was appealing to families because it was provided at no cost, and provided food, transportation and childcare. In the parent focus groups, ***child care was by far the most frequently mentioned*** aspect of the program that supported parent attendance. Most of the participating parents in these focus groups had other children, and noted that without child care they would not have been able to attend.

“The child care is wonderful! My youngest one, who is 2 ½, he calls it his class. He wants to go every week. That made it work, for me. I could just sit here and talk.”

3. Utilize Recruitment Supports from UWLC and OSLC

Feedback from district/school staff was generally quite positive about the communication and support they received from United Way (in particular, the Learning Collaboratives) and OSLC:

“The communication has been great. OSLC wants the program to succeed and we want the program to succeed....Through meetings or phone calls, they're always willing to support us and help problem-solve and work through any glitches.”

“OSLC sent regular e-mails, phone calls and was instrumental in providing guidance and consultation.”

“United Way helped coordinate the meetings to get it all started.”

“Everyone was always so helpful when you called for support.”

Schools and districts reported varied levels of utilizing support from the KITS Coaches during the recruitment phase. When they did access support, they generally found the Coach consultation to be helpful:

“Coach was extremely helpful. I would text her and she would help out, responding at all times of the day. Super responsive.”

“Yes, the Coach has been really helpful...I was meeting with the Coach twice a week, problem-solving, asking for feedback and suggestions. I felt like that was really good.”

“Yes, consultation via phone. Coaching has been good.”

This variability was reflected by Coaches' comments as well:

“I was minimally involved. I was a touchpoint if the team had questions but didn't have hands-on involvement.”

“I was in touch with them by phone and email to pass on ideas for recruitment or remind them of the timeline.”

“Even when I offered to meet with people, it was hard to get responses.”

4. Utilize Logistical Supports & Materials

Several sets of materials and tools for recruitment were provided by UWLC and/or OSLC. All district/school staff were given a comprehensive "Logistics" Manual, designed to help guide and support the start-up phase. This included a variety of forms, tools and ideas to support recruitment (KITS interest forms, enrollment forms, flyers, scripts for recruitment, recommended strategies for recruitment, etc.) Regarding the helpfulness of the KITS Logistics Manual, most district/school staff indicated that it was very useful:

"I was given the Logistics Manual. We used a lot of it, often."

"I used the Manual for recruitment and found it helpful."

"Very helpful reference. Used it very often. Thumb drive with the job descriptions was helpful."

"I went through the Manual and we just got all of our questions answered and it went really smoothly."

"It was great for me to know what the materials were going to be and to make sure we had them and if we didn't, make sure they got created. "

Many district/school staff also reported that they used a variety of materials from the Manual, including the KITS information flyers, postcards, sample scripts, registration forms, etc.:

"The flyers with the numbers on them were great. We could quickly explain KITS while we were handing them out."

"The questions and script was helpful to get all of the key points out and keep the conversation on track."

"Registration packet was helpful, nuts and bolts."

5. Utilize Strategies for Program Retention

As noted earlier, drop-out prior to the KITS start date was a challenge experienced in multiple sites. Some district/school staff, however, reported successfully retaining registered families via regular, personal contact in the period between program registration and initiation. For example, some sites implemented regular (sometimes weekly) reminder calls and/or texts to families, in an effort to avoid early drop-out prior:

"I made weekly follow-up reminder calls to all families about the program. This personal contact was important."

"I continued to make regular reminder calls to all of the families involved. Personal contact seemed to work well."

"Personal contact worked best in follow-up with families."

FQ1C: What are the barriers to over-recruitment and how can these be better addressed?

1. Short Time Frame for Recruitment & Start Up

By far, the most significant challenge reported by school/district respondents regarding recruitment and start-up in Year 1, was the extremely short timeline between notification of their KITS status and the program start date. This, coupled with the heavier than anticipated workload associated with recruiting KITS families was a significant barrier to the recruitment process. Accordingly, the great majority of respondents indicated that they intended to begin recruitment efforts earlier in Year 2.

"I think it was all time-related. Just not getting to an event that would have been a great place [to recruit] or not calling families in time. Not because [staff] weren't willing to it, but just because there wasn't enough time."

"We began in April because that's when the KITS materials were available. We went as fast we could, but it wasn't soon enough. For next year, we plan to begin recruitment and hiring in January."

Most respondents indicated that KITS recruitment efforts began in March - April (April was most often mentioned) of 2016, although some reported beginning as late as May, and one reported beginning in January. The KITS Logistics Manual recommends beginning recruitment in January, but sub-grantees did not learn that the program was funded until mid-February, and then had to designate/hire Site Coordinators and Site Supervisors, develop a recruitment strategy and materials, and put into place a support structure, prior to beginning recruitment efforts.

In most cases, sites had little to no experience doing this kind of recruitment and staff tasked with recruitment in many cases already had full-time jobs. Indeed, when asked about the thing that most surprised district/school staff about the model the most frequent responses were related to was how much time and effort was required to get KITS off the ground:

"Recruitment was much harder and more time-consuming than staff anticipated. Recruitment itself was outside of the norm for their positions."

"I worked more hours trying to recruit for KITS than I did for my job for the district. I wouldn't do the job again because the hours were too many to support with my job and my life."

Once families had indicated their interest in KITS, schools typically followed up with a phone call to answer questions, get more information from parents, and complete the registration process. This process likewise proved to be unexpectedly time-consuming for staff:

"It was a disaster. It was time intensive...When we actually got ahold of them, it went well. But some of those families we called 7 and 8 times before we connected."

"Inviting 80 families, it took more man power than I thought it would to make phone calls, and do all the follow-up. Had to bring on more staff."

Similarly, several OSLC staff reported the perception that many sites were simply too busy to fully take advantage of the recruitment resources offered by OSLC, i.e., the Logistics Manual or the coaches themselves:

“For many staff, their KITS responsibilities were on top of their regular 40-hour week job responsibilities. They just didn't have time to read the Manual, and a written format wasn't easily accessible to them. They also just didn't have time to put together a well-thought out recruitment plan or strategy.”

2. Lack of Prior Knowledge of KITS Model and Lack of Clarity Regarding Effort Needed for Implementation

Compounding the time constraints, most sites had never hosted a KITS program in their district/school prior to involvement in the KITS Project. Likewise, most district/school respondents had been unfamiliar with, or only somewhat familiar with the program, e.g., a few knew that it had something to do with kindergarten, but little beyond that. This meant a steep learning curve for many:

“I think that what the challenge was for us was just not really knowing what to expect.”

“It's just hard to start a program in a place that's never done that before.”

“We didn't have the know-how or information. We should have tried really hard.”

“It surprised me and I'm not quite sure exactly how to deal with this issue...it's a complicated program...it requires a tremendous amount of effort and staff time. It's complicated to organize and get up and running. The labor intensiveness of it is a pretty significant issue for people who are just starting and it continues - I can't see how to mitigate that very much.”

3. Need for More Role Clarity & Clear Expectations

In addition, some stakeholders lacked clarity about their own role in the recruitment and start up process, and in particular around the role of the Site Supervisor. A number of district/school staff mentioned that they would have appreciated a training specifically for Site Supervisors, as well as more information regarding the KITS curriculum itself:

“There was no [specific] training for Site Supervisors. There was a lot expected that was not gone over before it started. It was rather shocking.”

“I would have liked to have had the curriculum ahead of time so that we could have planned in advance instead of the week before implementation.”

“Although I felt supported by UWLC and OSLC, it wasn't clear to me at the beginning that I, and not UWLC/OSLC, was responsible for recruitment. It turned out to be a bigger job than I expected.”

Some district/school respondents likewise reported issues with communication from OSLC, PSU, and/or United Way, most specifically during the start-up phase. Several respondents mentioned confusion regarding whom to contact with questions, as well as some redundancy in e-mails. A number of respondents suggested "streamlining" communications from the various organizations involved, in order to avoid confusion/redundancy.

"My first impression was that there were "too many cooks in the kitchen." [We] had been receiving communications from United Way, PSU, ESD, OSLC, and it was information overload. When I came on, I was really unclear about the different roles of OSLC, UW, and SIF."

*"Maybe a couple of times we were running in circles, not sure who to contact about particular concerns."
"Many times we received e-mails from different agencies regarding the same question and had to answer it more than once."*

4. Need for Stronger District Leadership & Communication

Several respondents attributed some of the confusion around roles, responsibilities, and timelines to a lack of involvement by District leadership:

"After the decision was made to implement KITS, there no outreach from the Superintendents. Communication from them was non-existent. The Superintendents needed to be involved in doing outreach and talking with the various programs to tap into grants, human resources, facilities, transportation."

"The infrastructure wasn't in place to implement KITS. There needed to be communication from the Superintendents to the Directors, and then down to the front-line staff each step of the way to say here's what's needed and needs to be done."

5. Time Constraints Limited Effectiveness of Logistical Supports

As mentioned previously, all district leads and Site Supervisors were given a comprehensive "Logistics" manual. However, perhaps due in part to the role confusion present at the outset, as well as staff transitions as KITS roles were sorted out, it is not clear that the Logistics manual always made it into the right hands. Several district/school staff said that they never received a manual, or had only ever seen the Curriculum manuals, intended for teaching staff. It is important to note, however, that those who did utilize the Logistics manual found be quite helpful (as mentioned earlier). Some respondents also reported that the shortened time frame reduced the helpfulness of materials (such as recruitment materials and the Logistics manual) provided:

"It was more the timeline and that the materials came too late."

"We liked the banner but it arrived late and most of our recruiting had been done at that point."

6. Challenges in Engaging Families – KITS Time Commitment

Following time constraints and the unexpected amount of effort required for successful recruitment, the next most significant barrier to recruitment identified by district/school respondents, was the time commitment required by families to participate in the KITS program. Many school/district respondents felt that families were simply too busy and/or unwilling to commit 8 weeks of their summer to KITS:

"It was largely because of the time commitment. Many families had vacation and other commitments during the summer."

“Some of the barriers were that the program took place during vacation; families were busy, and had family in town visiting, etc.”

This perception was confirmed by interviews with parents who were not able or chose not to participate to KITS. For example:

“So with his mom’s visitation and the Hawaii trip he would have only been able to attend 6-9 sessions and that’s it. He wasn’t going to get the maximum benefit of it. It just didn’t seem like him missing so many sessions would accomplish what we had wanted to accomplish.”

On the flip side, some respondents mentioned that participation in KITS was difficult for working parents who need more consistent, full-day activities for their children during the summer and/or who were themselves unable to attend Parent Group during the day:

“Another barrier of the program is that working families can’t participate.”

“Their children [or working parents] were in private preschool or day care.”

“Overall, timing was an issue for parent participation. Many were stay-at-home moms who didn’t want to meet in the evening but then working parents can’t meet during the day.”

“The parent component is a challenge for working families... [We need to] work through ways to make it cost-effective for families who are working to participate.”

7. Challenges in Engaging Families - Scheduling conflicts

Scheduling conflicts were by far the most frequently mentioned challenge to participation in the parent focus groups, and although all four groups discussed the relative merits of different timing and scheduling options, it seemed clear that no one time of day or day of the week would work for all parents. Several parents also noted that not learning about the time of the parent groups until just a few short weeks before the groups started made it difficult, if not impossible, for some parents. Parents also suggested that schools provide more information about details (time, location, transportation, etc.)

For rural districts in particular, respondents reported that getting the word out to more geographically dispersed families was challenging. Relatively small numbers of incoming kindergarteners in rural areas likewise resulted in small pools from which to recruit. One rural parent who chose not to participate also felt that the transportation time was not justified for the relatively brief KITS session (2 hours/day):

“I do think I would have enrolled him if the program had been closer to our house....Honestly, I would have thought about it more and tried to figure it out and said maybe we can make this work if there was some kind of incentive that I could justify by putting towards gas or groceries. I really have a special place in my heart for people who live in rural areas and the challenges they have in getting to school.”

8. Challenges in Engaging Families – Parent Group Requirement

In addition to the general time commitment issue, a number of district/school respondents mentioned that the parent component of KITS had been a disincentive to participation for some parents:

“A lot of parents were not interested or didn't have time to do the parent component so they didn't want to register their child in the program once they found out that the parent part was a required piece.”

“Some parents wanted their children enrolled in the children's program but they weren't interested in the parent education piece.”

One Parent Group bilingual/bicultural facilitator/interpreter reported that the Latino families in her groups were more interested in learning how to support their children academically than in a parenting class:

“There were people who chose not to come back, saying that they didn't need a parenting class....The parent curriculum needs to be better oriented toward how to support children academically - not parenting. How do I support their reading; their math. This is what parents were looking for.”

A number of parents reported not initially understanding that there was a parent component, or not understanding what the parent component entailed:

“I didn't know much about the parent meetings either. I knew that there was something about a parent group in there, but I didn't know the extent of the parent group.”

Even those parents who were aware of the parent component reported that they did not have a good understanding of what the parent group was about or what the potential benefits for them might be. **Better communication about the importance of the parent group** and the benefits for parents of having opportunities to learn parenting skills and meet other parents might also help increase motivation to participate.

9. Challenges in Engaging Families - Lack of Clarity Regarding Program Eligibility and Components

Some parent respondents likewise reported confusion regarding KITS eligibility/suitability for their child, suggesting a need for greater clarity in messaging:

“I didn't feel like I had a good understanding of what it was and how it could benefit us. What would be beneficial for participating in the program? I would want to know if for kids and families who haven't had any kind of school yet or preschool or kindergarten readiness or if it was more social and meeting other kids or help with parenting. I just wasn't sure.”

Similarly, several parents noted that their only concern or worry in signing their child up was not understanding who the child's teacher would be. **Knowing that staff were credentialed in some way**, or even better, were school district staff and/or teachers, would have helped these parents feel more comfortable enrolling the program, as illustrated by the following exchange:

“I was concerned about who the teachers would be...” ...“Yea, we just gave our kids to strangers.” “I think they are all District employees”...“but this is the last day and I'm just finding that out.”

Having **good communication about the program as early as possible** was described as important in helping parents understand what the expected commitment for KITS would be:

“I played phone tag for 3 days [with KITS contact person], but she was really clear when she did call, and she let us know everything, all the details. She went over it twice with us to make sure we understood.”

10. Challenges in Reaching Families Most in Need of KITS

The KITS SIF Project is intended to serve low-income communities in Lane County. In the majority of sites, KITS was open to all incoming kindergarteners in Year 1, with no other eligibility criteria. A few sites, however, did report focusing on, or even limiting eligibility to, particular populations, e.g., non-white, Free and Reduced Lunch eligible, those with no preschool experience, Head Start participants, and/or recipients of Special Education services (in some instances, multiple criteria were applied). When asked about the extent to which recruitment efforts reached the families they hoped to engage, some respondents reported success, based solely on having filled the program slots. Many respondents, however, indicated that they thought they had failed to reach the neediest families:

“The families who enrolled were ‘families who already have it together.’ Next year, I’d like to target families enrolled in Head Start and in the public housing complex near the school.”

“We ended up enrolling families who were savvy with school resources and savvy with resources in general. They were all well-functioning families. No non-Native English speakers were enrolled. We’ve realized that we didn’t enroll or even reach the kids who need KITS the most. We need to figure out how to do this for next year.”

“The parents who enrolled were very involved parents (involved in their children’s lives). They were families who were already comfortable with the school system and knew how to talk to teachers....Once school started, there were 4-5 children in each kindergarten class whom we think could have benefitted from KITS.”

Of the nine English-speaking KITS families interviewed, all but 2 of the children in question had at least some preschool experience (mostly center-based/more than a third in Head Start); many had been enrolled full-time and/or for a period of years. Similarly, all 5 of the non-enrolling (yet initially interested) families interviewed reported significant preschool experience prior to kindergarten.

The apparent over-representation of highly-involved families, both enrolled and non-enrolled (yet interested) in KITS, may be due in part to the reliance on kindergarten round-ups for KITS recruitment; typically, it is the more well-informed and connected families that attend such events. Higher-need families are often more challenging to identify, establish rapport with, and retain. As OSLC staff explained:

“The hardest thing is finding families who aren’t already connected to services. Need to think outside the box. We had a lot of success in previous years going door to door. Just having a booth and expecting families to wander over is not sufficient.”

11. Challenges Recruiting Spanish-speaking families

A number of respondents described specific efforts to reach Latino families, including having interpreters available at kindergarten roundups, making Spanish-language materials available, identifying Spanish-speaking staff to answer calls from and follow up with interested, Spanish-speaking families, attending events for Spanish-speaking families, and partnering with Family Resource Centers.

Such efforts, however, were not always successful, often for reasons not well understood by school/district staff:

"I would say [our efforts to reach Latino families] were not really effective. We're looking at eight percent [Latino] in our community and we got one kid."

"None of the Latino families enrolled in KITS despite the fact that I'm bilingual and attended the kindergarten open house and explained KITS to them in Spanish."

"We need to ask more questions. Did they not know about it? Were they not interested? Why are families reticent?"

Spanish-speaking parents confirmed the perception that recruitment efforts had failed to reach many Latino families: *"I don't think many families know about the program. I noticed signs in English around the community, but I didn't see any in Spanish."* A Parent Group facilitator/interpreter observed, *"In Eugene and Springfield, I see that none of the parents know about it."* All four Latino parents interviewed and one Parent Group facilitator/interpreter suggested recruiting Latino families via Latino churches and businesses.

"I think that informing the local churches would be a good way and local Latino businesses too, because many families do not know about the program, like I didn't with my first daughter."

"Maybe if they placed signs at the Latino churches and at the only Latino store we have here in Cottage Grove."

"Sending the information to the Latino churches and Latino businesses."

"Taking the information to local Latino churches and local Latino businesses."

"Go to Mexican stores -post flyers. Go to where families get together, e.g., the churches and talk to the ministers."

Several also mentioned connecting with Head Start programs that serve large numbers of Latino children:

"Also, taking the information to the Head Start program. I asked at the Head Start program about KITS, and they did not have any information. I had to call the program to find out more information. The Head Start program has many Latino kids, they need to have this information there."

"Maybe having a meeting in the Head Start program where they tell us about the program."

“Access the Head Start waiting list - provide them with the mailing so they can send out flyers. There are 200 people on the waiting list, many of which are Latino families - that never end up having any experience with preschool.”

One Parent Group facilitator/interpreter also suggested working with local health care providers (including the Health Department) to distribute KITS flyers at regularly scheduled 4-year-old and 5-year-old check-ups.

Respondents also suggested providing transportation, which KITS actually *does* provide, suggesting there may have been a breakdown in communication somewhere:

“I don’t know if transportation was offered or not. I believe transportation would help more families to attend the program.”

“The program did not provide transportation, maybe providing transportation.”

More generally, one Parent Group facilitator observed that personal contact may be a better mechanism than flyers for reaching Latino families: *“We are a culture of verbal communication. You can paste flyers all over town, but we don't read flyers. Need to have a more personal connection.”*

12. Challenges Recruiting Families: Early Family Drop-Out & Need for Stronger Commitment to Enrollment

As already mentioned, another factor that seems to have contributed to lower-than-expected enrollment in KITS was attrition prior to the beginning of the program. According to district/school respondents, a number of families registered for KITS in the spring, but then withdrew or failed to attend once KITS actually began in July:

“So many families falling out last minute when we were saving a spot for them throughout the summer.”

“Signing up for slots, and then when it comes down to it, they evaporate. Parents don't always know what they're signing up for. They don't really know [at the time of kindergarten roundup] if they are available.”

“We did have an issue with families showing up. There were two or three at each site that never came. Those are the families we were trying to get. Trying to figure out the barriers for those families.”

In many cases, it was reportedly difficult to find replacement families at such a late date. To increase retention, one respondent suggested hosting a "meet and greet" with families prior to the KITS start date. A successful strategy mentioned above was the practice of regularly calling/texting families during the interim period, to stay connected and make sure families maintained their commitment to program participation.

Feasibility Question 2: Research Study Recruitment Process

FQ2A. What percent of families who agree to participate in KITS also provide a “consent to contact” for the research study?

Because recruitment for the program had started prior to the evaluation methodologies being approved, consent to contact was collected in a number of different ways by school districts implementing the KITS Program. Some school districts asked parents/caregivers for consent to share contact information with partners, including the Portland State University evaluation team, on the KITS Interest Form, other school districts asked families on follow up phone calls, and some school districts did not ask families for consent to

contact at all and were recruited during face-to-face during Parent Readiness Group sessions or mailed and sent information about the research study directly to families from the schools. For this reason, we cannot calculate the percent of KITS families that provided consent to contact for the research study; it ended up being less meaningful because of the face to face recruitment done at parent groups.

FQ2B. What strategies are most effective and efficient in securing these consent to contact forms?

As previously discussed, consent to contact was secured in a variety of ways both within and across school districts. Methods to secure consent to contact for the research study included: a check box or question on the KITS Interest Form, a check box on the OSLC KITS website, discussed during follow up calls from the KITS Administrative Coordinator, discussed during KITS Program calls from the KITS Site Supervisor or KITS Administrative Coordinator, and a check box or question on KITS enrollment forms. Based on what was observed last year, the most efficient and effective way to secure consent to contact for the research study moving forward is to ask parents/caregivers for consent to contact during the first point of contact, where parents expressed interest in the KITS Program. At this point of contact, all families completed a KITS Interest Form either on hard copy or online. Including a check box on the KITS Interest Form that asks for consent to contact regarding additional opportunities (e.g., the research study), was the most efficient way to collect this information on a mass scale, minimizing KITS staff time and resources. A check box asking for consent to contact was included on KITS Interest Forms for the KITS 2017 cohort.

FQ2Ca. What strategies are most effective for successfully recruiting families into the KITS evaluation study?

As described previously, a variety of strategies were used to recruit families into the study (see also Participant Recruitment Strategies, above). These included:

- Mailing study packets, including a flyer, a consent form, a parent survey, and a self-addressed, stamped envelope to the family;
- Calling and texting parents/caregivers who provided consent to contact every other day at different times, leaving messages half of the time, for one month;
- Emailing (when email address was provided by the school district) parents/caregivers who provided consent to contact, once a week for one month;
- Attending one of the first 4 child groups to catch parents/caregivers who pickup/drop-off kids at the Program;
- Asking KITS parent group facilitators to distribute study packets, including a flyer, a consent form, and a parent survey, to the family at the first parent group meeting;
- Presenting the study and inviting participation at the first 2 parent group meetings;
- Asking parent group facilitators to follow up with unresponsive parents who provided consent to contact.

The study data collection team kept a log of successes and challenges related to data collection, including study recruitment. In general, effective strategies were those that made a personal connection with the parent/caregiver, were in person, allowed parents/caregivers time to complete the survey and consent form immediately (e.g., during the Parent Group sessions), and provided the incentive (a \$20 gift card) immediately following the completion of the forms. More specifically, it was commonly noted by data collection staff that attending the *end* of one of the first couple of a parent group meetings, after parents had already received the KITS study packet from the parent group facilitator, was the most effective way to get families to participate in the study.

FQ2Cb. How many families declined study participation and why?

As shown in Table 1 below, the majority of the declines were because the evaluation team was not able to contact families to invite them to participate. Although incorrect contact information was an issue for some families, for most families that did not consent to the study, PSU data collectors never reached the parent/caregiver on their phone or through mail. These parents/caregivers did not respond to multiple mailings, phone calls, text messages, and/or emails. There were a number of KITS parents/caregivers who did not attend the parent group, making it difficult to contact them through the KITS Program as well. In addition to lack of contact, one parent completed a survey but declined to participate in the research study on the consent form. As can be seen, the percentage of comparison families who we were unable to contact was larger than among KITS families. This is likely due to the limited information available for comparison families (e.g., those who supplied only email information, or only a phone number) and the success of recruitment of KITS families in face-to-face recruitment presentations at PRG and SRG sessions.

Table 1. Reasons for Declining Study Participation for KITS and Comparison Groups

Reason for Decline	KITS		Comparison	
	N	% of sample	N	% sample
No contact	37	10%	60	39%
Not interested	2	1%	2	1%
Incorrect contact information	2	1%	5	3%
Mailed information only, not returned	2	1%	0	0%
Declined on consent form	1	1%	0	0%
Contacted, did not turn in materials	8	2%	17	11%

Feasibility Question 3: Baseline Data Collection Process

FQ3A: What types of activities, events, or other strategies are most useful for facilitating control-group data collection?

Data collectors contacted potential comparison group families from an initial list of more than 200 families. Comparison group families were identified in two primary ways: (1) families expressed interest in the KITS Program but did not qualify for KITS because their child did not attend a KITS school or (2) families expressed initial interest in the KITS Program but could not attend because of schedule or other conflicts. Similar to KITS participant recruitment, comparison group study packets were mailed to comparison group families, which included a flyer describing the study, a consent form, a survey, and a self-addressed, stamped envelope. Comparison group parents/caregivers were called, emailed, and/or texted at different times in the day and on different days of the week every couple of days for up to a month. Phone calls and texting were most effective and resulted in the most responses from parents. Once in contact with the families, data collectors would describe the opportunity to take part in the research study in order to help key stakeholders learn more about family’s experiences transitioning into kindergarten who were not able to participate in KITS. Most families (63%) mailed their survey using the self-addressed, stamped envelope. A limited number of families completed the survey online (19%) or submitted it in person during the child assessment (19%). Some of the families who

completed the survey online were able to do so on their mobile phone. Data collectors found that it was a helpful strategy to text a link to the survey to parents directly so they could complete it wherever they were.

Most families who were in the comparison group who were invited to participate in the child assessment agreed to participate. Parents were interested in participating in the child assessment portion of the study because it resulted in an extra \$20 gift card (in addition to the \$20 gift card received for completion of the parent survey).

Interviews with district/school staff also included questions regarding their involvement with and perceptions of the research component. On the whole, respondents reported that seeking consent to contact had not been a burden:

"It was easy because it [consent] was a part of all the other questions that we needed to ask about transportation and contact and things like that."

"It was fine. I was making contact with everyone anyway."

"I explained the research piece to families when I called them to register for KITS."

Many likewise reported using the script provided by PSU to introduce the research to families:

"I read the script PSU gave me."

"I used the KITS/PSU script. I really emphasized how important it was to know if the program was successful or not for the children in getting ready for kindergarten."

"I gave a condensed version of the script."

The majority of district/school respondents indicated that the research had not been a concern for families.

"Families didn't have any concerns, even about the information sharing between OSLC and PSU. They trusted the researchers' confidentiality policy and felt assured of their anonymity."

"All the parents said yes."

"Almost all were happy to participate."

One respondent commented that the provision of gift cards to families as a "thank you" for participating in the research had been valuable. Several mentioned the importance of explaining to families the benefit of research to the community, and "making it not scary." Some respondents indicated that 1 or 2 families at their site had had concerns and ended up not consenting, or choosing not to participate in KITS at all (participation in the research was *not* required in order to participate in KITS). Family concerns about the research reportedly included: fears about the impact on open DHS cases; concerns about being videotaped (which is a KITS program requirement, not an aspect of the evaluation); concerns about children receiving "intelligence testing" (not part of the evaluation, nor the program); concerns about privacy; and concerns about excessive paperwork.

FQ3B: What types events, activities, or other strategies are most effective for facilitating KITS participant data collection?

There were two types of baseline data collection for KITS participants: (1) parent/caregiver surveys and (2) child assessments. Activities that best facilitated parent/caregiver survey data collection aligned with strategies that were most effective in recruiting parents to participate in the research study (see FQ2C above). In general, effective strategies were those where a personal, face-to-face connection was made, allowed parents time to complete the survey, and provided the incentive (a \$20 gift card) immediately following the completion of the survey. These strategies all came together when data collection staff attended one of the first KITS parent group meetings. This strategy was also the most effective for follow up parent survey data collection. Of the 230 follow up parent surveys received, 44% (102) were collected at the end of a parent group session or in-person at the KITS Program graduation (i.e., final session).

In addition to parent/caregiver surveys, PSU piloted child assessments with two KITS School Readiness Groups last year. Similar to KITS participating parent/caregiver survey data collection at baseline, KITS child assessments were most easily completed during the KITS School Readiness Groups. The PSU evaluation team worked closely with the KITS Administrative Coordinators, KITS Site Supervisors, and KITS School Readiness Teachers to pull children out of the KITS School Readiness Groups individually. Children were taken by a PSU child assessor to a quiet room near their KITS classroom to complete the assessments. The assessments took between 5 and 15 minutes to complete, and once finished, the child would return to his/her classroom. Conducting child assessments for KITS participating children in this way was most effective because it minimized amount of travel time for the child assessors, eliminated coordination with parents/caregivers to complete the assessments, and maximized the number of assessments that could be completed in a 2 hour time span (during the KITS School Readiness Group). At follow up (i.e., KITS program-end), some children did not attend the final few KITS School Readiness Groups. For these children, the data collection team had to contact and coordinate with the parent/caregiver to meet up at a convenient location (e.g., public library, child's home). This individual attention on KITS children that did not attend the last few KITS School Readiness Groups required more resources (time, mileage) than did the child assessments that took place at the school during the KITS School Readiness Groups.

FQ3C: How much time is needed for child-level data collection and what strategies might increase the efficiency of these assessments?

See below.

FQ3D: How much time and other staff resources are needed for multi-site simultaneous data collection at all implementing KITS schools for parent survey data collection?

By far the most resource-efficient approach to child data collection was to capitalize on children's participation in KITS groups to "pull out" children for the brief assessment period. Given the relatively short amount of time needed for assessment, this strategy was quite effective for KITS participating children. However, collecting child assessments for comparison group children took considerably more resources, as these were done at individual home visits and meetings with families. Overall, we estimate that each comparison group child assessment took approximately 4-5 hours per child (including recruitment, scheduling, follow up, and assessment time) and a cost of \$95 per assessments. Additionally, mileage costs for transportation per

assessment were estimated at a total cost of approximately \$650 for the comparison group child assessments.

For KITS participant child assessments, we estimate \$21 per assessment with additional \$17 in mileage costs for every assessment. Overall, we estimate that data collection costs for the feasibility study were approximately \$25,000 in total wages and \$6100 in mileage reimbursements. This does not include training and supervision costs nor data entry costs. Given this estimate, we have determined that primary child level data collection is not a feasible option for the evaluation during Year 2 without additional resources.

Feasibility Question 4: Preliminary assessment of selection bias in the research study sample (FQ4)

FQ4A. Are the baseline characteristics of KITS program families who consent to participate in the evaluation different from those of comparison families who consent to participate in the data collection?

While the study was not able to implement a randomized design, a quasi-experimental comparison group was recruited. Understanding potential baseline inequivalence of this quasi-experimental group is therefore paramount, especially in the unfortunate event that random assignment during Year 2 proves again unfeasible. Tables 2 & 3 show baseline scores and results of t-tests (continuous variables) or Chi-squared (categorical variables) for the key Time 1 assessment outcome measures for KITS vs. Comparison group children (Table 2) and parent/caregiver survey outcomes (Table 3); Table 4 shows baseline demographic information for KITS vs. Comparison group families. As can be seen, there were some differences between KITS and Comparison group families, especially in terms of demographic characteristics. In terms of baseline scores for key outcome measures (Tables 2 & 3), the only significant parent difference at baseline was in terms of parent perception of school climate (how welcome they feel at the school); KITS parents felt significantly more welcome at baseline. This may be due to the fact that some families had attended at least one KITS session at the school prior to baseline; whereas it may be less likely that control parents/caregivers had any level of contact, beyond the Kindergarten Roundup events, with schools when these surveys were collected. There were no statistically significant difference in child assessment scores between KITS and control children at baseline, although it is important to note that the sample size for these analyses were quite small. Demographically, however, there were several differences between the groups (Table 4). Compared to control parents, KITS families were more likely to have at least one parent working full time (81.8% vs. 66.7%); were less likely to have a 4-year degree (22.4% vs. 36.0%); and were somewhat more likely to be married (65.7% vs. 52%). Further, there was a marginally significant trend indicating comparison group children were more likely to have participated in formal preschool (70.6% of controls vs. 57.6% of KITS children).

Table 4 also presents internal consistency statistics for the various parent survey measures (i.e., Chronbach's alpha). Overall, most measures had adequate reliability (above .70). The Discipline implementation subscale had somewhat lower alpha (Chronbach's alpha=.67), as did the Contact subscale of the Parent-Teacher interaction scale (Chronbach's alpha=.51). Potential alternatives to these measures will be considered for Year 2.

Table 2. Baseline Equivalency of Child Assessment Outcomes, KITS vs. Controls, on (Repeated Measures) Follow-Up Sample

		KITS (n=18)	Comparison (n=29)		
		Mean (SD)	Mean (SD)	<i>t-value</i>	<i>p</i>
Easy CBM	Letter Names	16.0 (11.6)	19.1 (14.9)	0.51	0.48
	Letter Sounds	9.2 (10.6)	6.9 (7.7)	0.70	0.41
	Numbers & Operations	8.3 (3.6)	7.9 (2.7)	0.12	0.74
Self-Regulation (HTKS)		19.2 (13.8)	23.0 (13.2)	0.90	0.35

Table 3. Baseline Equivalency of Time 1 Parent Survey Outcome Measures, KITS vs. Controls, Follow-Up Sample

	KITS (n=203)	Comparison (n=51)	Internal Consistency			
	Mean (SD) or %	Mean (SD) or %	<i>t-value or chi-square (df)</i>	<i>p</i>	Cronbach's α	# Items
Parent-Child Activities Scale	1.62 (0.32)	1.57 (0.34)	0.96 (1)	0.33	0.72	8
Books in the Home					NA	1
<10	5.0%	4.0%				
11-25	15.4%	10.0%	1.10 (2)	0.58		
26 or more	79.6%	86.0%				
Frequency of Reading					NA	1
Not at all	1.5%	6.0%				
1-2 times/week	26.4%	22.0%	3.72 (3)	0.29		
3 or more times/week	33.3%	34.0%				
Daily	38.8%	38.0%				
Perceived Readiness for Kindergarten (parent)	4.36 (0.62)	4.40 (0.74)	0.16 (1)	0.69	0.77	3
Perceived Readiness for Kindergarten (child)	4.30 (0.67)	4.21 (0.67)	0.65 (1)	0.42	0.84	4
Parent and Teacher Interactions Scale						
Contact	NA	NA	NA	NA	0.51	2
Involvement	NA	NA	NA	NA	0.78	4
Quality Relationships	NA	NA	NA	NA	0.91	7
School Endorsement	NA	NA	NA	NA	0.89	4
Receipt of Information from School	NA	NA	NA	NA	0.62	3
Satisfaction with Information from School	NA	NA	NA	NA	0.89	4
Social Skills Rating Scale						
Cooperation	2.22 (0.48)	2.21 (0.48)	0.02 (1)	0.90	0.84	6
Self-Control	1.79 (0.57)	1.76 (0.57)	0.10 (1)	0.75	0.87	7
Externalizing Behavior	2.18 (0.46)	2.12 (0.38)	0.75 (1)	0.39	0.83	7
Hyperactivity	1.83 (0.52)	1.74 (0.55)	1.11 (1)	0.29	0.82	7
Parenting Style - Laxness Scale	2.39 (0.77)	2.37 (0.74)	0.40 (1)	0.84	0.84	11
Poor Discipline Implementation	1.99 (0.59)	2.01 (0.62)	0.05 (1)	0.83	0.67	4
Poor Discipline Results	2.10 (0.66)	2.10 (0.69)	0.00 (1)	0.99	0.74	5
Poor Discipline (Total Scale)	2.05 (0.54)	2.06 (0.60)	0.01 (1)	0.92	0.78	9
Parent Perception of School Climate	4.65 (0.72)	4.25 (0.89)	10.55 (1)**	0.001	NA	1

†*p*<.10 **p*<.05 ** *p*<.01

Table 4. Baseline Equivalency for KITS vs. Controls for Demographic Characteristics

	KITS (n=203)	Comparison (n=51)	<i>t-value or Chi-Square value (df)</i>	<i>p</i>
% Children female (n)	44% (88)	48% (24)	0.32 (1)	0.57
# of Children in household	2.48	2.24	1.00 (1)	0.32
Relationship of Parent to Child (n/%)				
Mother	87.7% (178)	90.2% (46)		
Father	8.9% (18)	7.8% (4)	1.02 (4)	0.96
Other (grandparent, adoptive parent, foster parent, etc.)	3.5% (7)	2.0% (1)		
% Child's Race (n)				
White	82.8% (168)	86.3% (44)	0.37 (1)	0.55
African American	4.4% (9)	7.8% (4)	0.98 (1)	0.32
Latino/Hispanic	15.8% (32)	15.7% (8)	0.00 (1)	0.99
Asian	2.5% (5)	0% (0)	1.28 (1)	0.26
Native Hawaiian/Pacific Islander	2.0% (4)	0% (0)	1.02 (1)	0.31
Alaska Native/American Indian	5.9% (12)	2.0% (1)	1.31 (1)	0.25
Other	2.0% (4)	2.0% (1)	0.00 (1)	0.99
English as Primary Language at Home (n/%)	95.5% (193)	98.0% (50)	0.67 (1)	0.41
Spanish as Primary Language at Home (n/%)	10.9% (22)	7.8% (4)	0.41 (1)	0.52
Marital Status (n/%)				
Single	9.5% (19)	20.0% (10)		
Living with partner	15.9% (32)	14.0% (7)	6.16 (3)	0.10
Married	65.7% (132)	52.0% (26)		
Divorced/Widowed/Separated	9.0% (18)	14.0% (7)		
Household unemployment (parent and/or partner not employed full-time)	81.8% (166)	66.7% (34)	5.56 (1)	0.02
Parent highest education Level				
< HS or GED	27.4% (55)	20.0% (10)	1.13 (1)	0.29
4-year college degree or greater	22.4% (45)	36.0% (18)	3.95 (1)	0.05
% of children that participated in preschool (n)	57.6% (117)	70.6% (36)	2.86 (1)	0.09

FQ4B. Are families who consent to participate in KITS representative of the schools from which they are recruited in terms of demographic characteristics?

Table 5 below compares the racial/ethnic characteristics and home language for KITS participants to this information for each participating School District. Although unfortunately, racial/ethnic categories used by the evaluation did not match exactly those used by school districts (evaluation forms allowed parents to select more than one racial/ethnic group, resulting in a “mixed race/ethnicity” categories), it is quite clear that Latino families were under-represented in most of the Districts. In fact, all but two schools had at least 5% fewer Latino families in KITS groups than would have been expected given school demographics. This speaks to the importance in upcoming year of doing more focused outreach and recruitment of these families.

Table 5. Demographic Characteristics at Baseline (Follow-Up KITS Sample) by School District

School District	Baseline Demographic Characteristics ³		School District Report Card ²
Bethel	Parent’s Race (n/%)		
	White	63%(37)	67%
	African American	0%(0)	2%
	Latino/Hispanic	15%(9)	21%
	American Indian/Alaska Native	0%(0)	1%
	Asian	0%(0)	2%
	Native Hawaiian/Pac. Islander	0%(0)	<1%
	More than one race/ethnicity	20%(12)	NA
	Other	2%(1)	7%
	Parent/caregiver primary language Spanish (n/%)	9%(5)	NA
Creswell	Parent’s Race (n/%)		
	White	77%(17)	76%
	African American	0%(0)	<1%
	Latino/Hispanic	0%(0)	13%
	American Indian/Alaska Native	0%(0)	3%
	Asian	0%(0)	1%
	Native Hawaiian/Pac. Islander	0%(0)	0%
	More than one race/ethnicity	23%(5)	NA
	Other	0%(0)	7%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA
Crow-Applegate	Parent’s Race (n/%)		
	White	100%(7)	88%
	African American	0%(0)	0%

² K-3

³ KITS parent/caregiver race/ethnicity exceeds 100%. Parents/caregivers reported all applicable race/ethnicities.

		KITS	15-16 School District Report Card ₂
	Latino/Hispanic	0%(0)	7%
	American Indian/Alaska Native	0%(0)	0%
	Asian	0%(0)	1%
	Native Hawaiian/Pac. Islander	0%(0)	0%
	Other	0%(0)	0%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA
Fern Ridge	Parent's Race (n/%)		
	White	88%(14)	85%
	African American	0%(0)	1%
	Latino/Hispanic	0%(0)	9%
	American Indian/Alaska Native	0%(0)	3%
	Asian	7%(1)	0%
	Native Hawaiian/Pac. Islander	0%(0)	0%
	More than one race/ethnicity	13%(2)	NA
	Other	0%(0)	2%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA
Junction City	Parent's Race (n/%)		
	White	67%(12)	78%
	African American	11%(2)	<1%
	Latino/Hispanic	0%(0)	13%
	American Indian/Alaska Native	11%(2)	4%
	Asian	0%(0)	<1%
	Native Hawaiian/Pac. Islander	0%(0)	<1%
	More than one race/ethnicity	11%(2)	NA
	Other	0%(0)	3%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA
Lowell	Parent's Race (n/%)		
	White	58%(7)	78%
	African American	0%(0)	2%
	Latino/Hispanic	25%(3)	11%
	American Indian/Alaska Native	8%(1)	1%
	Asian	0%(0)	0%
	Native Hawaiian/Pac. Islander	0%(0)	0%
	More than one race/ethnicity	8%(1)	NA
	Other	0%(0)	9%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA
Marcola	Parent's Race (n/%)		
	White	90%(9)	87%
	African American	0%(0)	0%
	Latino/Hispanic	0%(0)	6%
	American Indian/Alaska Native	0%(0)	0%

	KITS	15-16 School District Report Card ²	
McKenzie	Asian	0%(0)	0%
	Native Hawaiian/Pac. Islander	0%(0)	0%
	Other	10%(1)	9%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA
	Parent's Race (n/%)		
	White	100%(9)	75%
	African American	0%(0)	0%
	Latino/Hispanic	0%(0)	16%
	American Indian/Alaska Native	0%(0)	5%
	Asian	0%(0)	2%
Siuslaw	Native Hawaiian/Pac. Islander	0%(0)	0%
	Other	0%(0)	2%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA
	Parent's Race (n/%)		
	White	93%(13)	78%
	African American	0%(0)	<1%
	Latino/Hispanic	7%(1)	7%
	American Indian/Alaska Native	0%(0)	4%
	Asian	0%(0)	2%
	Native Hawaiian/Pac. Islander	0%(0)	<1%
South Lane	More than one race/ethnicity	7%(1)	NA
	Other	0%(0)	9%
	English Learners (%)	NA	7%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA
	Parent's Race (n/%)		
	White	664%(23)	78%
	African American	0%(0)	1%
	Latino/Hispanic	19%(7)	11%
	American Indian/Alaska Native	3%(1)	1%
	Asian	0%(0)	1%
	Native Hawaiian/Pac. Islander	3%(1)	<1%
	More than one race/ethnicity	11%(4)	NA
	Other	0%(0)	2%
	Parent/caregiver primary language Spanish (n/%)	14%(5)	NA

KITS 15-16 School Report Card⁴

School District Baseline Demographic Characteristics

	KITS	15-16 School Report Card ⁴	
Eugene 4J		Cesar Chavez	McCornack
Parent's Race (n/%)			
White	33%(4)	47%	60%
African American	0%(0)	2%	4%
Latino/Hispanic	25%(3)	35%	26%
American Indian/Alaska Native	8%(1)	2%	1%
Asian	0%(0)	1%	1%
Native Hawaiian/Pac. Islander	0%(0)	1%	1%
More than one race/ethnicity	33%(4)	NA	NA
Other	0%(0)	12%	7%
Parent/caregiver primary language Spanish (n/%)	8%(1)	NA	NA
Eugene 4J			Holt
Parent's Race (n/%)			
White	73%(8)		64%
African American	0%(0)		2%
Latino/Hispanic	18%(2)		16%
American Indian/Alaska Native	0%(0)		1%
Asian	0%(0)		2%
Native Hawaiian/Pac. Islander	0%(0)		1%
More than one race/ethnicity	9%(1)		NA
Other	0%(0)		14%
Parent/caregiver primary language Spanish (n/%)	9%(1)		NA
Springfield			Guy Lee
Parent's Race (n/%)			
White	57%(8)		52%
African American	0%(0)		5%
Latino/Hispanic	21%(3)		36%
American Indian/Alaska Native	0%(0)		1%
Asian	14%(2)		1%
Native Hawaiian/Pac. Islander	0%(0)		1%
More than one race/ethnicity	7%(1)		NA
Other	0%(0)		5%
Parent/caregiver primary language Spanish (n/%)	7%(1)		NA
Springfield		Riverbend	Mt. Vernon
Parent's Race (n/%)			
White	54%(7)	68%	62%
African American	0%(0)	2%	1%
Latino/Hispanic	15%(2)	2%	29%
American Indian/Alaska Native	0%(0)	2%	1%
Asian	0%(0)	1%	2%
Native Hawaiian/Pac. Islander	0%(0)	0%	0%

	KITS	15-16 School Report Card ⁴		
	More than one race/ethnicity	31%(4)	NA	NA
	Other	0%(0)	6%	5%
	Parent/caregiver primary language Spanish (n/%)	15%(2)	NA	NA
Springfield			Two Rivers Dos Rios	Maple
	Parent's Race (n/%)			
	White	73%(11)	63%	62%
	African American	0%(0)	1%	1%
	Latino/Hispanic	0%(0)	27%	28%
	American Indian/Alaska Native	0%(0)	1%	1%
	Asian	0%(0)	0%	0%
	Native Hawaiian/Pac. Islander	0%(0)	1%	0%
	More than one race/ethnicity	27%(4)	NA	NA
	Other	0%(0)	8%	7%
	Parent/caregiver primary language Spanish (n/%)	0%(0)	NA	NA
	Parent/caregiver primary language Other (n/%)	7%(1)	NA	NA

FQ4C. Are families who consent to participate in the research study representative of the families who consent to participate in the KITS program in terms of their demographic characteristics?

All Districts implementing KITS were provided with a family enrollment form that included key demographic information about families. The original plan asked District staff to provide this form to families, with the goal of having all KITS participants complete the information so that this question could be addressed. However, there was little to no follow up to ensure that Districts were, in fact, using these forms, and in fact, the majority of schools did not systematically collect information on KITS families beyond the information that was collected for KITS study participants by the PSU evaluation team. Thus, while 254 KITS participants completed the PSU Baseline Parent Survey (and thus, provided the information needed to address this question), the remaining 56 families who were served by the KITS program but did not consent to evaluation provided no consistent demographic information that could be used to answer FQ4c. Thus, at this point, this question was not able to be address by the evaluation team. However, steps have been taken to ensure a consistent KITS Family Participant Enrollment Form is in place for Year 2. The United Way of Lane County has clearly indicated the requirement for schools to collect and report this information as part of their contracts, and both OSLC and PSU plan to follow up with each KITS group to ensure all participating parents fill out the Enrollment Form.

Exploratory Research Questions: Preliminary Outcomes & Attrition Analysis

Although not related to a specific research question, another area in which the Feasibility Study has informed planning for Year 2 is through preliminary analysis of study outcome data collected. Originally, we hoped to address the following Exploratory Research Questions outline in the SEP:

1. **Exploratory Research Question #1 (EQ1):** Do children randomly assigned to the KITS program have higher early numeracy skills at the end of the KITS program participation compared to children assigned to the comparison group?
2. **Exploratory Research Question #2 (EQ2):** Do children randomly assigned to the KITS program have higher scores at school entry on the Oregon Kindergarten Assessment (OKA) of early numeracy compared to children assigned to the comparison group?
3. **Exploratory Research Question 3 (EQ3): *What is the relationship of changes in particular aspects of parenting behavior to child outcomes?***
 - a. Are particular parenting outcomes linked more (or less) strongly to child outcomes?

At this time, however, we are unable to examine these outcomes due to pending receipt of the Oregon Kindergarten Assessment data, as described previously. Sample sizes for the primary child assessments collected for the Feasibility study are insufficient for these analyses (needed for EQ1); however, we expect to receive early numeracy, literacy, and social emotional outcomes from the OKA data on all children in the parent/caregiver survey outcome groups. These analyses will be included in subsequent reports.

That said, we utilized the data collected through the Feasibility study to examine several additional questions, specifically:

1. **Revised Exploratory Question 1: EQ1.** To what extent is there evidence of attrition from the parent survey outcomes study for KITS vs. Control participants? What baseline characteristics are associated with either (1) overall attrition at follow-up or (2) differential attrition from KITS vs. Control participants?
2. **Revised Exploratory Question 2: EQ2.** To what extent is there evidence that participating in KITS is associated with more improvements over time for KITS vs. Control participants?
3. **Revised Exploratory Questions 3a-3c. Among KITS Participants:**
 - a. To what extent is attendance in KITS sessions associated with more evidence of positive improvements over time within KITS participants?
 - b. Do participant demographic characteristics relate to attendance levels?
 - c. To what extent is there evidence that there are differential effects of KITS for specific subgroups of families, in particular for Hispanic/Latino families and for children who participated (or not) in formal preschool or child care?

Exploratory Question 1: Attrition Analysis

We conducted attrition analysis to examine the extent to which there was evidence of attrition from the parent survey outcomes study for KITS vs. Control participants. We conducted two sets of analyses, comparing the baseline characteristics (demographic characteristics, see Table 6) and baseline scores on the key outcome measures (Table 7) for KITS participants who had baseline and follow up data (“Repeated Measures Sample”) to KITS participants who were missing the follow up assessment (“Baseline Only Sample”). Chi-squared analyses (categorical characteristics) or T-tests (continuous baseline outcome scores) were used to compare the two groups of families. Although ideally we would have assessed differential attrition by directly analyzing the differences in patterns of attrition for KITS vs. Comparison groups, there were only n=9 families who comprised the “Baseline Only” Sample within the comparison group; therefore we conducted attrition analyses related to likelihood of follow up first within the KITS sample, and then within the Comparison sample.

Within the KITS families, a few baseline characteristics were related to the likelihood of participation at follow-up. First, KITS parents/caregivers who completed both surveys were significantly more likely to have full-time employment in the household (81%) and significantly more likely to have an education level exceeding a high school diploma/GED (73%), compared to KITS parents who completed baseline only. There was also a trending difference in child gender where KITS families with follow-up data were more likely to have a boy in KITS (56%) compared to families with baseline survey data only (44%). Evidence of attritional differences based on demographic characteristics was not seen for comparison families.

Responses to items on the baseline parent/caregiver survey were not significantly different between parents/caregivers in the KITS with and without follow-up data (see Table 7).

Table 6. Demographic Differences for Families with and without Follow-Up Assessments

	KITS				Comparison			
	Baseline Only Sample (n=64)	Repeated Measures Sample (n=219)			Baseline Only Sample (n=9)	Repeated Measures Sample (n=51)		
	%	%	<i>chi-square</i>	<i>p</i>	%	%	<i>chi-square</i>	<i>p</i>
Child is Female	56.3%	43.6%	3.14	0.08	33.3%	48.0%	0.66	0.42
Household Full Time Employment	59.4%	81.4%	13.56	0.000	66.7%	65.4%	0.01	0.94
Parent Education - More than High School Degree	21.1%	72.6%	3.15	0.08	88.9%	80.0%	0.40	0.53
Race/Ethnicity								
White	84.6%	82.8%	0.12	0.73	77.8%	86.3%	0.43	0.51
African American	7.7%	4.4%	1.06	0.30	0.0%	7.8%	0.76	0.38
Latino	21.5%	15.8%	1.16	0.28	22.2%	15.7%	0.24	0.63
Asian	6.2%	2.5%	2.07	0.15	0.0%	0.0%	NA	NA
Native Hawaiian/Pacific Islander	3.1%	2.0%	0.28	0.60	0.0%	0.0%	NA	NA
Alaska Native/American Indian	1.5%	5.9%	2.04	0.15	11.1%	2.0%	1.99	0.16
Other	1.5%	2.0%	0.05	0.82	0.0%	2.0%	0.18	0.67
Any Formal Childcare	55.1%	57.4%	0.11	0.74	77.8%	69.2%	0.27	0.60

Table 7. Differences in Baseline Parent Survey Scores for Families with and without Follow-Up Assessments

	KITS				Comparison			
	Baseline Only Sample (n=64)	Repeated Measures Sample (n=219)	<i>t- value or chi- square</i>	<i>p</i>	Baseline Only Sample (n=9)	Repeated Measures Sample (n=51)	<i>t- value or chi- square</i>	<i>p</i>
Parent-Child Activities Scale	1.56 (0.35)	1.62 (0.32)	-1.46	0.15	1.43 (0.43)	1.57 (0.34)	-1.13	0.27
Books in the Home								
<10	7.7%	5.0%			11.1%	4.0%		
11-25	16.9%	15.4%	0.82	0.66	11.1%	10.0%	0.83	0.66
26 or more	75.4%	79.6%			77.8%	86.0%		
Frequency of Reading								
Not at all	0.0%	1.5%			0.0%	5.1%		
1-2 times/week	35.4%	26.4%			33.3%	18.6%		
3 or more times/week	38.5%	33.3%	4.94	0.18	22.2%	28.8%	1.36	0.71
Daily	26.2%	38.8%			44.4%	38.0%		
Perceived Readiness for Kindergarten (parent)	4.36 (0.77)	4.36 (0.62)	-0.01	0.99	4.33 (1.09)	4.40 (0.74)	-0.23	0.82
Perceived Readiness for Kindergarten (child)	4.44 (0.71)	4.30 (0.67)	1.44	0.15	4.03 (1.33)	4.21 (0.67)	-0.60	0.55
Social Skills Rating Scale								
Cooperation	2.20 (0.50)	2.22 (0.48)	-0.28	0.78	2.26 (0.37)	2.21 (0.48)	0.32	0.75
Self-Control	1.83 (0.56)	1.79 (0.57)	0.56	0.58	1.49 (0.60)	1.76 (0.57)	-1.28	0.21
Externalizing Behavior	2.20 (0.47)	2.28 (0.46)	0.33	0.74	2.35 (0.55)	2.12 (0.38)	1.59	0.12
Hyperactivity	1.87 (0.49)	1.83 (0.52)	0.55	0.58	2.05 (0.46)	1.74 (0.55)	1.60	0.11
Parenting Style - Laxness Scale	2.33 (0.88)	2.39 (0.77)	-0.55	0.58	2.28 (0.83)	2.37 (0.74)	-0.31	0.76
Poor Discipline Implementation	1.95 (0.57)	1.99 (0.59)	-0.45	0.66	2.00 (0.83)	2.01 (0.62)	-0.04	0.97
Poor Discipline Results	2.15 (0.71)	2.10 (0.66)	0.59	0.56	2.27 (0.56)	2.09 (0.69)	0.71	0.48
Poor Discipline (Total Scale)	2.06 (0.54)	2.06 (0.54)	0.14	0.89	2.15 (0.54)	2.06 (0.60)	0.41	0.68
Parent Perception of School Climate	4.69 (0.75)	4.65 (0.72)	0.41	0.69	4.38 (1.19)	4.25 (.89)	0.35	0.73

Exploratory Question 2: EQ2. Preliminary Outcomes

We conducted multiple regression analyses to address Exploratory Research Question 2: To what extent is there evidence that participating in KITS is associated with more improvements over time for KITS vs. Control participants? Specifically, multiple regression analyses were employed using Time 2 (T2) outcomes as the dependent variables, intervention participation and the intervention X Time 1 (T1) score interaction as predictors, and controlled for baseline (T1) scores and demographic characteristics (child gender, child race, parent education, household full-time employment, and previous formal child care experiences) as covariates in each model. These results are shown in Table 8. At follow up, KITS families reported significantly less permissive (“lax”) parenting compared to comparison families. As can be seen, there were three significant interaction effects of KITS participation in the overall sample; however, one of these favors the comparison group, which showed more growth in Cooperation Skills as measured by the Social Skills Rating Scales – Parent Report. However, on the measures of Child School Readiness and Discipline Results, results showed significantly more improvement over time (lower scores on the Discipline Results sub-scale indicate better discipline skills) for KITS participants compared to controls.

As can be seen in Table 14, there were a few significant overall differences in outcomes both between the subgroups (across KITS and comparison families) as well as significant moderation (interaction) effects indicating differential effectiveness of KITS for families with particular characteristics. However, the sample sizes for subgroups within the comparison group were generally very small which may have limited statistical power to detect these differences.

Table 8. Parent Survey Outcomes with Full Repeated Measures Sample

	KITS		Comparison				Group by T1	
	T1	T2	T1	T2	Group Effect		Interaction	
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	B	p	B	p
Parent-Child Activities Scale	1.62 (0.32)	1.58 (0.34)	1.57 (0.34)	1.64 (0.29)	-0.09	0.13	0.11	0.42
Books in the Home	3.28 (0.90)	3.44 (0.78)	3.42 (0.84)	3.43 (0.78)	0.03	0.6	0.14	0.27
Frequency of Reading	2.09 (0.84)	2.40 (0.72)	2.04 (0.93)	2.49 (0.58)	-0.04	0.47	0.07	0.58
Perceived Readiness for Kindergarten (parent)	4.36 (0.62)	4.62 (0.56)	4.40 (0.74)	4.43 (0.55)	0.14	0.02	-0.10	0.42
Perceived Readiness for Kindergarten (child)	4.30 (0.67)	4.59 (0.64)	4.21 (0.67)	4.47 (0.71)	0.03	0.64	-0.29	0.03
Parent and Teacher Interactions Scale								
Contact	NA	1.18 (0.99)	NA	1.34 (1.04)	-0.08	0.22	NA	NA
Involvement	NA	1.86 (0.84)	NA	1.99 (0.88)	-0.07	0.26	NA	NA
Quality Relationships	NA	3.43 (0.63)	NA	3.30 (0.62)	0.09	0.18	NA	NA
School Endorsement	NA	3.58 (0.59)	NA	3.51 (0.51)	0.07	0.27	NA	NA
Receipt of Information from School	NA	2.56 (0.80)	NA	2.40 (1.00)	0.07	0.27	NA	NA
Satisfaction with Information from School	NA	3.33 (0.75)	NA	3.09 (0.91)	0.12	0.06	NA	NA
Social Skills Rating Scale								
Cooperation	2.22 (0.48)	2.22 (0.42)	2.21 (0.48)	2.26 (0.50)	-0.07	0.21	-0.33	0.01
Self-Control	1.79 (0.57)	1.87 (0.53)	1.76 (0.57)	1.82 (0.50)	0.02	0.67	-0.18	0.14
Externalizing Behavior	2.18 (0.46)	2.26 (0.47)	2.11 (0.38)	2.18 (0.41)	0.02	0.75	-0.06	0.70
Hyperactivity	1.82 (0.52)	1.86 (0.55)	1.74 (0.55)	1.81 (0.50)	-0.02	0.68	-0.04	0.71
Parenting Style - Laxness Scale	2.39 (0.77)	2.34 (0.79)	2.37 (0.74)	2.61 (0.91)	-0.14	0.01	-0.13	0.29
Poor Discipline Implementation	1.99 (0.59)	1.91 (0.55)	2.01 (0.62)	1.98 (0.60)	-0.03	0.62	-0.24	0.04
Poor Discipline Results	2.10 (0.66)	1.97 (0.61)	2.09 (0.69)	2.05 (0.60)	-0.04	0.40	0.03	0.77
Poor Discipline	2.05 (0.54)	1.94 (0.48)	2.06 (0.60)	2.02 (0.55)	-0.04	0.36	-0.10	0.30
Parent Perception of School Climate	4.64 (0.72)	4.69 (0.70)	4.25 (0.89)	4.63 (0.77)	-0.04	0.53	-0.01	0.92

Exploratory Research Question 3a: Effects of Attendance

To explore the question “To what extent is attendance in KITS sessions associated with more evidence of positive improvements over time within KITS participants?” we conducted regression analyses comparing outcomes for families whose children attended 75% or more of the School Readiness sessions (n=106) to comparison families, using the same models described above. Table 9 below shows the average attendance and the percentage of parents and children attending 50% and 75% of sessions for all SRG Groups, all PRG groups, and for each group type for the summer and fall sessions. Overall, attendance was higher for the SRG (Child) groups, with an overall attendance rate of 66% and 83% attending more than half of the sessions. Parent Group attendance was lower, with an overall attendance rate of 45% of sessions, and with fewer than half of parents attending more than half the PRG sessions. For both groups, attendance was much higher in the summer compared to the fall.

Table 10 shows the outcome findings analyzed separately for families whose children attended 75% or more SRG sessions. As can be seen, when outcome analyses included only children with strong attendance, a pattern of stronger effects was apparent. Specifically, within this subgroup of KITS families, it appears that KITS parents reported that at Time 2, they felt significantly more prepared to help their child enter kindergarten and were significantly less lax in their parenting style. KITS parents/caregivers also indicated significantly more change over time compared to the comparison group. It appeared that there was more change over time for KITS participants compared to controls in terms of perceived school readiness, self-control, and discipline implementation and overall discipline skills. However, as noted for the overall outcomes, comparison children were reported by their parents/caregivers as improving their cooperation skills significantly more than the KITS children.

Finally, we conducted multiple regression analyses using child attendance rates as a predictor of Time 2 parent/caregiver survey outcomes, controlling to T1 scores and demographic characteristics as outlined above. As shown in Table 11, children’s attendance in the School Readiness Group significantly predicted developmentally supportive activities (Parent-Child Activities Scale), frequency of reading in the home, quality of parent-teacher interactions, parents’ endorsement of the school, parents’ satisfaction with information from the school, the child’s self-control, and parenting discipline skills above and beyond demographic characteristics and T1 scores on these outcomes. In all cases, better attendance resulted in better supports for learning at home, parent-teacher interaction, and disciplinary styles and results.

Table 10. Parent Survey Outcomes with Repeated Measures Sample – KITS Children Who Attended 75% or More School Readiness Group Sessions

	KITS		Comparison		Group Effect		Group by T1 Interaction	
	T1 Mean (SD)	T2 Mean (SD)	T1 Mean (SD)	T2 Mean (SD)	B	<i>p</i>	B	<i>p</i>
Parent-Child Activities Scale	1.63 (0.30)	1.61 (0.29)	1.57 (0.34)	1.64 (0.29)	-0.03	0.73	-0.03	0.84
Books in the Home	3.37 (0.86)	3.51 (0.67)	3.42 (0.84)	3.43 (0.78)	0.03	0.70	0.07	0.57
Frequency of Reading	2.20 (0.81)	2.55 (0.65)	2.04 (0.93)	2.49 (0.58)	0.12	0.15	-0.06	0.61
Perceived Readiness for Kindergarten (parent)	4.32 (0.64)	4.61 (0.58)	4.40 (0.74)	4.43 (0.55)	0.16	0.05	-0.08	0.51
Perceived Readiness for Kindergarten (child)	4.29 (0.70)	4.61 (0.65)	4.21 (0.67)	4.47 (0.71)	0.06	0.47	-0.37	0.01
Parent and Teacher Interactions Scale								
Contact	NA	1.16 (0.93)	NA	1.34 (1.04)	-0.09	0.29	NA	NA
Involvement	NA	1.96 (0.76)	NA	1.99 (0.88)	-0.01	0.90	NA	NA
Quality Relationships	NA	3.53 (0.56)	NA	3.30 (0.62)	0.19	0.02	NA	NA
School Endorsement	NA	3.69 (0.45)	NA	3.51 (0.51)	0.21	0.01	NA	NA
Receipt of Information from School	NA	2.61 (0.70)	NA	2.40 (1.00)	0.15	0.08	NA	NA
Satisfaction with Information from School	NA	3.40 (0.69)	NA	3.09 (0.91)	0.18	0.03	NA	NA
Social Skills Rating Scale								
Cooperation	2.24 (0.46)	2.26 (0.39)	2.21 (0.48)	2.26 (0.50)	-0.03	0.72	-0.28	0.02
Self-Control	1.83 (0.53)	1.95 (0.44)	1.76 (0.57)	1.82 (0.50)	0.12	0.12	-0.27	0.03
Externalizing Behavior	2.25 (0.40)	2.35 (0.38)	2.11 (0.38)	2.18 (0.41)	0.10	0.21	-0.20	0.14
Hyperactivity	1.89 (0.46)	1.92 (0.49)	1.74 (0.55)	1.81 (0.50)	-0.001	0.99	-0.09	0.39
Parenting Style - Laxness Scale	2.40 (0.74)	2.41 (0.79)	2.37 (0.74)	2.61 (0.91)	-0.15	0.03	-0.15	0.22
Poor Discipline Implementation	2.02 (0.56)	1.90 (0.47)	2.01 (0.62)	1.98 (0.60)	-0.05	0.49	-0.30	0.01
Poor Discipline Results	2.03 (0.61)	1.88 (0.52)	2.09 (0.69)	2.05 (0.60)	-0.12	0.08	-0.10	0.33
Poor Discipline	2.03 (0.50)	1.89 (0.42)	2.06 (0.60)	2.02 (0.55)	-0.11	0.09	-0.21	0.04
Parent Perception of School Climate	4.60 (0.80)	4.74 (0.64)	4.25 (0.89)	4.63 (0.77)	-0.004	0.97	-0.08	0.55

Table 11. Effects of SRG Attendance on T2 Parent Survey Outcomes, Controlling for T1 scores

KITS Full Repeated Measures Sample (n=203)		
	Attendance Effect	
	B	<i>p</i>
Parent-Child Activities Scale	0.13	0.05
Books in the Home	0.02	0.79
Frequency of Reading	0.18	0.004
Perceived Readiness for Kindergarten (parent)	0.02	0.80
Perceived Readiness for Kindergarten (child)	0.10	0.15
Parent and Teacher Interactions Scale		
Contact	-0.01	0.90
Involvement	0.11	0.13
Quality Relationships	0.17	0.02
School Endorsement	0.21	0.003
Receipt of Information from School	-0.05	0.54
Satisfaction with Information from School	0.17	0.02
Social Skills Rating Scale		
Cooperation	0.07	0.29
Self-Control	0.16	0.01
Externalizing Behavior	0.11	0.07
Hyperactivity	0.05	0.44
Parenting Style - Laxness Scale	0.03	0.65
Poor Discipline Implementation	-0.11	0.09
Poor Discipline Results	-0.12	0.02
Poor Discipline	-0.15	0.01
Parent Perception of School Climate	0.01	0.84

Exploratory Research Question 3b: Do participant demographic characteristics relate to attendance levels?

It is important to note that in examining the association of attendance and outcomes, selection factors related to strong attendance and participation may be operating; families with different characteristics might be more or less likely to attend KITS program sessions. To explore this, we first examined correlations between participant characteristics and attendance (see Table 12) and between attendance and T2 parent/caregiver survey outcome measures (Table 13). As can be seen in Table 12, there was a significant correlation between attendance (75% or higher attendance) and household full-time employment such that participation in 75% or more parent group sessions was related to lack of full-time employment. An association was also seen between the attendance and race, where Latino parents/caregivers were more likely to attend parent groups; however, this relationship was not significant in the KITS sub-sample with 75% or higher attendance. Overall, however, few measured parent characteristics were associated with KITS attendance.

While there were few significant correlations between attendance and demographic characteristics, there was more evidence of significant associations between attendance and parent/caregiver survey outcomes (see Table 13). Stronger participation by children in the School Readiness Groups (75% or more sessions attended) was positively and significantly related to developmentally supportive activities in the home (Parent-Child Activities Scale), frequency of reading, parent endorsement of the school, self-control, and externalizing behavior. Better overall parent discipline was also significantly correlated with higher child attendance. Stronger parent group participation at 75% or higher attendance was also positively, significantly related to parent endorsement of the school.

Table 12. Correlations between Attendance and Family Demographic Characteristics

(n=203)	School Readiness Group Average Attendance	Parent Group Average Attendance	50% School Readiness Group Attendance	50% Parent Group Attendance	75% School Readiness Group Attendance	75% Parent Group Attendance
Child Gender	0.08	-0.06	0.10	0.01	0.08	-0.04
Household Full Time Employment	-0.07	-0.14	-0.09	-0.07	-0.09	-0.16*
Parent Education	0.08	0.01	0.09	0.02	0.06	0.04
Race/Ethnicity						
White	0.04	-0.06	-0.04	-0.04	0.06	0.004
African American	-0.08	-0.02	0.01	-0.05	-0.06	0.04
Latino	0.06	0.22**	0.07	0.20**	-0.03	0.11
Asian	0.06	0.04	0.06	0.02	0.04	0.05
Native Hawaiian/Pacific Islander	0.03	-0.04	0.05	-0.02	-0.01	-0.004
Alaska Native/American Indian	0.02	0.08	0.02	0.06	0.06	0.04
Other	0.02	-0.05	0.05	-0.01	-0.06	-0.09
Any Formal Childcare	-0.05	-0.04	0.04	-0.05	-0.08	-0.08

* $p < .05$, ** $p < .01$

Table 13. Correlations between Attendance and Parent Survey Outcomes at Time 2

(n=203)	School Readiness Group Average Attendance	Parent Group Average Attendance	50% or Higher School Readiness Group Attendance	50% or Higher Parent Group Attendance	75% or Higher School Readiness Group Attendance	75% or Higher Parent Group Attendance
Frequency of Developmentally Supportive Activities	0.17*	0.05	0.10	0.07	0.15*	0.05
Books in Home	0.10	0.11	0.10	0.10	0.08	0.04
Frequency of Reading	0.22**	0.14*	0.14	0.05	0.26**	0.09
Welcoming School Climate	0.02	-0.05	-0.07	-0.07	0.10	0.03
Confidence to Support Learning	0.01	-0.04	-0.001	-0.04	-0.03	0.01
Child School Readiness	0.12	-0.04	0.13	0.01	0.06	-0.03
P-T Contact	-0.01	-0.01	0.01	-0.04	-0.05	0.01
Parent Involvement	0.10	0.07	0.13	0.03	0.09	-0.04
P-T Quality Relationship	0.17*	0.11	0.09	0.08	0.12	0.06
Parent Endorsement of School	0.21**	0.14	0.14*	0.09	0.16*	0.14*
Receipt of School Info	0.14*	0.09	0.13	0.06	0.02	0.01
Satisfaction with Info	0.17*	0.06	0.14	0.04	0.07	0.05
Cooperation	0.13	0.12	0.12	0.06	0.14	0.03
Self-Control	0.21**	0.07	0.21**	0.09	0.14*	0.09
Externalizing	0.23**	0.00	0.22**	0.04	0.16*	-0.01
Hyperactivity	0.13	-0.05	0.12	0.01	0.10	-0.02
Laxness	0.00	0.10	-0.10	0.06	0.02	0.08
Poor Discipline	-0.20**	-0.03	-0.21**	-0.06	-0.16*	-0.07

* $p < .05$, ** $p < .01$

Exploratory Research Question 3c: Subgroup Effects for KITS

To explore whether there were differential effects for specific subgroups of families, we repeated the regression models including subgroup interaction terms (e.g., Gender X Group) as predictors. Each subgroup was assessed separately for the key outcomes. Specifically, we examined outcomes for the following subgroups: for male vs. female children, full-time employed vs. unemployed or part-time employed households, parents with and without a high school degree, child race comparing Latino and White children and children from other racial backgrounds and White children, and children who participated (or not) in formal preschool or child care. These results are included in Table 14.

As can be seen in Table 14, there were a few significant overall differences in outcomes both between the subgroups (across KITS and comparison families) as well as significant moderation (interaction) effects indicating differential effectiveness of KITS for families with particular characteristics. However, the sample sizes for subgroups within the comparison group were generally very small which may have limited statistical power to detect these differences.

As seen in Figure 2, there was one significant interaction between gender and intervention group such that parents/caregivers reported that girls participating in KITS (n=88) had better self-control at T2 compared to comparison girls (n=24). The opposite was true for boys, where comparison boys (n=27) had better self-control than boys participating in KITS (n=115). In households where no caregiver held full-time employment, KITS parents/caregivers (n=37) reported higher school climate scores compared to comparison families (n=17); however, comparison parents/caregivers with full-time employment (n=34) reported feeling more welcome in the school compared to KITS families with full-time employment (n=166; see Figure 3). In addition to significant sub-group effects for race on discipline results and discipline overall, there were significant racial sub-group by intervention interactions on these two outcomes (see Figures 4 and 5); however, interpretations should be made with caution as sample sizes for families of color with KITS and comparison groups are small. While Latino families, on average, reported better discipline results compared to White families, Latino parents/caregivers participating in KITS (n=32) reported the highest (i.e., worst) discipline results while Latino parents/caregivers in the comparison group (n=8) reported the lowest (i.e., best) discipline results at T2. Results were similar for overall discipline, as seen in Table 14. Additionally, KITS parents/caregivers reported better discipline results across White families and families from other racial backgrounds; however, the difference in discipline results between KITS (n=34) and comparison families (n=6) from other racial backgrounds was greater than that for White families. Further, these sample sizes are extremely small and should be interpreted with care.

Table 14. Sub-Group Differences with Full Repeated Measures Sample

Table	Gender (Male=112; Female= 112)				Household Full Time Employment (No FT=54; FT =200)				Parent Education - More than High School Degree (< HS=65; ≥HS =186)			
	Group Effect		Sub-Group by Intervention Interaction		Group Effect		Sub-Group by Intervention Interaction		Group Effect		Sub-Group by Intervention Interaction	
	B	p	B	p	B	p	B	p	B	p	B	p
Parent-Child Activities Scale	-0.14	0.31	0.13	0.36	0.05	0.70	-0.02	0.93	-0.26	0.10	0.31	0.10
Books in the Home	0.04	0.70	-0.01	0.93	-0.12	0.21	0.17	0.19	-0.23	0.07	0.23	0.14
Frequency of Reading	-0.01	0.91	0.01	0.93	-0.15	0.18	0.14	0.35	0.18	0.22	-0.18	0.32
Perceived Readiness for Kindergarten (parent)	-0.11	0.42	0.11	0.47	-0.17	0.17	0.20	0.23	-0.03	0.59	0.30	0.12
Perceived Readiness for Kindergarten (child)	0.08	0.58	0.04	0.77	-0.07	0.55	0.06	0.72	-0.26	0.11	0.29	0.14
Parent and Teacher Interactions Scale												
Contact	-0.05	0.75	-0.10	0.50	-0.19	0.14	0.15	0.38	0.28	0.08	-0.25	0.21
Involvement	0.15	0.30	-0.12	0.42	-0.05	0.72	0.07	0.69	0.15	0.37	-0.20	0.33
Quality Relationships	0.18	0.20	-0.18	0.23	0.03	0.82	-0.06	0.72	-0.02	0.92	-0.05	0.79
School Endorsement	0.12	0.41	-0.10	0.51	0.11	0.39	-0.18	0.29	0.07	0.66	-0.09	0.65
Receipt of Information from School	0.22	0.12	-0.27	0.08	0.07	0.59	0.02	0.91	0.19	0.25	-0.23	0.26
Satisfaction with Information from School	0.10	0.49	-0.05	0.72	0.09	0.48	-0.12	0.49	-0.24	0.14	0.17	0.40
Social Skills Rating Scale												
Cooperation	-0.07	0.55	0.18	0.17	0.20	0.06	-0.21	0.15	0.06	0.68	0.00	0.98
Self-Control	-0.15	0.23	0.27	0.04	-0.07	0.53	0.06	0.69	0.09	0.51	-0.02	0.91
Externalizing Behavior	-0.06	0.64	0.16	0.22	0.06	0.58	-0.11	0.44	0.00	0.99	0.01	0.94
Hyperactivity	0.01	0.96	0.03	0.83	0.10	0.30	-0.10	0.49	0.10	0.44	-0.10	0.52
Parenting Style - Laxness Scale	-0.11	0.33	0.04	0.72	-0.18	0.08	0.15	0.27	-0.01	0.97	-0.06	0.70
Poor Discipline Implementation	0.10	0.40	0.06	0.65	0.04	0.70	-0.04	0.81	0.06	0.65	-0.21	0.22
Poor Discipline Results	0.14	0.20	-0.14	0.24	-0.03	0.79	0.11	0.38	0.04	0.75	-0.11	0.48
Poor Discipline	0.14	0.18	-0.06	0.59	0.01	0.95	0.05	0.68	0.07	0.56	-0.19	0.21
Parent Perception of School Climate	0.23	0.11	-0.13	0.39	0.24	0.06	-0.35	0.04	-0.18	0.29	0.24	0.25

	Race - White vs. Latino <i>(White = 182; Latino=26)</i>				Race - White vs. Other <i>(White=182; Other=46)</i>				Any Formal Childcare <i>None=101; Any=153)</i>			
	Group Effect		Sub-Group by Intervention Interaction		Group Effect		Sub-Group by Intervention Interaction		Group Effect		Sub-Group by Intervention Interaction	
	B	<i>p</i>	B	<i>p</i>	B	<i>p</i>	B	<i>p</i>	B	<i>p</i>	B	<i>p</i>
Parent-Child Activities Scale	-0.05	0.79	0.12	0.50	0.12	0.05	0.22	0.13	-0.19	0.20	0.21	0.21
Books in the Home	-0.02	0.31	-0.02	0.91	-0.12	0.31	0.11	0.34	-0.12	0.31	0.19	0.15
Frequency of Reading	-0.21	0.19	0.24	0.13	0.02	0.91	0.03	0.85	0.16	0.26	-0.14	0.37
Perceived Readiness for Kindergarten (parent)	0.15	0.40	-0.14	0.44	-0.19	0.18	0.24	0.09	0.13	0.39	-0.09	0.58
Perceived Readiness for Kindergarten (child)	0.13	0.45	-0.20	0.26	0.03	0.81	-0.02	0.90	-0.24	0.12	0.22	0.20
Parent and Teacher Interactions Scale												
Contact	-0.10	0.60	0.18	0.31	-0.10	0.50	0.18	0.25	0.07	0.65	-0.10	0.59
Involvement	-0.18	0.32	0.32	0.08	-0.21	0.16	0.17	0.26	-0.08	0.63	0.11	0.54
Quality Relationships	-0.21	0.24	0.28	0.13	-0.28	0.07	0.15	0.33	-0.01	0.96	-0.03	0.86
School Endorsement	0.15	0.40	-0.03	0.88	-0.31	0.04	0.19	0.23	0.06	0.69	0.01	0.97
Receipt of Information from School	-0.04	0.83	0.12	0.51	-0.24	0.12	0.25	0.10	0.18	0.26	-0.23	0.20
Satisfaction with Information from School	0.29	0.10	-0.20	0.28	-0.03	0.83	-0.07	0.63	0.04	0.78	-0.07	0.68
Social Skills Rating Scale												
Cooperation	0.20	0.21	-0.05	0.73	-0.10	0.45	0.05	0.73	-0.02	0.90	-0.07	0.67
Self-Control	0.12	0.43	0.09	0.59	0.01	0.92	-0.09	0.52	0.05	0.74	-0.09	0.57
Externalizing Behavior	-0.14	0.37	0.16	0.30	-0.15	0.23	0.19	0.15	-0.13	0.35	0.00	0.99
Hyperactivity	-0.07	0.65	-0.01	0.93	-0.07	0.54	0.04	0.76	0.00	0.97	-0.17	0.24
Parenting Style - Laxness Scale	-0.12	0.39	0.21	0.14	0.22	0.08	-0.19	0.13	0.00	0.98	0.00	0.98
Poor Discipline Implementation	-0.17	0.28	0.12	0.45	-0.01	0.97	-0.03	0.82	0.12	0.38	-0.01	0.97
Poor Discipline Results	-0.26	0.05	0.29	0.03	0.04	0.69	-0.06	0.60	-0.02	0.90	0.09	0.50
Poor Discipline	-0.30	0.03	0.30	0.03	0.05	0.65	-0.09	0.46	0.05	0.68	0.05	0.69
Parent Perception of School Climate	-0.08	0.66	0.08	0.67	-0.03	0.83	-0.04	0.77	0.08	0.60	-0.13	0.47

Figure 2. Gender Differences on Self-Control by Intervention Group

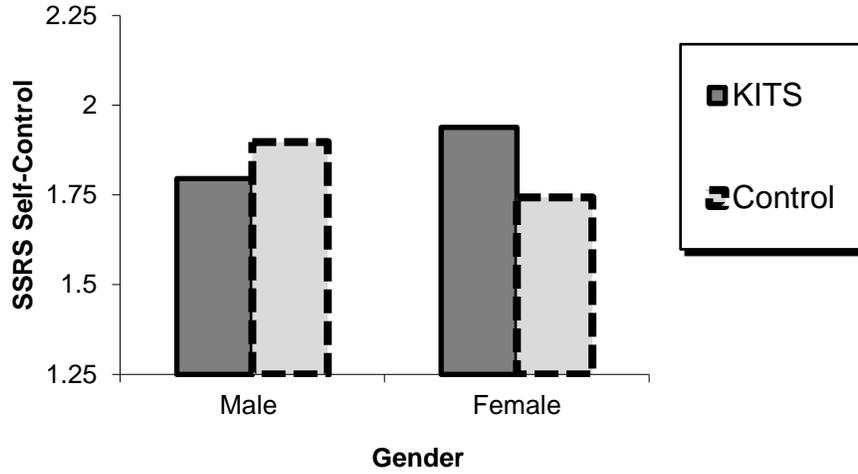


Figure 3. Household Full-Time Employment Differences for School Climate by Intervention Group

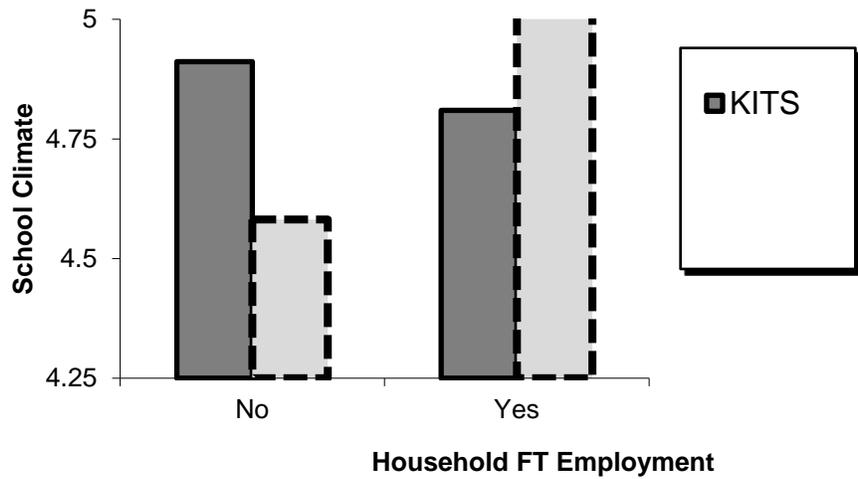


Figure 4. Race Differences (Latino vs White) for Poor Discipline Results by Intervention Group

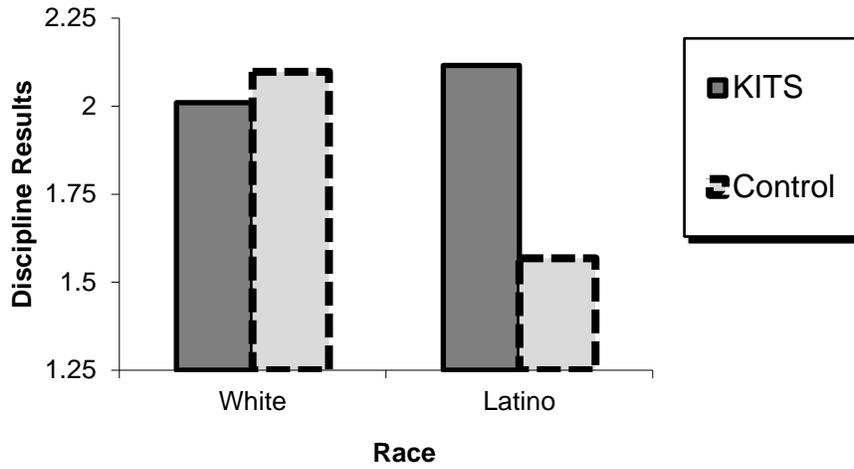
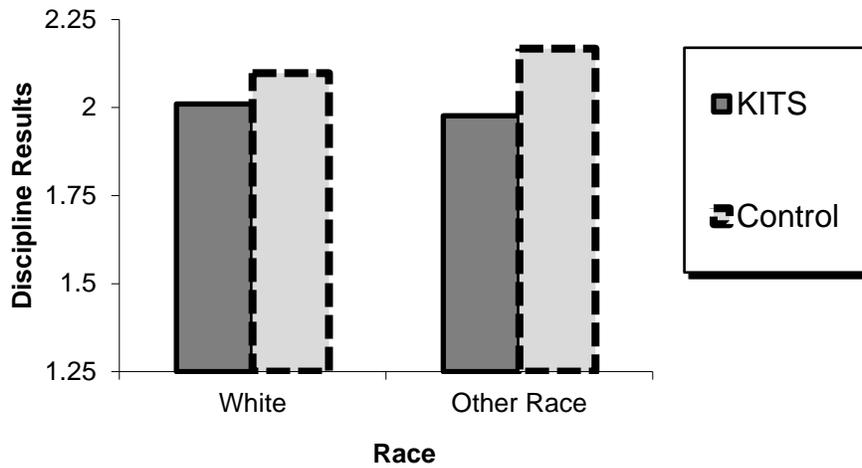


Figure 5. Race Differences (Other Race vs White) for Poor Discipline Results by Intervention Group



Conclusions: Findings, Lessons Learned, and Next Steps

Summary of Feasibility Study Findings & Changes Planned for Year 2

Results of the feasibility study suggest that, while over-recruitment and random assignment were not possible during this first year of implementation, random assignment may yet be possible during Year 2. Although schools were not able to successfully over-recruit families in Year 1, a great deal was learned from the feasibility study about the level of effort needed for recruitment. Thus, in Year 2, the United Way of Lane County and Oregon Development, Inc./Oregon Social Learning Center have re-organized recruitment support, providing additional resources (e.g., staff for door-to-door recruitment, trained recruiters present at school events, centralized family recruitment database, and a host of community-based outreach and marketing efforts) and begun these efforts much earlier (recruitment is currently underway, and started in January 2017; last year's efforts were delayed until March and even later in many schools). Further, we are leveraging additional resources provided by the Laura and John Arnold Foundation (LJAF) for evaluation to further strengthen over-recruitment efforts with additional recruitment staff. Specifically, LJAF has authorized and provided funding to PSU to hire 4 additional recruitment specialists to support contacting control families for study recruitment. These staff are being used specifically to: (1) do more community-based canvassing in low income neighborhoods (e.g., housing projects, etc.); (2) do more concentrated outreach to Hispanic/Latino families; and (3) provide additional support for contacting and enrolling families.

Initial recruitment to the KITS program is being done using a multi-pronged outreach and recruitment plan developed by ODI, the United Way, and the school districts based on lessons learned in the Feasibility phase. The recruitment plan includes several primary strategies identified as useful in the Feasibility phase: (1) Kindergarten orientation meetings ("Kindergarten Round Ups"); (2) Door-to-door community recruitment; (3) Extensive use of social media (Facebook, Twitter, etc.); (4) Visits to local child care and preschool facilities; and (5) community marketing (radio, newspaper, bus advertisements and mass mailings). Parents will be able to express interest through these various venues by completing paper forms, calling a central recruitment specialist, using a web-based KITS portal, and/or through a mobile app. Each modality for indicating interest will also include a "check box" through which consent to contact for the KITS research study will be obtained. Parents who indicate interest will receive a follow up phone call from a central KITS recruitment coordinator, who will be housed this year within Oregon Development, Inc. This person will explain the program in more detail, screen for eligibility (essentially, that the child is indeed entering kindergarten and that the family and child will be available to participate during the KITS program timeframe), and collect a few key pieces of information for the evaluation study (namely, child and parent preferred language, race/ethnicity, child date of birth, and child gender). Lastly, the KITS recruitment coordinator will tell parents that because it is likely that more families will want to participate than can be enrolled, the school will be doing a "lottery" or "drawing" to select families for enrollment.

In addition to these changes in recruitment, outreach, and enrollment, the evaluation plan has been modified (details provided in approved impact SEP). We do not plan to collect direct child assessments, but instead will access the Oregon Kindergarten Assessment and other school records information to assess child outcomes. We also obtained preliminary evidence that parent report of child behavior can provide a good outcome measure

related to the key constructs of child behavior and self-regulation. Most measures will be maintained for the Year 2 study, although some changes may be made to subscales that were low in reliability. Recruitment of a larger comparison/control group will also facilitate improved statistical power to detect subgroup differences.

The KITS program developers have also planned some additional changes for Year 2 based on Feasibility Study findings. Specifically, there are more resources now devoted to supporting PRG attendance (e.g., regular reminder calls and more flexibility in providing “make up” sessions). Most significantly, the Fall program component has been modified to increase the number of sessions during the summer, and shorten the Fall phase to 4 (rather than 8) weeks. This will enable the program to retain the content of these Fall sessions but hold them during the summer when parents and children are better able to participate.

In terms of preliminary outcomes, results from this year provide preliminary promising evidence of program effects. These effects were considerably stronger for families with stronger participation (hence, the increased focus on attendance support for year 2). Our approved Impact SEP includes our detailed plan for outcomes data collection during Year 2 to ensure the study contributes to at least a moderate level of evidence.

List of Appendices

Appendix A: Summer Phase Stakeholder Interview Protocols

Appendix B: KITS Coach & Teacher Surveys

Appendix C: Parent Focus Group Protocols

Appendix D: Spring Parent Interview Protocols

Appendix E: Spring Stakeholder Interview Protocols (Teacher, PG Facilitator, PG Translator)

Appendix F: Brief Reports and CPI Documents

- Year 1 Highlights
- Teacher-Facilitator Staff Survey Summary
- Recruitment Themes
- Parent Interview Themes
- Spanish Speaking Parent Themes