

Florida Partners in Education and Research for Kindergarten Success (Florida PERKS):

Clarifying Information Regarding FY 2007 Annual Performance Report

INTERVENTION

Describe the professional development (PD) intervention as implemented including the setting, content, and delivery (i.e., curriculum, provider, duration, intensity, and implementation fidelity).

PERKS provided two types of professional development activities per teacher in our 2007 intervention group:

- a) two 3-credit college courses (for 6 credit hours total) at the community college level, and
- b) one-to-one technical assistance from a trained Technical Assistance (TA) Specialist at one of three randomly-assigned levels of intensity:
 - weekly visits
 - monthly visits
 - monthly phone calls

The two types of intervention activities took place concurrently during the course of one school year (October through April, 2007).

As an overview, a typical intervention year for a PERKS teacher would look like this:

<u>July-August:</u>	Recruitment into PERKS as the school year begins and random assignment to intervention group
<u>September:</u>	Pre-testing of teachers, classrooms, and children
<u>October:</u>	Intervention begins – <ul style="list-style-type: none">• First college course = 3-credit Early Childhood Curriculum course in an accelerated 8-week format• Technical assistance (with participants randomly assigned to 1 of 3 levels of intensity)
<u>November:</u>	Intervention (college + TA) continues
<u>December:</u>	First college course ends; TA continues
<u>January:</u>	Second college course begins = 3-credit Observation and Assessment course in an accelerated 8-week format; TA continues
<u>February:</u>	Intervention (college + TA) continues
<u>March:</u>	Second college course ends; TA continues
<u>April/May:</u>	TA ends
<u>May:</u>	Post-testing of teachers, classrooms, and children

Specifically, each type of intervention activity was implemented as follows:

COLLEGE COURSES AS INTERVENTION

Setting: College courses were delivered (a) in traditional face-to-face courses on the campuses of 11 community colleges in Florida and (b) in online distance learning courses developed by one community college (Tallahassee Community College, Tallahassee, FL). Teachers were able to choose their preferred format. Florida has a state-funded system of 28 public community colleges.

Content: The content of the college courses was developed by PERKS project staff using the Florida Voluntary Pre-Kindergarten (VPK) performance standards as a foundation, given that all PERKS teachers were active VPK teachers. The Florida VPK program is a state-funded, universal, voluntary program for all 4-year-old children in the state, implemented in August, 2005. Although all domains of development were included in the content, primary emphasis was given to language and early literacy development.

- The Fall semester course was an Early Childhood Curriculum Course.
- The Spring semester course was an Observation and Assessment Course.

In order to deliver two college courses in one school year between pre-testing and post-testing, we offered the courses in accelerated 8-week “mini-mesters.” Because both were 3-credit hour courses required to meet for a total of 45 hours, the classes met twice each week for 3 hours per class.

Each participant was awarded a T.E.A.C.H.[®] scholarship (an early childhood scholarship initiative currently operating in 19 states) for the Associate’s degree model. Because all PERKS teachers had already earned a Child Development Associate (CDA) credential (as required by VPK statutes), we were able to place them on a career path toward the Associate of Science degree in Early Childhood Education. The T.E.A.C.H.[®] scholarship provided funds for tuition, books, transportation, release time, substitute teachers, and wage increases or one-time financial bonuses upon completion of a scholarship contract.

Delivery:

- Curriculum – No existing commercial curricula were adopted for use in the college courses. Florida statutes forbid the requirement of specified curricula for VPK programs (unless individual programs are identified as “low-performing” for 2 consecutive years).
- Provider - (a) Traditional courses were taught by community college faculty and adjunct faculty in classrooms on college campuses. Each instructor received notebooks of course materials, including textbook readings, articles, classroom activities, homework assignments, projects, quizzes, and tests (pre-test and post-test). All courses used the same required textbooks, syllabus, and content.

(b) Online courses were taught by faculty at Tallahassee Community College. Instructors received the same course notebooks and uploaded the materials to the college website using Blackboard as a platform.

- Duration – In 2007, the PERKS courses ran from mid-October through early December (Fall semester) and from early January through early March (Spring semester), with the exact dates depending on the academic calendar of each respective college.
- Intensity – Each course ran as a traditional 3-credit hour course, with PERKS teachers meeting for two 3-hour classes per week. A few colleges delivered courses in a blended/hybrid format, in which PERKS teachers met on campus for 3 hours per week or every other week and interacted with the course online between classes. Teachers who took the courses online (primary reasons were [a] convenience, [b] because the closest local campus was too far away, or [c] they were the sole caregiver for a young child) completed all aspects of the course electronically.
- Implementation fidelity – In order to assess the adequacy of the content/delivery of the college coursework, we developed a “Content Coverage in College Classes” Scale (*not covered, partially covered, substantially covered*) and adopted “decision rules” about the implementation of the courses. TA Specialists (who were required to attend the college classes along with their PERKS teachers and monitor the online course) were asked to use the scale to rate the adequacy of delivery of the course content at their respective colleges. Using these data, we identified PERKS teachers as having received Adequate, Marginally Adequate, or Inadequate exposure to the content we intended to teach them.

TECHNICAL ASSISTANCE (TA) AS INTERVENTION

Setting: Technical assistance was delivered in two frequencies (weekly or monthly) with monthly intervention delivered either face-to-face or via telephone. This resulted in three different, randomly-assigned intervention strategies:

- weekly visits (face-to-face in the teacher’s workplace during work hours)
- monthly visits (face-to-face in the teacher’s workplace during work hours)
- monthly phone calls (via telephone from any location at any time)

Content: TA Specialists and PERKS teachers worked together to:

- identify strengths and weaknesses (using assessment data)
- transfer theory to practice from college coursework to classroom
- brainstorm ideas and develop formal, written goals

Development of teacher goals was based on (a) results of pre-testing on classroom and child instruments and (b) college coursework.

Delivery:

- Basis for TA Strategies – Technical assistance was delivered according to 10 mentoring strategies developed in a previous ECEPD grant project (*Parity Project*, Nova Southeastern University, 2002 grantee). The 10 strategies included:
 - Relationship-building
 - Building on strengths
 - Observation

- Reflection
 - Problem-solving
 - Stories and experiences
 - Resources and information
 - Networking
 - Modeling
 - Demonstration
- Provider - TA Specialists were hired on the local level by the Early Learning Coalitions serving as partners to our project using a job description developed by PERKS staff.

TA Specialists were required to have a minimum of a Bachelor's degree (Master's preferred) in child development, early childhood or a related field; a minimum of 3 years of successful teaching experience with preschool-aged children; and a minimum of 1 year of experience training and/or working with adult learners.

- Duration – In 2007, TA contacts occurred from mid-October through April/May with the exact dates depending on completion of pre-testing in October and end of the school year in April/May in each respective school district.
- Intensity – Each TA contact (the actual visit or phone call) occurred for a maximum of 3 hours per contact. All activities related to a contact (i.e., preparation, transportation, delivery, and follow-up) were limited to a maximum of 10 hours per contact. PERKS teachers in the weekly visit group were scheduled to receive 28 contacts (4 contacts/month x 7 months), whereas teachers in the monthly visit and monthly phone call groups were scheduled to receive seven contacts (1 contact/month x 7 months).
- Implementation fidelity – In order to assess adequacy of the delivery of our technical assistance services, we developed a “Relationship and Strategies Scale” (*never, sometimes, frequently, always*) and adopted “decision rules” about the implementation of technical assistance. Designed to measure the TA Specialists’ use of the 10 mentoring strategies, this scale was completed at the end of the year for each Teacher-Specialist dyad, by three different raters: PERKS teacher, TA Specialist, and the PERKS TA Coordinator (who oversaw technical assistance implementation for the project). Using these data, we identified PERKS teachers as having received Adequate, Marginally Adequate, or Inadequate technical assistance services.

EVALUATION DESIGN

Present the final evaluation questions.

Research Question 1: What are the effects of varying levels of TA intensity paired with early childhood coursework on teacher knowledge?

Research Question 2: What are the effects of varying levels of TA intensity paired with early childhood coursework on the quality of teachers’ classroom environments?

Research Question 3: What are the effects of varying levels of TA intensity paired with early childhood coursework on child outcomes?

Describe the evaluation design, indicating whether it is an experimental, quasi-experimental, or other study. For experimental and quasi-experimental designs, describe how treatment and control/comparison groups were assigned or matched. For “other studies,” explain the rationale i.e. why an experimental or quasi-experimental study was not conducted and describe the details of the evaluation design.

Florida PERKS was conducted as an experimental study in Year 1 (2006 Reporting Period), with random assignment to control and intervention groups. Each teacher had an equal chance of being assigned to any of the four groups.

In Year 2 (2007 Reporting Period), the intervention component of our study was experimental, with random assignment to intervention groups. Each teacher had an equal chance of being assigned to any of the three intervention groups. No additional control teachers were randomly assigned in Year 2. Therefore, in Year 2 the comparison with control component of our study was quasi-experimental. We used Year 1 control data for comparison purposes.

For experimental and quasi-experimental evaluations describe services received (if any) by the control/comparison group including the setting, content, and delivery of services. If other designs were implemented in lieu of an experimental and quasi-experimental evaluation, explain what was done.

In Year 1 (2006 Reporting Period), the control group ($n = 20$) took part in these activities (which are not necessarily “services”):

- Knowledge of project and its benefits and responsibilities in August 2005
- Completion of application forms and informed consent to participate in project in August 2005
- Notification of selection as a control site in September 2005 (through random assignment)
- Pre-testing of teachers, classrooms and children in September 2005
- Completion of college post-test for Curriculum course in October/December 2005¹
- Receipt of pre-test report on results of teacher, classroom, and child assessments as explained by a TA Specialist in January 2006²
- Completion of college pre-test and post-test for Assessment course in January/March 2006
- Post-testing of teachers, classrooms and children in May 2006
- Receipt of post-test report on results of teacher, classroom, and child assessments as explained by a TA Specialist in July 2006

¹ A pre-test was not conducted in Year 1 for intervention or control teachers.

² This activity can be construed as a service to the teachers with the potential to impact Year 1 outcomes in that teachers received feedback information upon which they may have altered their teaching behavior and practices.

Describe the size of the sampling frame, and how the study's sample was selected. Provide the number of centers, classrooms, teachers, and/or children selected for each group in the study.

Our Year 2 pool of eligible teachers (from which PERKS teachers were chosen) was identified according to these procedures:

1. Early Learning Coalitions (ELCs) volunteered for participation in the project. Twelve ELCs representing 18 counties participated.
2. In order to comply with the ECEPD requirement to serve teachers in "high-need communities," we identified all eligible zip codes in the counties of each participating ELC using free- and reduced-meal program data.
3. TA Specialists from each ELC announced the project to all zip code-eligible VPK programs operating in child care centers in their counties. VPK teachers volunteered for participation in the project. Florida statutes permit a teacher-child ratio of 10 children per teacher or 18 children per teacher/teacher assistant dyad; therefore, each teacher represents a maximum of 10 children.

Final Year 2 (2007 Reporting Period) participation [defined in terms of all teachers who took part in all phases of the study including pretesting and posttesting] is shown in the table below.

PERKS INTERVENTION GROUPS				
2007 Reporting Period	COLLEGE COURSES + MONTHLY PHONE CALLS	COLLEGE COURSES + MONTHLY VISITS	COLLEGE COURSES + WEEKLY VISITS	COMPARISON [YEAR 1 CONTROL]
# Centers N = 141	51	41	49	13
# Teachers N = 181	61	54	66	20
# Children N = ~ 1144	~ 387	~ 334	~ 423	~ 101

Describe all teacher and student outcome measures used in the study (GPRA and non-GPRA), including evidence that the instruments used are reliable and valid.

TEACHER/CLASSROOM MEASURES

- Early Language and Literacy Classroom Observation Toolkit, Research Edition (ELLCO; Smith & Dickinson, 2002)

[GPRA Measure]

- *Early Childhood Environment Rating Scale, Revised Edition (ECERS-R; Harms, Clifford, & Cryer, 2005) or Family Day Care Rating Scale (FDCRS; Harms & Clifford, 1989)*, as appropriate to the setting. The *ECERS-R* is a 43-item rating scale and the *FDCRS* is a 32-item rating scale for preschool through kindergarten settings that provides an environmental assessment of seven areas: space and furnishings, personal care routines, language/reasoning, activities, interaction, program structure, parents and staff. Ratings are based on observation and interview during a 2- to 3-hour classroom visit. Reliability measures indicate that percentage of agreement across all indicators is 86%. Subscale internal consistencies range from .71 to .88, with .92 internal consistency for the total scale. Quality, as measured by the *ECERS-R*, has demonstrated predictive validity in relation to children's language and social/behavioral development. This tool generally sets the standard for monitoring early childhood program quality.
- *Supports for Early Literacy Assessment (SELA; Smith, Davidson, Weisenfeld, & Katsaros, 2001)*. The SELA is a research-based classroom observation and interview assessment that identifies a classroom's strengths and weaknesses in supporting children's early literacy development. Its subscales include classroom learning activities, features of the environment, and teacher-child interactions that promote children's oral language skills, phonological sensitivity, print awareness and letter knowledge. High ratings on SELA items reflect literacy supports that are developmentally appropriate for preschool-aged children. Reliability of this scale is excellent, with internal consistency of .92 as measured by Cronbach's alpha. Criterion validity of .75 between the SELA and ECERS-R has been reported.
- *Arnett Scale of Caregiver Behavior (Arnett, 1989)*. The 35-item version of the *Arnett* used in this study was an adaptation by Keystone University Research Corporation that included nine cognitive stimulation items not found in the original 26-item rating scale. Trained observers completed the scale immediately following a three-hour classroom visit. This scale measures the emotional tone, discipline style, and responsiveness of caregivers. Items are organized into five subscales: (1) positive interaction (warm, enthusiastic, and developmentally appropriate behavior), (2) punitiveness (hostility, harshness, and use of threat), (3) detachment (uninvolvement and disinterest), (4) permissiveness, and (5) cognitive stimulation. Reliability of this scale is excellent, with internal consistency ranging from .81 to .98. Concurrent validity with other established measures generally exceeds .50. Although no specific norms are available, this measure is widely used by researchers including those conducting the national Early Head Start evaluation.

CHILD OUTCOME MEASURES

- Peabody Picture Vocabulary Test-3rd Edition (PPVT-III; Dunn & Dunn, 1997)

[GPRA Measure]

- Phonological Awareness Literacy Screening-Prekindergarten (PALS-PreK; Invernizzi, Sullivan, Meier, & Swank, 2004): Upper Case Alphabet Knowledge Subtest

[GPRA Measure]

- *Expressive One Word Picture Vocabulary Test-2000 (EOWPVT-2000)* (Brownell, 2000) was used to individually assess how children process language as well as other key elements of verbal expression. Children named objects, actions, and concepts pictured in illustrations. National norms are based on a 1999 sample representative of the U.S. population and are stratified for age, geographic region, ethnicity, parent education, community size, and gender. Internal consistency reliability ranges from .93 to .95. Test-retest reliability ranges from .88 to .89. Median concurrent validity with established language measures is .75 and .88 for verbal cognitive abilities.
- *Developing Skills Checklist-Auditory Processing Subtest (DSC)* (CTB-McGraw Hill, 1990). The *DSC* is an individually-administered, criterion-referenced test designed to measure skills and behaviors that children typically develop between prekindergarten and the end of kindergarten. KR20 coefficients for the auditory scale range from .84 to .86. Inter-correlations of the scales within the *DSC* demonstrate adequate construct validity. Concurrent validity for this subscale ranges from .41 to .57. Normative scores provided for the *DSC* are useful for evaluation of preschool and kindergarten programs.
- *Devereux Early Childhood Assessment (DECA)* (LeBuffe & Naglieri, 1999). The *DECA* assesses strength of a child's protective factors based on three scales: Initiative, Self-Control, and Attachment. A range of challenging and problem behaviors seen in some preschool children is measured by the Behavioral Concerns scale. Two stratified, national standardization samples represent the target population of U.S. preschoolers. One quarter of the standardization sample came from families of low socioeconomic status, and all major ethnic groups were represented. Internal consistency reliability ranges from .90 to .94 for teacher raters. Acceptable content validity and criterion-related evidence is provided for the *DECA*. Teacher raters were used in this study.

EVALUATION IMPLEMENTATION

For experimental and quasi-experimental evaluations, compare the characteristics between the treatment and control/comparison groups to show that there were no systematic differences at baseline. If there were systematic differences, describe those differences and how they were addressed in the analysis.

Pretest differences were found between intervention and control groups for some child outcome measures. These differences are noted in the tables below. In general, children in the comparison group (Year 1 control) initially performed better than PERKS children on language and literacy measures. PERKS children initially performed better on social/behavioral measures compared to Year 1 control children. These baseline differences were addressed through multiple analysis of covariance with pretest scores serving as the covariate. Although no significant pretest differences between intervention and control groups were found on teacher/classroom measures, for clarity of interpretation these measures also were assessed by multiple analysis of covariance with pretest scores serving as the covariate.

TEACHER/CLASSROOM MEASURES		PRETEST		<i>p</i>
		<i>M</i>	<i>SD</i>	
ECERS-R	Control	4.20	1.22	$F(1, 194) = 0.08, p = .783$
TOTAL	Intervention	4.13	1.10	
ELLCO	Control	22.90	4.78	$F(1, 196) = 0.27, p = .604$
LITERACY ENVIRONMENT	Intervention	23.73	6.96	
CLASSROOM OBSERVATION & TEACHER INTERVIEW	Control	2.68	0.72	$F(1, 196) = 1.16, p = .282$
	Intervention	2.86	0.69	
LITERACY ACTIVITIES	Control	7.35	3.60	$F(1, 196) = 1.51, p = .221$
	Intervention	8.16	2.71	
SELA	Control	3.26	0.85	$F(1, 196) = 0.44, p = .508$
TOTAL	Intervention	3.39	0.84	
ARNETT	Control	3.10	0.51	$F(1, 194) = 0.21, p = .884$
POSITIVE	Intervention	3.13	0.62	
PUNITIVENESS	Control	1.31	0.28	$F(1, 195) = 0.08, p = .778$
	Intervention	1.34	0.44	
PERMISSIVENESS	Control	1.80	0.29	$F(1, 193) = 0.23, p = .633$
	Intervention	1.85	0.43	
DETACHMENT	Control	1.22	0.33	$F(1, 194) = 0.06, p = .800$
	Intervention	1.25	0.37	
COGNITIVE STIMULATION	Control	2.58	0.74	$F(1, 192) = 0.66, p = .416$
	Intervention	2.72	0.71	

CHILD OUTCOME MEASURES		PRETEST		<i>p</i>
		<i>M</i>	<i>SD</i>	
PPVT	Control	94.76	14.64	$F(1, 1247) = 11.03, p = .001$
	Intervention	88.90	17.20	
EOWPVT	Control	94.76	14.64	$F(1, 1246) = 0.95, p = .329$
	Intervention	88.90	17.20	

CHILD OUTCOME MEASURES		PRETEST		<i>p</i>
		<i>M</i>	<i>SD</i>	
PALS-PreK	Control	13.92	10.26	$F(1, 1258) = 2.56, p = .110$
	Intervention	12.25	10.06	
DSC-Auditory	Control	39.58	13.81	$F(1, 1241) = 7.14, p = .008$
	Intervention	35.11	16.23	
DECA-Protective (high scores desirable)	Control	52.46	8.52	$F(1, 1210) = 0.78, p = .378$
	Intervention	53.50	10.02	
DECA-Behavior (low scores desirable)	Control	53.42	9.07	$F(1, 1206) = 12.84, p = .000$
	Intervention	49.31	10.39	

Discuss the timing and procedures used for data collection. For experimental and quasi-experimental evaluations, discuss whether the data collection for the treatment and control/comparison groups used the same procedures and was conducted at the same (relative) times.

All assessments were administered by trained assessors hired by the Children's Forum. Training was held in August/September 2006. Upon completion, assessments were delivered to the University of North Florida for scoring and data entry by trained research assistants. All quantitative data were analyzed by Dr. Rebecca Marcon at the University of North Florida using *SPSS (Statistical Package for the Social Sciences)*.

As explained earlier, 2006-07 data were collected at two points: (1) baseline measurement/pretest at the beginning of the school-year (September) and (2) posttest measurement in late spring (May) at the end of the year:

- Classroom Assessors made 3-hour visits to systematically collect observational data on each VPK teacher/classroom in the 2007 Reporting Period.
- Child Assessors administered outcome measures on-site in a counter-balanced order to children in the 2007 Reporting Period.
- Teachers completed the Devereux Early Childhood Assessment (DECA) rating scale.

Classroom and Child Assessors were not present in classrooms on the same day. Assessors were blind to each teacher's intervention group assignment. To the maximum extent possible, the same Assessors were assigned to classrooms and children for both pre- and post-assessment.

Provide attrition rates (percentage of teachers and children who participated in the pre-tests but not post-tests) and response rates (the percentage of teachers and children for whom there are data for each instrument).

2007 Reporting Period	ATTRITION RATE (# TEACHERS VOLUNTEERED – # COMPLETED STUDY) / # VOLUNTEERED
Teachers	(213 – 181) / 213 = 15%

2007 Reporting Period	ATTRITION RATE (M# CHILDREN PRETESTED IN CLASSES OF TEACHERS WHO VOLUNTEERED – M# CHILDREN PRETESTED IN CLASSES OF TEACHERS WHO COMPLETED STUDY) / M# CHILDREN PRETESTED IN CLASSES OF TEACHERS WHO VOLUNTEERED
Children	(1738 – 1394) / 1738 = ~20%

2007 Reporting Period	Instruments	Response Rate # POSTTEST / # PRETEST
	TEACHERS	FOR TEACHERS WHO COMPLETED STUDY
	Early Language and Literacy Classroom Observation, Research Edition (ELLCO)	178/181 = 98%
	Early Childhood Environment Rating Scale-Revised (ECERS-R) Family Day Care Rating Scale (FDCRS)	176/179 = 98% 2/2 = 100%
	Supports for Early Literacy Assessment (SELA)	178/181 = 98%
	Arnett Caregiver Interaction Scale	177/181 = 98%

CHILDREN	FOR CHILDREN WHOSE TEACHERS COMPLETED STUDY
Peabody Picture Vocabulary Test-3 rd Edition (PPVT-III)	1148/1433 = 80%
Phonological Awareness and Literacy Screening-Prekindergarten (PALS-PreK): Upper Case Alphabet Knowledge Subtest	1159/1442 = 80%
Expressive One-Word Picture Vocabulary Test (EOWPVT)	1147/1429 = 80%
Developing Skills Checklist (DSC), Auditory Subtest	1143/1429 = 80%
Devereux Early Childhood Assessment (DECA): Protective Factors Behavior Concerns	1136/1315 = 86% 1132/1314 = 86%

Describe how the data were analyzed for each outcome. Be specific about the statistical techniques used. For regression analyses, describe the specified model including covariates. For hierarchical linear models (HLM) also identify the levels. Provide the type of statistical test used to determine significance, and describe how effect sizes were calculated.

Preliminary answers for each research question have been determined for Year 2. All effect sizes were calculated using Cohen’s *d*. Analysis is ongoing, with additional analyses planned to examine plausibility of alternative explanations for results. Further examination of all PERKS data (Year 1 and Year 2 combined) is planned.

Research Question 1: What are the effects of varying levels of TA intensity paired with early childhood coursework on teacher knowledge?

Change in teacher knowledge: Final Exam

Across PERKS interventions, pretest and final exam scores for each course were analyzed using t-tests to assess change in teacher knowledge as a result of coursework. Difference between intervention and comparison groups in knowledge of curriculum was assessed using analysis of variance.

Change in teacher knowledge: Course Grades

For each course, differences between interventions (varying levels of TA intensity) were examined using analysis of variance. Correlations between course grades and final exam scores were used to assess correspondence between knowledge measures.

Research Question 2: What are the effects of varying levels of TA intensity paired with early childhood coursework on the quality of teachers’ classroom environments?

Data were analyzed using multiple analysis of covariance with pretest serving as the covariate.

Research Question 3: What are the effects of varying levels of TA intensity paired with early childhood coursework on child outcomes?

Data were analyzed using multiple analysis of covariance with pretest serving as the covariate.

Describe any problems in implementing the evaluation design and lessons learned and how they were addressed.

Issues of alignment, implementation fidelity, and attrition were identified in Year 1 and addressed prior to conducting Year 2 intervention.

Year 2 (2006-2007)

Problem: In Year 2, despite increased attention to sound implementation procedures, we continued to experience some difficulty with delivery of *Adequate* TA to all teachers.

Lesson Learned: Through examination of contact notes written by TA Specialists (to record their activities during each contact) and discussions with TA Specialists, we learned that difficulties in achieving *Adequate* TA for some teachers often fell more on the side of teachers than TA Specialists. A segment of PERKS teachers became dissatisfied with their participation in the project for a number of reasons, including:

- Finding the role of college student to be more demanding than anticipated
- Feeling overwhelmed by life circumstances, with resulting difficulty integrating increased expectations into their classroom routines
- Not being supported by their center directors in implementing new ideas and therefore eventually giving up

Through examination of the “Relationship and Strategies Scale” (implementation fidelity measure), we also learned that the first of our 10 mentoring/TA strategies (relationship-building) was crucial. Teachers who rated this area poorly tended to report less adequate TA than did teachers who had a stronger relationship with their technical assistance specialist.

As a result of incongruence between ideal expectations of the program versus its real-life demands and the nature of personal relationships, some teachers rated the TA they received as not meeting their needs. We learned that what we may see as well-intended “help” is not always perceived by the recipient in the same way.

EVALUATION FINDINGS

Statistics used to answer each research question (in relation to comparison group that did not receive PERKS intervention) are presented in the following tables.

Research Question 1: What are the effects of varying levels of TA intensity paired with early childhood coursework on teacher knowledge?

The following table shows change in teacher knowledge of content covered in two early childhood courses. Differences between final exam scores (non-adjusted) of intervention and control groups are reported.

TA intensity: P = monthly phone, M = monthly visit, W = weekly visit, C = control

Course	TA	n	PRETEST EXAM		FINAL EXAM		vs Control	Cohen's	GRADE ^d	
			M	SD	M	SD	p	d	M	SD
Curriculum ^a	P	61	82.13	8.72	90.77	9.84	.000	1.17	3.57	1.01
	M	54	80.00	13.54	94.04	8.91	.000	1.55	3.67	0.75
	W	66	78.53	11.00	92.39	5.81	.000	1.36	3.62	0.78
	C	20	---- ^c	----	80.78	8.76				
Assessment ^b	P	61	62.77	10.24	86.08	14.05	.000	1.38	3.45	1.02
	M	53	62.43	12.26	90.40	11.75	.000	1.73	3.60	0.99
	W	66	61.47	10.40	86.17	13.52	.000	1.38	3.73	0.65
	C	20	65.55	13.37	69.40	13.29				

^a Intervention teachers increased significantly in knowledge of curriculum from pretest to final exam, $p = .000$. On the final exam, monthly > phone, $p = .037$. ^b Intervention teachers increased significantly in knowledge of assessment from pretest to final exam, $p = .000$. On the final exam, monthly > phone ($p = .079$) and monthly > weekly ($p = .080$) ^c In Year 1 no pretest of curriculum knowledge was given, therefore, no pretest control data are available for comparison. No significant differences, however, were found in knowledge of assessment at pretest for Year 2 intervention and Year 1 control groups. ^d No significant differences between intervention groups were found in course grades. Curriculum grades: $N = 181$. Assessment grades: $N = 176$. Correlations between course grade and final exam score were .59 and .55, respectively for Curriculum and Assessment courses ($p = .000$).

Research Question 2: What are the effects of varying levels of TA intensity paired with early childhood coursework on the quality of teachers' classroom environments?

The following table shows results for total scale scores. Although not shown, analyses of subscale scores helped to further interpret areas of difference within each measure. Where it is especially useful for understanding the project, an occasional subscale is included below.

TA intensity: P = monthly phone, M = monthly visit, W = weekly visit, C = control

MEASURE	TA	n	ADJUSTED POSTTEST		Overall	vs Control	Cohen's	vs other TA	Cohen's
			M	SD	p	p	d	p	d
ELLCO Literacy Environment Checklist	P	60	27.15	7.92	.000				
	M	53	27.53	6.22					
	W	65	29.40	6.50					
	C	20	22.84	8.37					

Classroom Observation and Teacher Interview	P	60	3.15	0.67	.070	.032	.400			
	M	53	3.21	0.55		.010	.486			
	W	65	3.18	0.57		.018	.443			
	C	20	2.87	0.80						
	Literacy Activities Rating Scale					.739				
		P	60	8.82	2.36		> .10			
		M	53	9.02	2.67		> .10			
		W	65	8.48	2.90		> .10			
C	20	8.74	3.15							
ECERS-R										
TOTAL										
	P	60	4.42	1.34	.152	> .10				
	M	52	4.59	1.03		.052	.336	> W .063	.23	
	W	64	4.28	1.06		> .10				
	C	20	4.13	1.59						
Program Structure										
	P	60	5.12	1.52	.094	> .10				
	M	52	5.35	1.49		.049	.405	> W .032	.32	
	W	64	4.82	1.51		> .10				
	C	20	4.67	1.83						
SELA										
TOTAL										
	P	60	3.83	0.71	.061	.017	.416			
	M	53	3.87	0.68		.009	.512			
	W	65	3.80	0.72		.025	.429			
	C	20	3.44	0.97						

Literate Environment	P	60	3.61	0.91	.083	> .10				
	M	53	3.74	0.83			.028	.392		
	W	65	3.78	0.88			.015	.470		
	C	20	3.30	1.16						
Language Development					.017					
	P	60	3.97	0.84			.014	.500		
	M	53	4.10	0.80			.002	.633	> W .074	.26
	W	65	3.85	0.78			.062	.378		
Print Concepts					.063					
	C	20	3.48	1.14						
	P	60	3.95	0.88			.007	.611		
	M	53	3.81	1.03			.037	.481		
Phonological Awareness					.066					
	W	65	3.76	0.99			.048	.435		
	P	60	3.79	1.06			.008	.654		
	M	53	3.64	1.00			.038	.528		
Letters and Words					.015					
	W	65	3.67	1.13			.027	.556		
	P	60	3.90	0.86			.002	.724		
	M	53	3.77	0.93			.011	.592		
ARNETT Positive					.352					
	W	65	3.83	0.93			.004	.653		
	P	60	3.24	0.67			> .10			
	C	20	3.19	1.06						

Punitive	M	53	3.29	0.52	.197	> .10			
	W	64	3.13	0.55		> .10			
	C	19	3.14	0.70					
[low desirable]	P	60	1.33	0.44	.135	> .10			
	M	53	1.28	0.33		.036			.442
	W	64	1.30	0.29		.062			.395
	C	20	1.47	0.50					
Permissive					.719		> M .088	.24	
[low desirable]	P	60	1.90	0.44		> .10			
	M	53	1.77	0.33		.035			.426
	W	64	1.90	0.40		> .10			
Detached					.371				
[low desirable]	P	60	1.21	0.39		> .10			
	M	53	1.15	0.28		> .10			
	W	63	1.19	0.25		> .10			
Cognitive Stimulation									
	C	20	1.22	0.37					
	P	60	2.81	0.78		> .10			
	M	53	2.90	0.67		> .10			
	W	63	2.74	0.68	> .10				
	C	20	2.69	0.85					

Research Question 3: What are the effects of varying levels of TA intensity paired with early childhood coursework on child outcomes?

The following table shows results for total scale scores. Although not shown, analyses of subscale scores helped to further interpret areas of difference within each measure. Where it is especially useful for understanding the project, an occasional subscale is included below.

TA intensity: P = monthly phone, M = monthly visit, W = weekly visit, C = control

MEASURE	TA	n	ADJUSTED POSTTEST		Overall p	vs Control p	Cohen's d	vs other TA p	Cohen's d
			M	SD					
PPVT Receptive Language	P	394	93.98	14.40	.030	> .10	.180	>P .011 // >W .034	.13 // .11
	M	336	95.93	14.71		.023			
	W	418	94.31	16.03		> .10			
	C	101	93.25	14.63					
EOWPVT Expressive Language	P	394	89.81	14.58	.119	> .10	.150	> P .072	
	M	332	91.09	15.19		.032			
	W	421	90.28	16.28		> .10			
	C	100	88.75	15.76					
PALS-PreK Upper-Case Alphabet Knowledge	P	395	19.71	8.14	.042	> .10	.158	> W .014	.13
	M	339	19.60	7.94		> .10		> W .036	.12
	W	425	18.67	8.83		.060		> W .060	.158
	C	101	19.94	7.74					
DSC- Auditory Phonological Awareness	P	390	39.29	15.33	.079	> .10		> P .012	.16
	M	332	40.50	14.11		> .10			
	W	421	41.84	16.39		> .10			
	C	100	39.64	15.51					
DECA TOTAL Protective Factors	P	376	55.09	11.11	.051	> .10	.203	> P .011	.03
	M	334	56.78	10.18		.064			
	W	426	55.82	10.64		> .10			
	C	76	54.71	9.66					

Initiative					.045				
	P	377	55.74	10.62		> .10			
	M	334	57.37	9.78		.060	.201	> P .011	.16
	W	426	56.67	10.18		> .10			
	C	78	55.37	9.67					
Attachment					.005				
	P	377	52.98	10.64		> .10			
	M	334	55.38	9.94		.093	.188	> P .000 / > W .084	.24 // .19
	W	427	54.24	10.74		> .10		> P .050	.12
	C	79	53.48	9.60					
TOTAL Behavior Concerns					.082				
	P	374	49.15	11.01		> .10		> M .014	.16
[low desirable]	M	332	47.61	10.22		> .10			
	W	426	48.86	10.35		> .10		> M .041	.13
	C	76	48.71	8.75					

State what the evaluation results say about the intervention's effectiveness and how success was defined.

The three research questions represent a three-prong approach to evaluation.

1. Through college coursework combined with mentoring, PERKS teachers gained knowledge about early childhood curriculum and assessment to a significantly greater extent than did the comparison group of teachers who received no college or TA services. PERKS teachers who received monthly TA visits appear to have gained more knowledge than other intervention teachers.

2. PERKS teachers were able, with technical assistance, to apply their new knowledge to the classroom. Intensity of TA intervention was an important factor in effecting quality of classroom environment. Following intervention the overall classroom quality was generally higher for teachers who had monthly TA visits compared to control teachers or those who had received weekly visits. Monthly TA visits appear to have most notably enhanced quality of program structure. Following intervention, the quality of the literacy environment was significantly higher in PERKS classrooms compared to control classrooms. Weekly TA visits appear to have made the greatest impact in quality of literacy resources (ELLCO). Monthly TA visits appear to have provided greater support for children's language development (SELA). Monthly TA visits may also have altered teacher-child relationships, with these PERKS teachers being less punitive and less permissive following intervention compared to control teachers.

3. Children in PERKS classrooms benefited from services provided to their teachers. By the end of VPK, children whose teachers had monthly TA visits were higher in receptive language compared to children whose teachers received other PERKS assistance (weekly or phone) or no services (control). Monthly TA visits appear to also have enhanced children's expressive language compared to control children and possibly those in classes where teachers received monthly phone intervention. Although PERKS had a notable impact on children's language development, its impact on early literacy skills was not significantly different from end of the year findings for control children. Finally, the behavioral component of children's school readiness was positively affected by PERKS. Again, monthly TA visits appear to have had a greater impact by fostering positive behaviors in children. When teachers received monthly TA visits, children's initiative was seen as being greater compared to control and monthly phone TA. Their attachment was also stronger, and compared to other PERKS interventions, behavioral concerns appeared to be lower among children whose teachers received monthly TA visits.

Describe factors and circumstances that may account for the intervention's effect (or lack thereof). For example, if the comparison group was exposed to similar services provided to the treatment that may diminish the observed differences between the groups.

This component of the evaluation is not yet complete. Further analyses are needed to test possible explanations for our findings and assess plausibility of alternatives.

If experimental or quasi-experimental evaluation designs were not implemented, provide statistics for other evaluation designs.

Not applicable; an experimental/quasi-experimental design was used.

ADDENDUM

The Department requests that all ECEPD projects provide information derived from the most recent annual performance report to enable us to calculate an ECEPD efficiency measure for the program. The ECEPD efficiency measure is –

The average cost per participant teacher who achieves year-to-year gains on the ELLCO Literacy Checklist.

Grantees need to provide the following additional information in order to respond fully to this measure. (Grantees in the 2006 cohort should respond to the last two bullets below.)

- ***The number of teachers who participated in the project in both reporting year 2006 and reporting year 2007***
- ***The number of teachers who participated in the project in both reporting years 2006 and 2007 with scores on the ELLCO Literacy Checklist both years***
- ***The number of teachers whose scores on the ELLCO Literacy Checklist increased from reporting period 2006 to reporting period 2007***

The Children’s Forum is a 2055 grantee; however, Florida PERKS served separate cohorts of teachers respectively in reporting period 2006 and in reporting period 2007 per our approved application. Consequently, we are responding to the questions below:

If the same teachers did not participate in the project in reporting year 2006 and reporting year 2007 please provide the following:

- ***The number of teachers with pre-test and post-test scores on the ELLCO Literacy Checklist in reporting year 2007***
- ***The number of teachers whose scores on the ELLCO Literacy Checklist increased from the pre-test to the post-test in reporting year 2007***

The responses to both questions are contained in the table below. We believe that the request for data on the ***ELLCO Literacy Checklist*** refers to the sub-section “Literacy Environment Checklist” highlighted in the table, but we have also included data for the other 2 sub-sections (the Observation/Interview and the Rating Scale) as well.

ELLCO: Reporting Year 2007	# TEACHERS WITH PRE & POST SCORES	# TEACHERS WITH INCREASED SCORES	PERCENT SHOWING INCREASE
LITERACY ENVIRONMENT CHECKLIST			
TOTAL	178	127	71%
CLASSROOM OBSERVATION AND TEACHER INTERVIEW			
TOTAL	178	133	75%
LITERACY ACTIVITIES RATING SCALE			
TOTAL	178	93	52%