UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

EVALUATION OF A LABORATORY PRESCHOOL:

UTILIZING A THEORY APPROACH LOGIC MODEL

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

LISA ANN LANGENBACH MONROE
Norman, Oklahoma
2009

EVALUATION OF A LABORATORY PRESCHOOL:
UTILIZING A THEORY APPROACH LOGIC MODEL

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

BY

_____
Dr. Gregg Garn, Chair

_____
Dr. Courtney Vaughn

_____
Dr. Jeffrey Maiden

_____
Dr. Joan Smith

_____
Dr. Diane Horm

Acknowledgements

I would like to express thanks and appreciation to my committee for their guidance and support during my research. I am especially grateful to Dr. Gregg Garn, my chair, for his patience and encouragement.

I am most thankful and appreciative for the support of my family. They never doubted my abilities to complete this program and they provided unending support and encouragement.

Table of Contents

Appendix

List of Tables

List of Figures

Abstract

Utilization-focused, process evaluations of university-based laboratory preschools in their associated role with teacher preparation programs are rare in current literature. The purpose of such studies is for administrators and instructors to acquire knowledge that would improve the instruction for students in teacher education programs. This paper describes a self-study evaluation undergone by a university laboratory preschool. The author used a theory approach logic model to illustrate the connections between educational theories and the undergraduate instructional activities designed to facilitate learning. Undergraduate students and laboratory school instructors were surveyed and interviewed. The data collected and the process of the evaluation itself were informative to instructors. Instructional activities were modified and the instructors continue to systematically reflect and improve upon their practice with the students in the teacher education program.

EVALUATION OF A LABORATORY PRESCHOOL: UTLIZING A THEORY APPROACH LOGIC MODEL

Evaluation in education is a necessity and a priority that few would dispute (Simons, 2002). Some even believe that evaluation is of greater concern today than at any other time in history because of the massive amounts and complexity of knowledge educators are trying to transmit (Payne, 1994). This is true before even considering more recent developments, such as the implementation and enforcement of No Child Left Behind policies. The questions surrounding educational evaluation do not center upon its significance, rather, they are more accurately focused on what types of evaluation are necessary, and for what purpose (Simons, 2002).

Evaluation for improvement of delivery of instruction and student learning is a critical component of educational programs and consists of an examination of program processes and/or outcomes (Popham, 1993; Ritchie, 2007; Rossi, Lipsey, & Freeman, 2004). It is critical in the field of education because of the political and public attention that education receives in the United States. The type of educational program being examined will influence what kind of evaluation is warranted and for what purpose. Educational preparation programs are important to study because of their dual role in education, educating current students and teaching them the art of evaluation and reflection, as they become future educators. Evaluation is especially relevant in university laboratory schools because they are training sites for future educators and because they have proximity and a unique relationship to university preparation programs. They should

be of the highest quality and represent best practices in all aspects of effective teaching and learning.

Early childhood lab schools (also referred to in this paper as *laboratory preschools*, *lab schools*, and *labs*) exist on university campuses across the country. University laboratory preschools are utilized in a range of capacities (Clawson, 2003; McBride, 1996; Stremmel, Hill & Fu, 2003). Generally, their purpose is to present an ideal teaching environment for students in a teacher preparation program, provide students hands-on experience working with children, and serve as an outlet for research that examines various educational, social, or child development issues (McBride, 1996). These programs have played an essential role in promoting understanding of various issues in early childhood education and child development.

One function of lab preschools is to provide exemplary early childhood education programs for young children. But, the particular relevance in a university setting is that a lab school also serves as a field experience site for students in the education discipline or other areas of study dealing with children and families. An early childhood lab school can provide a convenient location for research that investigates issues related to different aspects of child development and early childhood education. Evaluation is especially relevant in university lab schools because they are training sites for future educators and should be of the highest quality and represent best practices in all aspects of effective teaching and learning.

In the past, typical evaluations in education were quantitative, measured student performance, and employed experimental designs. Those parameters were considered

narrow by some, and as unjust measures of what typically can be very complex educational environments (Payne, 1994; Popham, 1993; Simons, 2002; Wolf, 1990). Another concern, noted by Payne, was that experimental designs did not provide enough detailed information to properly inform program decisions.

Evaluations that examine how programs are implemented, as opposed to the outcomes associated with programs, are called process, or implementation evaluations (Patton, 1990; Rossi, et al., 2004; Wolf, 1990). Wolf believed that collecting information regarding how programs are carried out has not received enough attention. He felt these implementation data were vital because they provided insight and details into how or why objectives may or may not have been met. It is this type of information that provides guidance for improvements. Utilization-focused evaluations are designed specifically with the intent of using the data to inform decisions about a program.

Popular evaluation texts discuss the use of logic models, most frequently utilized by social service agencies (Patton, 2008; Rossi, et al., 2004). A logic model is usually designed as a visual representation (although it can also be narrative) that helps organize program development, implementation and/or evaluation. When used as an assessment tool, it helps focus on the critical elements of a program, which assists in identifying evaluation questions that should be asked (McLaughlin & Jordan, 2004). It can also serve to identify causal links between program activities and outcomes (Brun, 2007; Rossi, et al., 2004). Theory-based approaches to evaluation are especially relevant in programs that are purposefully developed and based upon theory (Weiss, 1997). The theoretical model is particularly useful in a lab school evaluation because it is a field site

where students are working in an environment specifically designed to bridge the gap between theory and practice (Dewey, 1976). The Kellogg Foundation, which funds several social service programs through United Way, distributes literature to its providers with details on the development and use of three types of logic models (2004). The *theory approach* model is designed to align the theory or theories behind a particular practice, intervention strategy or activities that are intended to cause change. Simply put, the theory of how or why your program will work is the core of this type of logic model.

Logic models vary in structure and purpose, which makes them particularly useful because they can be created and modified to accommodate any program. Standard features of a logic model are inputs, activities, outputs, and outcomes. At a lab school, inputs might be students, the environment, curriculum, teachers; activities might include learning practices of the students, for example, observing mentor teachers and hands-on experiences; outputs are the same as activities but depict how many times the activities took place; and outcomes might include successful attainment of course objectives.

There is a dearth of research related to the topic of evaluation in university laboratory preschool settings. A search for studies related to evaluations of lab schools yielded only one that was published (Clawson, 1999). This lab school evaluation chronicled the self-study and transformation of a nursery school into a lab school, and documented its quest to align course content with lab practice. It is unfortunate that more laboratory schools have not participated in systematic evaluations (self-studies) and made public their processes and findings. Schools that are intended as models in a teacher education program should demonstrate self-examination for program improvement.

Argyris and Schön (1974) claimed that programs operate under a relevant assumption that the theories of action will yield intended consequences. It makes sense that those theories and practices should be evaluated.

The subject of laboratory school evaluations is so scant the likelihood that published evaluation processes will provide meaningful and relevant insights to inform the field is highly probable (McBride, personal communication, March 26, 2008). Many scholars make the case for evaluation to be used as a tool to improve course instruction, not just to measure its effectiveness (Clift & Imrie, 1980; Cronbach, 1963; Patton, 1987; Popham, 1993). Their argument is another rationale for laboratory preschool evaluation.

The purpose of this study was to use a theory approach logic model to evaluate the implementation of instructional activities designed to promote achievement of undergraduate student goals at a university laboratory preschool. The study focused on the experiences of three cohorts (2007, 2008, 2009) of undergraduate early childhood education students who participated in the lab program once a week for one academic year (fall and spring semesters). This hands-on lab experience was designed to assist students in achieving a variety of course objectives that contributed to their understanding of children and teaching in an early childhood context. The intent of this utilization-focused, formative, process evaluation study was to improve current practice at the lab school, with the belief that such improvements would facilitate greater learning of the teacher preparation students.

The activities at the lab school are based on various theories related to education and are intended to facilitate undergraduate student learning. These activities, obviously,

are planned to help students meet course objectives. A logic model was developed by the author (insert Figure 1) to illustrate the linkages between the theories that inform the practice at the lab school and how these practices (activities) contribute to achievement of course goals. This study focused on the implementation of instructional activities at the laboratory preschool (the activities portion of the logic model) and did not pursue a summative evaluation of student achievement. The intent was to examine the process of delivery in order to improve instructional activities and student learning. The primary research question for this study was, how can a theory approach logic model be useful in evaluating a university laboratory preschool in its mission to prepare early childhood education undergraduate students?

Program evaluation in an educational setting has several implications. One implication is its use as a tool in program enhancement. A utilization-focused evaluation provides information to program staff and administrators that can enable them to make program improvements.

Evaluations of programs, in general, can be significant to a college, especially an institution of teacher preparation. There is room for improvement in any field, and if a teacher education program routinely evaluates itself or invites evaluation from others, the knowledge gained from such studies can inform the field. Not only can summative data of particular instructional strategies or program policies be distributed, but formative data can be shared that might enlighten or provide suggestions to programs or practices of a similar nature. A college's willingness to undergo systematic evaluation and its desire to

reflect and improve, contribute to a level of professionalism and transparency that should be admired and emulated by others in the field.

Evaluation Context – University Lab School

This study involved a laboratory preschool at a Mid-southwestern university. The lab school serves approximately 50 children who are 2, 3, and 4-years-old. There are three separate part-time classes of children; they come either, two mornings, three mornings, or four afternoons a week. The lab school has a rich history in this suburban town of about 110,000 people. It has been a part of the campus since the 1930s, serving children from the local and neighboring communities, as well as children of university staff, faculty, and students.

The lab school is staffed with two full time employees, one teaches the morning sessions at the lab, and the other teaches the afternoon class. They both also teach undergraduate courses in the early childhood teacher preparation program. The College of Education is the sponsor of the lab school and the primary purpose of the school is to provide hands-on experience for students in the early childhood education program. Students learn about many aspects of teaching and child development through their work with children, observation of mentor teachers, and through discussion of their experiences with their peers and instructors. The preschool is an exemplary program that is nationally accredited by the National Association for the Education of Young Children and also recognized as the highest level of quality by the state childcare licensing organization. It provides a high quality early childhood program for children and serves

as a model field experience site for the early childhood students in the teacher preparation program.

A cohort of undergraduate early childhood education students works at the lab one morning or afternoon each week for the fall and spring semesters. While they are at the lab, they are completing various assignments for their other courses (teaching literacy lessons, completing assessments, observing children for case studies). They also act as assistant teachers, who are learning to manage small groups of children and facilitate appropriate play, learning, and problem solving among the children. The students receive one hour of credit for the time spent working at the lab preschool. There were eight goals on the syllabus that undergraduate students were expected to meet upon completion of their two semesters working at the lab school. These goals, included in Table 1, addressed many of the skills needed to be an effective early childhood teacher.

(Insert Table 1 here)

The day of their scheduled lab, undergraduate students arrive thirty minutes before the start of the preschool program and stay thirty minutes after the children leave. The initial thirty minutes (prior to children's arrival) is called a "pre-conference" session where the daily schedule is covered and comments are made regarding any special circumstances or activities for the preschool class that day. The instructor or student intern in charge leads this discussion. The pre-conference session allows students to disclose any course requirements they are trying to fulfill during that particular preschool session. Upon conclusion of the preschool session, the instructor and students discuss the events that took place in the classroom; this is referred to as the "post-conference." This

is the final thirty minutes of the students' time spent at the lab. At this time, students will share experiences (positive or negative) or observations made and they will be discussed. Often, the instructor, student interns, and other undergraduates will offer guidance or suggestions regarding specific instances or in reference to anecdotes that are shared. The discourse among students and with the instructors provides a valuable learning experience.

Instruction at the lab school (for children and college students) is grounded in theory. The theoretical framework that the school embraces guides its teaching practices for adult and child learners. For example, the constructivist theory of Piaget, which states that a person actively constructs his own knowledge as he interacts with the environment, (Flavell, 1977) is a main tenet of the preschool. The social constructivist theory of Vygotsky, and Bandura's social learning theory also provide a framework for the program. The intention is for the college students to learn by constructing their own knowledge as they interact with children and instructors at the school, as well as through observation of master teachers. The lab school is based upon these theories and is set up in such a way to facilitate those experiences. Table 2 lists the instructional activities for the undergraduate students at the lab. (Insert Table 2 here) The activities described in Table 2 were the basis for this study. I hoped to use the data collected regarding these activities to improve our practice working with the teacher education students.

Design of Study

This study was participatory because I am the Director and an instructor at the lab school. I was particularly interested in improving the program and felt the undertaking of

this study was especially relevant and meaningful to me, the lab school, the academic department, and to the field of education.

The utilization-focused evaluation was formative and included a process assessment. "Formative evaluations are conducted for the purpose of improving programs – formative often includes a process evaluation strategy that can provide depth and detail about the program's strengths and weaknesses" (Patton, 1987, p. 28). This assessment was a self-study that used a theory approach logic model design to evaluate a university laboratory preschool. See Figure 2.

(Insert Figure 2 here)

This formative evaluation study employed a mixed-methods design. Data were collected from instructors and currently enrolled undergraduate students who participated in the early childhood laboratory school, over a three-year time period. This study included several data sources: interviews, surveys, informal conversations, and a reflective journal.

I interviewed the other lab instructor and she provided her views of the various lab activities and how she felt they could be improved. I provided similar information through a reflective journal I kept during the process; my journal was also used as a data source. Throughout the course of this on-going self-study, data from the student surveys and interviews were discussed with the other instructor and we worked to change the lab activities to reflect what was reported. These discussions and changes were also part of the data for this study.

The goal was to collect frequencies of responses and gather descriptive details that might lead to specific program improvements. The first part of this study, the surveys, employed a mixed-method design approach, referred to by Creswell (2007) as the Triangulation Design, validating quantitative data model. It involved acquiring quantitative and qualitative data simultaneously, on the same instrument. This method was used on the surveys, for the first part of this study, as a way to corroborate and elaborate upon findings. The qualitative data were analyzed to provide insights and context to clarify the quantitative responses. The second part of the study, which included interviews and conversations with students and the other instructor, and reviews of my reflective journal, was purely qualitative. Patton (1987) reminded us that the purposes of quantitative and qualitative data are different, yet they are complementary.

Overall, the study employed an embedded and triangulated, multi-level design (Creswell, 2007; Tashakkori & Teddlie, 1998). The embedded feature is apparent because the qualitative data are most useful in gathering formative data, but it is embedded as well, in the quantitative data, which provided the initial rating of activity significance. The multi-level design is also evident in this study because qualitative data were collected from students and from instructors, all in an effort to "address different levels within a system…where findings are merged together into one overall interpretation" (Creswell, 2007, p. 65).

Survey Development and Data Collection

Three surveys were designed for this study (see Appendix J). The first survey asked students to rate their experiences, "activities" (in reference to each of the learning

objectives stated in the syllabus) at the lab school by level of significance. Using a 4-point number scale, they were asked to choose (1) not at all important, (2) not very important, (3) somewhat important, (4) very important. Thomas (2004) wrote that if a researcher chooses not to include a neutral point, "…there should be room to avoid a firm stance" (p. 62). The two middle categories of "not very important" and "somewhat important" address this perspective. After more consideration, I determined that a "don't know" response was not necessary because of the students' familiarity with the material. Students had the opportunity to express themselves if there were unreasonable constraints to respond or if they were not satisfied with their numerical response. They had a chance to reveal those concerns in the open-ended response questions in follow-up interviews; none did.

The second instrument asked students to rate themselves using a 5-point Likert rating scale on how they perceived their skills at the current time. A score of 1 indicated no skills evident pertaining to the course goal listed, and a 5 indicated mastery of the stated goal. Frequencies of scores on each item (course goals) were reported to give me information regarding self-reported level of skills for the various course goals. I wanted to see if there were patterns of skill ratings linked to certain goals.

The third survey consisted of open-ended response items where students could provide written responses that expanded on their ratings and might offer insights that could improve the instructional lab activities. Students were asked to provide examples of how instructional activities may or may not have contributed to their learning, and also to offer suggestions on how to improve these activities. Patton (1987) stated, "narrative

comments from open-ended questions are typically meant to provide a forum for elaborations, explanations, meanings, and new ideas" (p. 11). He also explained that process evaluation is useful for uncovering areas in which programs can be improved as well as areas that are successful and should be maintained.

The second part of the evaluation involved interviews in which participants could provide depth in their responses. The interview questions were built on survey responses and probed for further detail in the hopes of gaining deeper insight from respondents. I believed the students would be less likely to give truthful responses to me because I was their instructor and a teacher at the lab. A neutral, third party conducted the interviews, in order to encourage honest responses. Students who didn't mind participating in the interview provided contact information on a sheet of paper and put it in an envelope that was collected by a student. This envelope was given to the interviewer, and then he chose randomly from that group of names to identify people to interview. The quantitative portion of the surveys served a narrow purpose; the depth of the responses was to come from the open-ended portion of one instrument and from the interviews.

Over the course of the 3 years, I conducted multiple interviews with the other lab instructor. She provided her views of the lab activities and ideas for how they could be improved. I provided similar information through a reflective journal I kept during the process; this journal was used as a data source. Throughout the course of this on-going self-study, data from the student surveys and interviews were discussed with the other instructor and we worked to change the lab activities to reflect what was reported. These discussions and changes were also part of the data for this study.

Multiple sources and use of various data collection methods enhance triangulation and construct validity (Kidder & File, 1987; McGee-Brown, 1994; Yin, 1994). Triangulation occurs when, "distinctly different methods are aimed at measuring the same construct," (Kidder & File, 1987, p. 63). Kidder and File expanded on the use of triangulation when they further describe it as occurring when different measures produce comparable results or if different participants (data sources) give similar accounts of an event.

Data Analysis

Numerical data were entered into an SPSS database and frequency and cross tabulation reports were calculated. Narrative data were coded by simple response themes (Merriam, 1998). The themes that emerged provided insights for later interviews with students and the other instructor.

Results

There were 71 surveys completed by undergraduate early childhood education students (juniors) over a 3 year time period (2007, 2008, 2009; three student cohorts). The student participants, at the time they completed the surveys, were all completing a 1 year (two semester) field placement at the laboratory preschool. Surveys were completed during the spring semesters. Six interviews were conducted in the spring of 2007 and four in the spring of 2009. The instructor at the lab school was interviewed several times over the course of the three years. I also contributed my thoughts about the research in a reflective journal.

Students

The data from all three cohorts showed that students rated observing the instructors or interns (students who have graduated from the early childhood education program who were completing an 8 week internship to meet state certification requirements) as important in helping them achieve all of the course objectives, with the exception of taking anecdotal and running records. On the open-ended portion of the survey, several students indicated that observing instructors and interns helped them see appropriate teacher-child interactions and how to promote problem solving among the children. Some students reported negative comments regarding the behavior of the student interns; according to the students, interns would occasionally interrupt their attempts to resolve conflicts with the children. They wrote that they wanted the instructors to tell the interns to show them more respect and let them try to handle difficult situations. Data from student interviews corroborated these reports.

More than 98% of the students in each cohort reported that hands-on experience at the lab, working with the children, was either somewhat important or very important in meeting all eight course goals. The open-ended portion of the survey and the interviews confirmed these numbers; students often reported that working with the children was an obvious benefit and helped them apply what they had learned in their classes.

Table 3 revealed that out of all the instructional activities, the pre-conference session consistently received the lowest ratings of importance in 2007 and 2008; there were several responses on the open-ended portion of the survey regarding the pre-conference that explained the low rating. Typical comments addressed the lack of

structure and focus of the pre-conference session and the need for more details regarding the theories and rationales that were behind the specific activities on the schedule. In the 2007 cohort, there was not one comment that indicated the pre-conference played a significant role in achieving their objectives. Comments from students in the 2009 cohort were slightly more positive and the positive frequencies increased. Several indicated an understanding of its usefulness in preparing them and going over expectations for the day. Indeed, the 2009 cohort of students made fewer requests (than the other two cohorts) for theoretical connections. The jump in the frequency of positive ratings for goal 4, of applying theory to classroom situations, often embedded in the pre-conference, supports this change in students' perspectives.

(Insert Table 3 here)

The pre-conference session elicited the most comments from students in all three cohorts that suggested improvements. General remarks suggested keeping the session more focused and providing more discussion that would connect theories from their coursework. Two quotes that represented these generalizations were found in the open-ended part of the surveys, "I do not feel like I benefit from the conferences as much as I could if they were set up in a more organized or formal setting"; "I liked the pre-conference just so you could be aware of what was happening for the day."

After reading these responses from the 2007 cohort, the other instructor and I changed our strategies for the pre-conference session. She developed a "lab debriefing form" that students would write objectives for the day, record notes about children and

theories, and write down any questions they had from the day. I adopted this form too, but alternated using it each week with a form for recording anecdotal records.

The students in the 2009 cohort wrote that assigning a specific objective (e.g., recognizing developmental milestones, writing anecdotal records, looking for examples from their courses) for the day would be helpful. It seemed apparent that the addition of the lab debriefing form could address these changes, but it might not have been implemented consistently enough to give the students the structure they were seeking.

Students overwhelmingly reported that one-on-one time with instructors was very helpful and could be improved only if more time were scheduled for such meetings between the instructor and individual students. At least 81% of students from each cohort indicated that discussions with the instructor were either somewhat important or very important in reaching each of the eight course goals. The activity that provided the most help for students in meeting goal one (writing anecdotal and running records) was one-on-one discussions with the instructor. Quotes from students that revealed these sentiments were: "This was helpful because we didn't have to worry about what our peers thought and I felt I still feel I can be totally honest about my feelings and concerns", "This helped because it let me know what I needed to work on and what I was doing correctly." Student interviews from 2007 and 2009 corroborated these reports.

Several students reported that the post conference was very informative and provided a valuable conclusion to the day. Students expressed that they felt comfortable asking questions and discussing their experiences. Some noted that they would prefer more specific feedback regarding their behavior as opposed to more general comments

that might be shared in order to spare someone hurt feelings. They indicated they would rather be told where they were making mistakes so they could work toward improvement. Table 4 reveals the increased importance of the post-conference over the years.

(Insert Table 4 here)

Just as it did for the pre-conference activity, the percentage of positive ratings rose over the 3 years for the post-conference activity and goal 4, applying theory to classroom situations, also embedded in the post-conference (77, 70, 100, respectively).

Especially in 2007 and 2008 a few students offered suggestions on how to improve the post-conference. Some indicated a need for more discussion of theories and specific connections to ideas from other courses. A couple mentioned that it would be helpful to go over specific anecdotal or running records that were taken during the day. Some students commented that we needed to make sure parents pick their children up on time so the instructor can spend the full thirty minutes participating in the post-conference session with the students.

The students rated themselves fairly high with regard to most of the lab school goals. The goals that consistently received the lowest ratings were the ones related to theory (goals 4 and 7, all 3 years). In 2007, students were not as confident with their skills of writing anecdotal and running records (goal 1).

Instructors

The other instructor at the lab indicated that the data from the surveys and interviews were very useful. She reported that her practice for the last 2 years was directly related to what was discovered after the initial round of research in 2007. She

said it was very helpful to get direct feedback about specific aspects of the lab, not only to know what we need to work on, but also what we are doing well. The data also provided her insight into the students' perspectives. The information gained about pre and post conferences helped her see which goals were not being addressed sufficiently at those times. Overall, she felt like the evaluation was a catalyst to think more critically and systematically about strengthening her practice with the students.

After the initial collection of data in 2007, we immediately made changes in our practice. The main focus of these changes centered on structuring the pre-conference session, increasing one-on-one time with instructors, and incorporating more discussion of theories and anecdotal record taking. These actions were a direct result of data that reported concerns about those particular activities and those specific course goals.

When asked about adaptations she made based on the evaluation data, the instructor shared two major changes. The first change she made was the creation of a lab debriefing form, which helped focus the content of the pre and post conferences. On this form, students would write down a specific goal to focus on for the day, report how that goal was met, and write down any questions they had for the instructor. They also had room to report any theoretical connections they were looking for or experienced during the lab time.

The second major change the instructor reported was scheduling more one-on-one time with students, typically in the observation booth, during free-play center time for the preschool children. The large number of undergraduate students made this easier to accomplish this academic year (2008-2009); she was able to leave the classroom and

meet in the observation booth with a student because there were plenty of other students to supervise the children. She said she focused on what was most important to each student in these informal conversations. The instructor reported that scheduling of regular meeting times with students has made a big impact on the students' learning.

The whole process of the evaluation over the last 3 years has affected her practice at the lab school. She said she has experienced a "big shift" in accountability and is much more focused on goal-oriented teaching and developing the specific skills that are stated in the syllabus. She reported that after examining the goals so closely, we might want to consider changing some of them or adding more. Some goals are difficult to interpret and need to be defined in more detail, and others are difficult to measure in a laboratory setting. Overall, the instructor felt that the evaluation process was extremely beneficial for the undergraduate students and her development as a professional.

I had similar experiences with the evaluation process. It was an extremely powerful and useful undertaking. I believed one of the biggest benefits to the lab school and our whole early childhood program was our modeling of self-study and reflective practice. We were transparent in our pursuit of more effective teaching and better learning for our students, and I believed this was a great example for pre-service teachers. I also felt a new focus on accountability and goal-directed teaching; I made matrices for the other courses I taught that aligned the course objectives with class assignments and instructional activities.

The changes I made at the lab were similar to those of the other instructor. I adopted the same lab debriefing form that she created. I did not implement it as

regularly, however, I typically alternated the form each week with a form for completing anecdotal records. I felt completing both forms would address the data from the surveys: the need for a more focused pre-conference, help with applying theory, and a lower rating of success in ability to write anecdotal and running records. I also began to meet with students in the booth and to schedule mid-semester conferences with each student to discuss her progress. The other instructor and I agreed that the pre and post conferences and one-on-one discussions with us would be the easiest activities to modify to meet the students' needs. The 2009 cohort that reported more positive data relating to goal 4 (applying theory) and the pre-conference session indicated that some of our efforts might be making a difference.

After two years, I finally figured out that it would be of even greater benefit to us (instructors) if I aggregated the data by morning and afternoon session. This would show us which comments applied directly to which instructor. For this study, I did not report the separate data, but I did enter it and analyze it for discussions with the other instructor.

Discussion

This study provides evidence that a logic model can be an effective evaluation design in a lab school environment. It is impossible to project that other lab schools would experience similar success, but the success of this study suggests it is quite plausible. It is hopeful that laboratory schools would participate in more systematic evaluations (self-studies) and make public their processes and findings. Schools that are intended as models for pre-service educators should demonstrate self-examination and analysis for program improvement. It is hypocritical for lab schools (and teacher

preparation programs) to encourage young teachers to be reflective practitioners and use assessment to guide student learning if they are not participants in the evaluation process themselves. Argyris and Schön (1974) write that programs operate under a relevant assumption that the theories of action will yield intended consequences. This statement is congruent with the earlier comment by Walker (2006) addressing the need to have the results live up to predictions. It makes sense that those theories and practices should be evaluated.

The evaluation process made an impact on our program as well. Patton (2008) described "process use" as impacts made on programs from the thinking required to engage in the evaluation, not the actual findings from the evaluation. The ongoing evaluation of our teaching practices with the undergraduate students at the lab preschool will continue to evolve. The data gathered was helpful and insightful; the process of collecting, analyzing, and discussing how we can address issues, was a professional development experience and gave us a renewed sense of commitment and value to our work. The transparency of the model and our willingness to share this experience provided an opportunity to demonstrate ongoing reflective practice to our pre-service teachers. The students were also aware of changes we made throughout the year that reflected their responses to our evaluation. This was evidence to them that we valued their opinion and feedback, and again, provided a model to them of what we would expect these students to do in their future classrooms.

The evaluation itself was a catalyst for us to employ more systematic evaluations of students and record data over time to track any changes in results due to changes in

practice. The logic model proved a useful tool (that was easily constructed) to show the linkages between the program theory, the activities intended and provided, and the projected outcomes.

Conclusion

As stated earlier, this was a utilization-focused evaluation. The use of the logic model provided a strong framework for causal linkages to be predicted and tested. The process of creating the model was a catalyst for analysis and reflection for the lab school instructors. The total program evaluation experience exemplified Patton's (2008) definition of "intended use by intended users" (p. 37).

The flexibility of this model allows for application to programs ranging from simple to complex. Program stakeholders (or educational leaders) have the freedom to construct the model to their liking and design or choose instruments that will address the issues or activities uncovered in the model.

References

Argyris, C. & Schön, D.A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.

Brun, C. F. (2007). *A practical guide to social service evaluation.* Chicago: Lyceum Books.

Clawson, M.A. (1999). Continuity between course content and lab school practice: outcomes of a self-study of the lab school at Syracuse University. *Journal of Early Childhood Teacher Education*, 20,7-17.

Clawson, M.A. (2003). The dilemma of linking theory and research with practice and innovation in child development laboratory programs. In B. McBride & N. Barbour (Eds.), *Bridging the gap between theory, research and practice: The role of child development laboratory programs in early childhood education* (pp. 51-87). Advances in Early Education and Day Care, (12). Amsterdam: Elsevier.

Clift, J.C. & Imrie, B.W. (1980). The design of evaluation for learning. *Higher Education,* 9(1). 69-80.

Creswell, J. W. (2007*). Research design: Qualitative, quantitative, and mixed-methods approaches* (2nd ed.). Thousand Oaks: Sage.

Cronbach, L.J. (1963). Course improvement through evaluation. *Teachers College Record*, 64, 672-683.

Dewey, J. (1976). *The school and society*. J. Boydston, (Ed.). Carbondale: Southern Illinois University Press.

Flavell, J.H. (1977). *Cognitive development*. Englewood Cliffs: Prentice Hall.

Kidder, L.H. & File, M. (1987). Qualitative and quantitative methods: When stories converge. In M.M. Mark & R. L. Shotland (Eds.), *New directions for program evaluation*, a publication of the American Evaluation Association, (35). San Francisco: Jossey-Bass.

McBride, B.A. (1996). University-based child development laboratory programs: Emerging issues and challenges. *Early Childhood Education Journal,* 24(1), 17-21. *Handbook of practical program evaluation* (pp. 7-32). San Francisco: Jossey-Bass.

McGee-Brown, M.J. (1994). Qualitative and ethnographic evaluation. In D.A. Payne's *Designing educational project and program evaluations: A practical overview based on research and experience* (pp.121-141). Boston: Kluwer Academic.

McLaughlin, J., & Jordan, G. (2004). Using logic models. In J. Wholey, et. al. (Eds.), *Handbook of practical program evaluation* (pp. 7-32). San Francisco: Jossey-Bass.

Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.

Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Newbury Park: Sage.

Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park: Sage.

Patton, M. (2008). *Utilization-focused evaluation* (4th ed.). Thousand Oaks: Sage.

Payne, D.A. (1994). *Designing educational project and program evaluations: A practical overview based on research and experience*. Boston: Kluwer Academic.

Popham, W.J. (1993). *Educational evaluation* (3rd ed.). Boston: Allyn and Bacon.

Ritchie, R. (2007). School self-evaluation. In S. Kushner & N. Norris (Eds.), *Advances in Program Evaluation,* vol. 10, *Dilemmas of engagement: Evaluation and the new public management.* Amsterdam: Elsevier.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A systematic approach*. Thousand Oaks: Sage.

Simons, H. (2002). School self-evaluation in a democracy. In D. Nevo (Ed.). *School-based evaluation: An international perspective*, (pp. 17-34). Advances in Program Evaluation, vol. 8. Amsterdam: Elsevier.

Stremmel, A.J., Hill, L.T, & Fu, V.R. (2003). An inside perspective of paradigm shifts in child development laboratory programs: Bridging theory and professional preparation. In B. McBride & N. Barbour (Eds.), *Bridging the gap between theory, research and practice: The role of child development laboratory programs in early childhood education* (pp. 89-111). Advances in Early Education and Day Care, (12). Amsterdam: Elsevier.

Tashakkori, A. & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* Applied Social Research Methods Series, vol. 46. Thousand Oaks: Sage.

Thomas, S.J. (2004). *Using web and paper questionnaires for data-based decision making: From design to interpretation of the results.* Thousand Oaks: Corwin Press.

Walker, D. (2006). Toward productive design studies. In J. van den Akker, K. Gravemeijer, S. McKenney, and N. Nieveen, (Eds.), *Educational Design Research.* London: Routledge.

Weiss, C.H. (1997). Theory-based evaluation: Past, present, and future. *New Directions for Evaluation*, 76 (pp. 41- 55).

Wolf, R.M. (1990). *Evaluation in education: Foundations of competency assessment and program review*. New York: Praeger.

Yin, R.K. (1994). *Case study research: Design and methods*, 2nd ed. Thousand Oaks: Sage.

Figure 1

Logic Model of Laboratory Preschool – attached file

Table 1

Course Goals for Undergraduate Students at Laboratory Preschool

1.	Become familiar with and practice the process of writing anecdotal notes and running records.
2.	Engage in active listening and problem-solving skills with children.
3.	Use positive phrasing and model appropriate behavior to guide children.
4.	Apply theoretical concepts to classroom situations.
5.	Become a more effective observer of children.
6.	Demonstrate an ability to facilitate appropriate play situations.
7.	Demonstrate understanding of the theory building process by utilizing that process in interactions with children.
8.	Practice professional and responsible behavior while working within a team.

Table 2

Instructional Activities Studied in Laboratory Preschool Evaluation

- Observation of instructor or student intern
  - Students observe mentor teachers in lab setting
- Experience working in the lab with the children
  - Students have hands-on experience with children in preschool classroom
- Pre-conference session
  - 30 minute session prior to children's arrival – review the daily schedule and curriculum rationales
- Post-conference session
  - 30 minute session following children's departure – discuss events of the day, answer questions
- One-on-one discussions with instructor
  - Students have meetings with instructor, formally scheduled to discuss progress and answer questions and informally during the preschool session (in observation booth)

Figure 2

Depiction of Evaluation Process and Terminology

Creating the Logic Model

Evaluation tool to easily display
program theories, activities, outputs, and outcomes;
Aid in designing evaluation study

Utilization-focused evaluation

evaluation with intent to utilize results

Formative Evaluation

•evaluation intended for program improvement

Process/Implementation Evaluation

•focus of the evaluation is on program activities and implementation

Designing the study; methodology, survey development

Utilization of results; program changes for improvement of implementation

Table 3

Frequencies of Responses: Pre-conference (collapsed)

Cohort	n	Negative		Positive	
		#	%	#	%
Goal 4 – applying theory to classroom situations					
2007	22	8	37	14	64
2008	20	10	50	10	50
2009	27	1	4	26	96

Note. Percentages were rounded to nearest whole number.

Table 4

Frequencies of Responses: Post-conference (collapsed)

Cohort	n	Negative		Positive	
		#	%	#	%
Goal 4 – applying theory to classroom situations					
2007	22	5	23	17	77
2008	20	6	30	14	70
2009	27	0	0	27	100

Note. Percentages were rounded to nearest whole number.

Appendix A

Introduction

Evaluation in education is a necessity and a priority that few would dispute (Simons, 2002). Some even believe that evaluation is of greater concern today than at any other time in history because of the massive amounts and complexity of knowledge educators are trying to transmit (Payne, 1994). This is true before even considering more recent developments, such as the implementation and enforcement of No Child Left Behind policies. The questions surrounding educational evaluation do not center upon its significance, rather, they are more accurately focused on what types of evaluation are necessary, and for what purpose (Simons, 2002).

Evaluation for improvement of delivery of instruction and student learning is a critical component of educational programs and consists of an examination of program processes and/or outcomes (Popham, 1993; Ritchie, 2007; Rossi, Lipsey, & Freeman, 2004). It is especially relevant in the field of education because of the political and public attention that education receives in the United States. The type of educational program being examined will influence the kind of evaluation warranted and for what purpose. Educational preparation programs are important to study because of their dual role in education – educating current students and teaching them the art of evaluation and reflection as they become future educators. Evaluation is especially relevant in university laboratory schools because they are training sites for future educators and because of proximity and their unique relationship to university preparation programs; they should be of the highest quality and represent best practices in all aspects of effective teaching

and learning. Early childhood laboratory schools (referred to in this paper as *laboratory preschools*, *lab schools*, *lab programs*, *lab preschools*, or *labs*) exist on university campuses across the country. Generally, their purpose is to present an ideal teaching environment for students in a teacher preparation program, provide students hands-on experience working with children, and serve as an outlet for research that examines various educational, social, or child development issues (McBride, 1996).

University laboratory preschools exist across the United States and serve multiple purposes in education (Clawson, 2003; McBride, 1996; Stremmel, et al., 2003). Early childhood lab programs have played an essential role in promoting understanding of various issues in early childhood education and child development (McBride, 1996). One function of laboratory preschools is to provide exemplary early childhood education programs for young children. But, the relevance in a university setting, is that a lab school frequently also serves as a field experience site for students in the education discipline or other areas of study dealing with children and families. Lab schools are typically seen as model early childhood programs at the local, state, and national levels. An early childhood lab school can provide a convenient location for research that investigates issues related to different aspects of child development and early childhood education.

In the past, usual evaluations in education were quantitative, measured student performance, and employed experimental designs. Those parameters were considered narrow by some, and as unjust measures, of what typically can be very complex educational environments (Payne, 1994; Popham, 1993; Simons, 2002; Wolf, 1990).

Another concern, noted by Payne, was that experimental designs did not provide enough detailed information to properly inform program decisions.

Evaluations that examine how programs are implemented, as opposed to the outcomes associated with programs, are called process, or implementation evaluations (Patton, 1986; Rossi, et al., 2004; Wolf, 1990). Wolf believed that collecting information regarding how programs are carried out has not received enough attention. He wrote that implementation data were vital because they provided insight and details into how or why objectives may or may not have been met. It is this type of information that provides guidance for improvements.

Popular evaluation texts discuss the use of logic models – most frequently utilized by social service agencies (Patton, 2008; Rossi, et al., 2004). A logic model is typically a visual representation that helps organize program development, implementation and/or evaluation. (Logic models can also be narrative.) When used as an assessment tool, it helps focus on the critical elements of a program, which assists in identifying evaluation questions that should be asked (McLaughlin & Jordan, 2004). It can also serve to identify causal links between program activities and outcomes (Brun, 2007; Rossi, et al., 2004). The logic model, theory approach, is an ideal match for an educational evaluation. Theory-based approaches to evaluation are especially relevant in programs that are purposefully developed and based upon theory (Weiss, 1997). The theoretical model is particularly useful in a lab school evaluation because it is a theory-driven program and field site where students are working in an environment specifically designed to bridge the gap between theory and practice (Dewey, 1976).

Evaluations are commonplace among social service agencies because often they are subject to grant and agency requirements that typically require them as a condition of funding. Many of these agencies and programs rely heavily on a logic model to frame their evaluation (Patton, 1997; Rossi, et al., 2004). Logic models vary in structure and purpose, but that makes them particularly useful because they can be created and modified to accommodate any program. Standard features of a logic model are inputs, activities, outputs and outcomes. At a lab school, inputs would be students, the environment, curriculum, and teachers; activities would include learning practices of the students, for example, observing mentor teachers and hands-on experiences; outputs are the same as activities but actually how many times these events took place; and outcomes would include successful attainment of course objectives.

Statement of Problem

Research on the topic of evaluation in a laboratory school setting is scarce. A search for studies related to evaluations of lab schools yielded only one publication (Clawson, 1999). This lab school evaluation chronicled the self-study and transformation of a nursery school into a lab school, and documented the staff's undertaking to align course content with lab practice. It addressed course revisions, including adding laboratory teaching staff as instructors in the teacher preparation program.

It is apparent that most laboratory schools have not participated in systematic evaluations (self-studies) and made public their processes and findings. Schools that are intended as models in a teacher education program have a unique opportunity to demonstrate self-examination for program improvement. Teacher preparation programs,

of which lab schools may be a part, encourage pre-service teachers to be reflective practitioners and use assessment to guide student learning; it would make sense for these teacher education programs and lab schools to be participants in the evaluation process themselves. Argyris and Schön (1974) claimed that programs operate under a relevant assumption that the theories of action will yield intended consequences. It makes sense that those theories and practices should be evaluated.

McBride and Barbour, two prominent early childhood education scholars edited a text that specifically addressed issues surrounding laboratory schools (2003). I contacted one of the editors, Brent McBride, and asked him about the lack of research in evaluation of laboratory schools. He admitted that there was just the one published study of which he was aware and that this was an area that needed exploration (personal communication, March 26, 2008). Information about laboratory school evaluations is scant, hence the likelihood that published evaluation processes will provide meaningful and relevant insights to inform the field is highly probable.

Many scholars made the case for evaluation to be used as a tool to improve course instruction, not just to measure its effectiveness (Clift & Imrie, 1980; Cronbach, 1963; Patton, 1987; Popham, 1993). Results of process evaluations in a lab school can be used to inform the program instructors to make improvements that will enhance the learning of the undergraduate students. Improved student learning is the long-term goal of any education evaluation. This argument is another rationale for the evaluation of the undergraduate program in a teacher preparation laboratory preschool.

Purpose of the Study

The purpose of this study was to use a theory approach logic model to evaluate the implementation of activities utilized to promote achievement of undergraduate student goals at a university laboratory preschool. The study focused on the experiences of early childhood education teacher preparation students who participated in the lab program once a week for one academic year (fall and spring semesters). This hands-on lab experience was designed to assist students in achieving a variety of course objectives that contributed to their understanding of children and teaching in an early childhood context. The intent of this formative, process evaluation study was to improve current practice at the lab school, with the belief that such improvements would facilitate greater learning of the students in the teacher education program.

The activities at the lab school are based on various theories related to education and are intended to facilitate undergraduate student learning. These activities are planned to help students meet course objectives. A logic model (see Figure 1) was developed by the author to illustrate the linkages between the theories that inform the practice at the lab school and how these practices (activities) contribute to achievement of course goals. This study focused on the activity portion of the logic model, emphasizing implementation, and did not pursue a summative evaluation of undergraduate student achievement. The intent was to examine the process of delivery in order to improve instructional activities and student learning.

Research Question

The primary research question for this study was:

How can a theory approach logic model be useful in evaluating a university laboratory preschool in its mission to prepare early childhood education undergraduate students?

Significance of Study

Program evaluation in an educational setting has several implications. It is a useful tool in program enhancement. A utilization-focused evaluation provides information to program staff and administrators that can enable them to make program improvements. Evaluation data are also able to inform policymakers, funders, administrators, program personnel, and the public. Summative data usually includes outcome information that describes the quality or significance of the impact made by a program. Formative data typically examine the processes involved in implementation and whether or not program activities are aligned with program theories and goals. Formative information is usually of more interest to program administrators and providers and can offer useful data regarding program improvement (Patton, 2008; Rossi, et al, 2004).

Evaluations of programs, in general, can be significant to a college, especially an institution of teacher preparation. There is always room for improvement in the field of teaching, and if a teacher education program routinely evaluates itself or invites evaluation from others – the knowledge gained from such studies can inform the field. Not only can summative data of particular instructional strategies or program policies be

distributed, but formative data can be shared that might enlighten or provide suggestions to programs or practices of a similar nature. A college's willingness to undergo systematic evaluation and its desire to reflect and improve, contribute to a level of professionalism and transparency that should be admired and emulated by others in the field.

Design of Study

This formative evaluation study employed a mixed methods design. Data were collected from current undergraduate students who participated in the early childhood laboratory school. Students rated each of the activities as to how they perceived their contribution to the attainment of each of the course goals. They also provided written responses to open ended questions asked to illicit information as to how these activities contributed (or did not contribute) to their learning and how they could be improved. Interviews with students and lab instructors were other methods used to obtain data for this study.

This study can be described as participatory because the author is the Director and an instructor at the lab school. The Director was particularly interested in improving the program and believed the undertaking of this study was especially relevant and meaningful to her, the lab school, and to the field of education.

Overview of Dissertation

This study was written in six chapters (appendices). The introduction chapter outlines the purpose of the study, research questions and significance of the study. The second chapter provides the context of the lab school under investigation and a

description of the program. It also includes the role of the lab school in the teacher education program and describes the children's program and staffing.

The third chapter is a literature review, the first part of which details the roles of laboratory schools and the significance of particular activities that contribute to learning in a teacher preparation program. The second part of the literature review focuses on program evaluation, logic models, and the importance of focusing on process variables to improve program implementation.

The fourth chapter is a description of the design of this study. It details the data collection methods. The fifth chapter reports the results of the study and the final chapter discusses the findings and the implications of the research.

Appendix B

Evaluation Context – University Lab School

This study involved a laboratory preschool at a mid-southwestern university. The lab school serves approximately 50 children who are two, three and four-years-old. There are three separate part-time classes of children; they come two mornings, three mornings, or four afternoons a week. The lab school has a rich history in this suburban town of about 100,000 people. It has been a part of the campus since the 1930s, serving children from the local and neighboring communities, as well as children of university staff, faculty, and students.

The lab school is staffed with two full-time employees, each with a Master's degree in early childhood education and each with approximately 16 years experience. I am the Director (and also serve as an instructor in the afternoon class) and have worked there for 14 years. The Assistant Director (the instructor for both morning classes) has been there for eight years. The Assistant Director and I also teach undergraduate courses in the early childhood teacher preparation program.

The College of Education is the sponsor of the lab school. The primary purpose of the lab school is to provide hands-on experience for undergraduate students and graduate student interns in the early childhood education program. Students learn about many aspects of teaching and child development through their work with children, observation of mentor teachers and through discussion of their experiences with their peers and instructors. The preschool is a high quality early childhood program that is nationally accredited by the National Association for the Education of Young Children

and is also recognized as the highest level of quality by the state childcare licensing organization.

A cohort of undergraduate early childhood education students works at the lab school one morning or afternoon each week for the fall and spring semesters. While they are at the lab, they are completing various assignments for their other courses (e.g., teaching literacy lessons, completing assessments, observing children for case studies). They also act as assistant teachers, who are learning to manage small groups of children and facilitate appropriate play, learning, and problem solving among the children. The students receive one hour of credit each semester for the time spent working at the lab preschool.

Early childhood graduate student interns work at the lab, every day, all day, for eight weeks, as part of their certification requirement for the state. These interns have all participated at the lab school as undergraduate students. The interns gradually assume increased responsibility in the classroom and eventually are fully responsible for the planning and teaching duties in the classroom. Typically, there are two graduate interns, three undergraduate students and one full-time instructor in each preschool class of 15 - 19 children.

Philosophy of the Program

The philosophy of the lab school program is described:

> … we attempt to foster social, emotional, cognitive, creative, and physical development in each child. We believe it is only through a balanced educational approach attending to each of these domains that a child will optimally develop. We believe two major goals of early childhood education are to help children achieve autonomy and self-control. We attempt to foster autonomy through self-selected center times, child

> prepared snack and service, and by encouraging children to be responsible for their personal needs and wants. Self-control is encouraged as children are taught to be responsible for their actions and behaviors and are encouraged to examine their consequences.
>
> The teacher's role is to serve as a guide, a resource, and a facilitator for the child. By this we mean the teacher facilitates a child-centered environment by initiating activities and projects for children which are developmentally appropriate, purposeful, meaningful, and foster learning through self-selected play. Children will learn best through a process of discovery, enabling them to build theories about how their world operates. The teacher acts as a guide when she questions the child, encouraging him or her to think more deeply about a problem or situation. The teacher acts as a resource person for children, offering suggestions if needed, yet encouraging children to develop ways to solve problems for themselves and to take responsibilities for their actions. We believe peer interactions are critical in helping children develop socially, creatively, physically, emotionally and cognitively. Through peer interactions children construct cognitive and social knowledge, acceptance of others, and an appreciation of individual/cultural differences. (School handbook)

Early Childhood Education Students

The lab preschool setting provides a range of valuable experiences for students in the teacher education program. The undergraduate students learn effective communication and teaching techniques and how to promote autonomy and problem solving among the children. The day of their lab, students arrive thirty minutes before the start of the preschool program and stay an additional thirty minutes after the children leave. The initial thirty minutes (prior to children's arrival) is called a "pre-conference" session where the daily schedule is covered and comments are made regarding any special circumstances or activities for the preschool class that day. The instructor or student intern in charge leads this discussion. At that time, students may disclose any course requirements they are trying to fulfill during that particular preschool session.

Upon conclusion of the preschool session, the instructor and students sit down to discuss the events that took place in the classroom; this is referred to as the "post-conference." This is the final thirty minutes of the students' time spent at the lab. At this time, students will share experiences (positive or negative) or observations made and they will be discussed. Often, the instructor, student interns, and other undergraduates will offer guidance or suggestions regarding specific instances or in reference to anecdotes that are shared. The discourse among students and with the instructors provides a valuable learning experience. Other learning opportunities (referred to as "activities" in this study) for the undergraduates occur when they have individual conversations with the instructors, observe instructors and interns working with the children, and through their hands-on experience in the classroom.

The lab session is for one-hour credit and has a syllabus. There are eight goals on the syllabus that undergraduate students are expected to meet upon completion of their two semesters working at the lab school. These goals, included in Table 1, address many of the skills needed to be an effective early childhood teacher.

Instruction at the lab school (for children and college students) is grounded in theory. The theoretical framework that the school embraces guides its teaching practices for adult and child learners. For example, the constructivist theory of Piaget, which states that a person actively constructs his or her own knowledge as he or she interacts with the environment, (Flavell, 1977) is a main tenet of the preschool. The social constructivist theory of Vygotsky, and Bandura's social learning theory also provide a framework for the program. The intention is for the college students to learn by

constructing their own knowledge as they interact with children and instructors at the school, as well as through observation of master teachers. The lab school is based upon these theories and is set up in such a way to facilitate those experiences. The "activities" intended to be learning opportunities for the students include: pre and post conference sessions, observations of peers and master teachers, one-on-one conversations with instructors, and hands-on interaction with the children.

The activities described above were the basis for this study. I hope to use the data collected regarding these activities to improve our practice working with the teacher education students. This chapter provided the background and context necessary to better understand the research presented in this study.

Appendix C

Literature Review

Laboratory Schools

It is generally agreed that the three functions most commonly associated with lab schools in the United States are: 1) serving as sites for early childhood teacher preparation; 2) providing leadership and model program practices in early childhood in the larger early childhood professional community; and 3) providing sites and participants for research relating to child development and early childhood education (McBride, 1996). Each of these functions played a role in the development of an early childhood education pre-service teacher. In an effort to explore the focus of a laboratory school's influence on teacher preparation, I briefly discuss the history of laboratory schools, variations in structure, and expanded on the three primary functions of a lab school, emphasizing the significance of its use in a pre-service early childhood program.

The History of Early Childhood Laboratory Schools

The significance and appreciation for historical data is rarely discounted, as it can be useful in understanding the context and current practice in an assortment of programs or institutions. A brief look into the history of early childhood lab schools provided meaningful insight into modern practice in and utilization of these schools. Nancy Barbour (2003) authored a chapter that detailed the evolution of child development lab programs. In this chapter, she wrote that G. Stanley Hall was a leader in the study of child growth and development in the late 19th century and early 20th century (Senn, 1975,

in Barbour, 2003). Hall developed a center for research and writing in child study at Clark University in the late 1890s. According to Schlossman (1973, in Barbour, 2003), Hall's work served as the basis for what would become a major tenet of early childhood education - that traditional academic instruction in elementary school was not developmentally appropriate for the needs of young children. Barbour went on to say that, "Hall's deliberate and consistent efforts to develop a scientific approach to studying young children began a trend for others that came to be known as child psychology" (p. 12). In the late 1800s and early 1900s there was an emergence of organizations and agencies that studied families and children (Whipple, 1928, in Barbour, 2003).

A well-known catalyst for the advance of child study and use of the term "laboratory" school in the U.S. was the University of Chicago Laboratory School, established by John Dewey in 1894. The university-affiliated school was not considered a "model school" by Dewey but he did think of it as a place to gain knowledge about which materials and environments would promote the conditions for normal growth and development of children (Barbour, 2003). *In School and Society*, Dewey (1976) elaborated on this idea by stating, "Other schools should not imitate what we do – a working model is not something to be copied – it is to afford demonstration of the feasibility of a principle and of the methods which make it feasible" (p. 56). He saw the lab school as a "means for developing his theories of child development and education" (Barbour, 2003, p. 13). Other programs began to appear in the 1920s with the intent of not only furthering the educational experiences of children, but to broaden the scope of influence to the larger social context affecting children and their families. The National

Society for the Study of Education published a statement in its 1929 yearbook that posited the significance to human development of the first six years of life. The statement elaborated by suggesting that this significance created a need for the development of preschools and new educational materials (Barbour, 2003).

Programs supported by private beneficiaries and university funding emerged to conduct research and to provide service and training related to the care and education of children and their families (Barbour, 2003). The Laura Spelman Rockefeller Memorial (LSRM) fund was one of the beneficiaries that advocated for these three initiatives. Lawrence K. Frank, an economist, worked for the LSRM and orchestrated several child study sites in universities across the country. His belief concerning the value of studying children and families revolved around a broader social movement: that a better understanding of children, their families, and an emphasis on parent education, would positively contribute to children's welfare. Financial contributions of various benefactors contributed to the operational status of several child development laboratory programs in the 1930s (Barbour, 2003).

Structure of Lab Schools

Laboratory preschool school programs vary across the country but are typically part of the university academic community; they should not be confused with campus childcare centers, whose main purpose is to provide childcare for staff and students associated with a university. Lab schools can provide a range of programs and services (McBride, 1996). Full-time childcare, part-time preschool, full-day kindergarten, and parent education services, are some examples of the programs that might be available.

Other differences in lab programs include: size of program, ages of children enrolled, college program or degree affiliation, and the range of university students and faculty who are involved. Several academic disciplines can benefit from a lab school – students and researchers in education, psychology, sociology, family studies, home economics, child development, and other related fields, all can profit through utilization of a laboratory school.

Lab School Role in Teacher Preparation

University lab schools play an especially critical role in the preparation of early childhood professionals in a teacher education program (Bersani & Hutchins, 2003; McBride, 1996; Stremmel, Hill & Fu, 2003). Several aspects of the lab school contribute to its significant impact on pre-service teachers. A lab experience offers several opportunities for undergraduate and graduate students in early childhood education to experience: hands-on practice with children; observation of a model early childhood; inclusive environment; observation of model, mentor teachers; collaboration among other students, staff and resource personnel; extensive family interactions; specialized study of individual, small and large groups of children; observation of and participation in early childhood leadership, advocacy, community outreach and parent education activities; and participation in action or other types of research projects.

It is accepted by most that hands-on experience is a valuable method of learning a skill, and that many consider it to be one of the most important part of teacher training (Darling-Hammond, 2000, 2003, 2004; Darling-Hammond & Baratz-Snowden, 2007; Darling-Hammond & Sykes, 2003; Dewey, 1976; Peck & Tucker, 1973). Peters and

Klinzing (1990) described it more eloquently when they stated, "one of the most ancient and honorable methods of learning a skilled craft or profession has been actual experience with or apprenticeship to a master teacher" (p. 76). Benham (in Peters & Klinzing) stated that it was this principle of "guided practice" upon which lab schools were based. Students reap maximum benefits from field experiences that are completed in well-designed programs with opportunities to combine theory and practice, experiment with and discuss ideas, and have superior teachers as role models (Christensen, 1989; Henry, 1989). Spodek and Saracho (1990) wrote, "the practice component of teacher education programs has long been considered an important part of teacher education programs" (in Spodek & Saracho; 1990, p. 38).

Field placements provide this important hands-on opportunity; however, all placements do not have equal effect. Therefore, the question seemed to shift from whether or not student teaching and field placements are necessary, but instead to, what are the characteristics surrounding such placements that contribute most powerfully to learning and teaching success? While no single factor can determine the success of a field experience, common themes have emerged. Prominent reviews and position papers addressing teacher characteristics, instructional impact and pre-service teaching have been authored by Linda Darling-Hammond of Stanford University (Darling-Hammond, 2000, 2003, 2004; Darling-Hammond & Baratz-Snowden, 2007; Darling-Hammond & Sykes, 2003).

In summary, to promote successful clinical training experiences, the following characteristics should be evident:

- *clarity of goals*, including the use of standards guiding the performances and practices to be developed;
- *modeling of good practices* by more-expert teachers in which teachers make their thinking visible;
- *frequent opportunities* for practice with continuous formative feedback and coaching;
- *multiple opportunities* to relate classroom work to university course work;
- *graduated responsibility* for all aspects of classroom teaching; and
- *structured opportunities* to reflect on practice with an eye toward improving it. (Darling-Hammond & Baratz-Snowden, 2007, p. 124)

Each of these characteristics are more likely to be found in a laboratory setting, as opposed to any other setting available to pre-service teachers.

Teacher preparation experts advocate students gaining experience in a variety of settings that deal with diverse populations of students (Bersani & Hutchins, 2003; Darling-Hammond, 2000, 2003, 2004). So, it is not suggested here that students should participate exclusively in a lab school setting. However, students who are placed solely in elementary school settings, not associated with the university, can be subject to models and practices that are not endorsed by the teacher education program. A large emphasis at a lab school is usually placed on the utility of high quality instructors, who are experts in mentoring and leading discussions addressing classroom practice, problem solving,

child development and other significant classroom issues; this is part of their job description. Students placed outside a laboratory school setting are subject to mentor teachers who may or may not have the time, ability, or desire to provide such scaffolding and support to pre-service teachers.

Classroom experience working with children provides opportunities for students to see the theories they are learning in their coursework applied in a classroom setting. Because the teachers are typically associated with the university and are possibly course instructors, they should be able to articulate the connection between theory and practice and help scaffold novice teachers as they grapple with theoretical applications. The dialogue among peers at a lab and between students and mentor teachers also promotes learning. The students have opportunities to ask questions and discuss issues that they may not have the opportunity for in a regular classroom setting. Lab programs should have time allotted for such discussion purposes. Many theorists (Bruner, Dewey, Vygotsky, Piaget) have noted the significance of social interaction, discussion and scaffolding to promote student learning. Experiences in lab schools are typically shared among several students, making it possible for particular events of interest to be revisited in other early childhood courses. This continuation of student discourse provides further opportunities for theory to practice connections.

Several authors have contributed their ideas as to what constitutes best practice when working with pre-service teachers (Darling-Hammond & Baratz-Snowden, 2007; Gage & Winne, 1975; Peck & Tucker, 1973). Spodek and Saracho (1990) stated the importance of participation and observation, and emphasized relating what is being

learned in coursework to what is being seen and experienced in a lab setting. Learning and practicing observation skills is an important component of a strong early childhood teacher (Caswell, 1949). A well-crafted lab placement can facilitate students to "construct and modify their own knowledge, skills, and personal/professional theories and understandings about teaching and learning" (Spodek & Sarcho, 1990, p.39).

A skilled mentor teacher or course instructor would be necessary to scaffold students in this process. McCarthy (in Spodek & Saracho, 1990) concurred and provided more detail, "observations should be accompanied by discussion, reflective thinking, and feedback to facilitate the students' ability to objectify their observation skills and develop their concept of teaching" (p. 95). Caswell (1949) believed that students need a great deal of help and practice in analysis of their observations during the process of becoming a teacher. Bolin (1988) explained that lab experiences that are directly related to course content can be more focused and effective and that reflective discourse among students and mentor teachers will likely promote a more valuable experience.

A closer look at the activities of the specific lab school under study will show some strong theoretical connections. (The activities studied included: observing a mentor teacher, pre and post conferences, interactions with children, and individual discussions with mentor teachers.) The most obvious contributions come from the work of Dewey, Vygotsky, Bruner, Bandura, and Piaget. Each activity is typically grounded in an amalgamation of theories.

The purpose of observing a model teacher seems obvious, but was grounded in the social learning theory of Bandura, which emphasized attention to a model and

learning that can be gained through repeated observation (Morgan, 2007). One aspect of modeling and its significance, could be considered part of Vygotsky's zone of proximal development, in which a learner copies a series of actions with guidance of a mentor (Hedegaard, 1990; Jacobs, 2001). The application of Vygotsky's theory stems from the notion that the learner must first see the action in order to copy it. Not only are students witnessing effective teacher behavior, they are also seeing an appropriate, engaging environment modeled (Jacobs, 2001). Dewey (1976) emphasized that a university lab should be a place where students can see theories and ideas tested and demonstrated, which does not exclude the actual practice of effective teaching that is modeled.

Vygotsky's and Dewey's ideas also overlap into the lab activity of hands-on experience working with the children in the lab setting. Dewey emphasized the importance of active, hands-on experiences that facilitate learning and bridging theory and practice (Baker, 1966; Dewey, 1976). Vygotsky's zone of proximal development also informs the active dimension of teacher training, as a student practices behavior seen modeled, and adjusts her behavior as she receives ongoing feedback (scaffolding) from the mentor teacher. Piaget's theories about learning and cognitive development also justify the practice of working with children as an activity for learning (Flavell, 1977). As students gain more experience in the classroom they assimilate and eventually accommodate information as they construct their knowledge based on personal, hands-on experiences. When students encounter new experiences they are assimilating the information, and eventually experiencing disequilibrium. Through experimentation and interaction among the children (and interacting with peers and mentors), they eventually

learn to accommodate and understand a particular operation more clearly (Morgan, 2007). In the *Culture of Education*, Bruner (1996) noted the importance of hands-on experience by devoting a whole chapter to the subject of "knowing as doing."

More theoretical relationships can be found in the practices of pre and post conferencing and one-on-one conversations with a mentor teacher. Bruner stressed the use of language as an "instrument of thinking" (1966, p. 14). He elaborated by stating that teaching is facilitated by language and that "intellectual development depends upon a systematic interaction between a tutor and learner" (p. 6). Bruner called such dialogue the "heart of the educational process" (p.21). Bruner, (1996) also described the significance of interactions between people that largely impacts and facilitates learning. This idea was similar to that of Vygotsky's scaffolding concept, except it did not necessarily imply the interactions must take place between a student and a more skilled mentor. Jacob's (2001) described Vygotsky's influence in relationship to scaffolding, which provides a tool for reflective practice - a critical tenet of effective teaching. Dewey (1966) stated the value of dialogue when people share their different experiences through discussion. Piaget noted the value of a social interactions and conversations to promote operational development in students (DeVries, 1997).

Each of the mentioned theorists above contributed to the practices of the lab school. There is not one single theory or theorist that can claim sole responsibility or foundation for any of the particular activities. Instead, like most situations in life, it was a dynamic combination of several theories that informed what we considered to be best practice at our lab school.

An additional benefit to a laboratory experience is typically the school setting itself. The lab school environment is usually ideal – it is not supposed to emulate a typical classroom, but instead, afford students experience working in a setting that represents best practice. Caswell (1949) stated, "it is of great importance to have means of setting a different standard for the student, a standard more nearly approaching the ideal than the majority of schools do," (p.2). Also, lab schools may have more enrollment discretion than other field placements, and therefore can purposefully enroll children who represent various ethnic backgrounds and include children of different abilities. Unfortunately, many lab schools have the reputation of having high enrollments of white, middle class children from two parent families (Caswell, 1949; McBride, 1996), which does not provide the diverse environment that is most meaningful in a field placement. This is definitely an issue that every lab school should address; McBride (1996) emphasized this as a priority for lab school improvement. Although lab school experiences are highly beneficial, they should never be the only field placement that pre-service teachers experience.

The National Association for the Education of Young Children (NAEYC) is the leading professional organization that promotes excellence in the early childhood education profession. NAEYC accreditation is considered the mark of a high quality early childhood program. The accreditation standards used by the National Council for Accreditation of Teacher Education (NCATE) for early childhood programs also comes from NAEYC. They have published a position statement of a conceptual framework for professional development in the field of early childhood. These recommendations

support earlier discussion of the benefits of a laboratory school in teacher preparation. Some relevant elements of this position statement included:

- "practicum or work experience under qualified supervision is essential to gaining the requisite professional knowledge and skills" (p. 6)
- Effective professional development is ongoing, structured and grounded in theory – providing a clear link between theory and practice
- Effective professional development provides opportunities for application and reflection which allows individuals to be observed and receive feedback
- Providers (teachers) have appropriate knowledge and experience
- Opportunities for learning should be active and hands-on (NAEYC)

These recommendations made by NAEYC, the most prominent professional early childhood organization in the United States, provided a perfect summary of several of the points made previously regarding the role of an early childhood laboratory school in the preparation of future teachers. Programs that are nationally accredited through NAEYC, gain such status through a process of rigorous self-study, followed by a visit from someone who validates what was reported. This procedure lends credibility to the idea of self-study in the field of education.

It is difficult to clearly demarcate the roles typically associated with a laboratory preschool. The functions of leader and advocate in early childhood and the role of research site are easily connected to the task of contributing to a teacher education program. Each of these responsibilities compliment one another and tasks associated with these roles can easily fit into the other two functions. A piece written by Horm and

Warford (2003) specifically describes the University of Rhode Island Child Development centers, and sums up the goal for its lab schools nicely. It states, "Our overriding goal is to improve the care and education of young children – through producing good teachers providing answers to grounded research questions, and bringing theory and research findings to practitioners in professional development programs" (p.147). This broad and well-structured definition of purpose is well stated and relevant to the work and intent of most laboratory preschool programs.

Program Evaluation

Evaluating educational programs is essential. A teacher preparation program has an obligation to evaluate its practice – as a sign of good faith that it lives by the standards it teaches. Utilization-focused evaluations are especially relevant in education, because they are focused on providing data to stakeholders who actually plan on utilizing the information for program decision-making. Patton (2008) wrote, "Utilization-focused evaluation is evaluation done for and with specific intended primary users for specific, intended uses" (p. 37). He elaborated that this approach is personal and situational and the issue of utility should drive the evaluation.

Evaluations either examine the outcomes of a program or they look at the implementation or process of program delivery (Patton, 2008; Rossi, et al., 2004). Each of these has value, but the outcome measures in education (test scores) get the most attention in our society. However, outcome measures, alone, do not provide insights that explain the results. Looking at the process elements of a program allows the researcher to gather details that will or will not eventually contribute to desired outcomes (Patton,

2008; Rossi, et al., 2004; Wolf, 1990). Evaluation practice can also be divided by intent – a formative or summative study. A summative evaluation would be useful for determining if the program was successful or should be sustained or terminated (Rossi, et al., 2004). The intent of a formative evaluation is to improve a program – which has obvious relevance in educational settings.

The type of formative data that can be collected and utilized in an instructional setting is diverse. The range of topics is enormous, and can include: examination of instructional strategies, teaching behaviors, environment, attitudes, participation level, subject matter, parent input, professional development, duration and frequency of instruction or non-instructional activities, transitions or breaks, and several others that might be common in most education settings or very specific in nature. A formative evaluation can be accomplished through examination of the process (implementation) activities of the program. There are several elements that make up and contribute to an educational program, so it is important to determine the specific parts of a program that are being evaluated. In a process evaluation, the delivery of program services (instructional activities in an educational setting) needs to be designed in such a way that each component (activity) can be examined specifically.

A design that breaks down the process of program delivery is the logic model (McLaughlin & Jordan, 2004; Patton, 2008; Rossi, et al., 2004). A logic model is usually designed as a visual representation (although it can also be narrative) that helps organize program development, implementation and/or evaluation. When used as an assessment tool, it helps focus on the critical elements of a program, which assists in identifying

evaluation questions that should be asked (McLaughlin & Jordan, 2004). Logic models vary, and they are particularly useful because they can be created to accommodate virtually any program.

Referring to the Kellogg Foundation (2004) guidebook and other evaluation texts (Patton, 1997; Rossi, et al., 2004), standard features of a logic model are inputs (factors), activities, outputs, outcomes, and impact. Inputs can be defined as the resources (material, human, or time) that are the basis for the program or services provided. Activities are the processes, activities, or tools used to implement the program or provide the intervention. Outputs are the actual events or results of activities – how many times the service was actually provided, for how long, and in what capacity; outputs basically indicate if a program delivered its services as they were intended. Outcomes (typically observed on an individual level) "are specific changes in attitudes, behaviors, knowledge, skills, status, or level of functioning expected as a result of activities" (Kellogg Foundation, p. 8). Outcomes can be short, intermediate and long term and can be expressed immediately or after several years. The term "impacts" is sometimes grouped with outcomes, and the difference is typically one of semantics determined by the program or evaluator.

There are several elements to the logic model that make it an appropriate tool to use in formative school evaluations. First of all, flexibility in design and application make it user-friendly and applicable in a variety of settings. The design of the model calls for a detailed break down of specific activities, which are aligned with specific

outputs and outcomes. This helps to "connect the dots" and make a visual and clear connection among inputs, activities, outputs and outcomes.

Logic models have been described as a tool to help lay out and examine the sequence of steps that connect program services to outcomes (Brun, 2007; McLauglhin & Jordan, 2004; Rossi, et al., 2004). Benefits of using the logic model in evaluations have been reported by McLaughlin & Jordan (2004). These include:

- Identifying projects or activities that are critical to goal attainment, are redundant, or have inconsistent or implausible linkages to program goals (or theories)
- Building a common understanding of the program, expectations and results
- Sharing of results and ideas to other interested parties or stakeholders (p.11).

When summative data are only collected, and we are left with information that says whether or not a student has met an objective, they do not provide information about where or how a learning failure may have occurred. Creating a logic model requires review of all the aspects of a program; this makes it less likely that critical issues will be overlooked (Rossi, et. al., 2004). The attention to detail of the logic model provides specific steps in the process and the ability to develop evaluation questions that examine each step – therefore, helping teachers and administrators determine where a problem may have occurred. This attention to detail will also help in coming up with a solution

that meets a specific problem, as opposed to trying to figure out why, in general, objectives may not have been met. Logic models are considered "living documents" to be used, revisited and revised. This ongoing utility helps staff improve program quality by continually examining what works and what areas may need improvement (Yarbrough, 2003).

The logic model has implications for school wide programs as well as for individual classrooms. One of the greatest strengths in the model is its flexibility and versatility. It is difficult to think of any classroom or school issue that could not be measured somehow by the use of a logic model. This model could be considered as a very broad framework that has few boundaries – so its application is practically limitless. This flexibility lends itself to a simple structure, if the evaluator so desires, and can be easily utilized for self-study. Once the pieces of the model have been filled in, it is up to the evaluator (or practitioner) to decide what questions need to be answered and how to best answer them. However, this component of the evaluation process is evident in all evaluation projects; the detailed nature of the logic model, facilitates the ease in which this task can be accomplished.

A logic model evaluation (or any evaluation) is most informative when it answers the research questions and provides useful information to the program. Evaluation information must be reported to the appropriate stakeholders or program personnel, as was determined at the beginning of the evaluation. Data that can be utilized may not always be discovered intentionally, therefore it is important to make note or report of any unintended findings, as these could prove insightful or beneficial to the program (Patton,

1997; Rossi, et al., 2004). In some circumstances, evaluation data is used to inform policies, determine funding or help decide if a program should be discontinued. The evaluator's job is to report the data, and sometimes, to make recommendations based on evaluation findings, and he/she typically has little or no control over how the information is used.

The Kellogg Foundation, which funds several social service programs through United Way, distributes literature to its providers with details on the development and use of three types of logic models (2004). The *theory approach* model is designed to align the theory or theories behind a particular practice, intervention strategy or activities that are intended to cause change. Simply put, the theory of how or why your program will work is the core of this type of logic model. The *activities approach* logic model maps out the process of program implementation; it is most useful for the purpose of monitoring and management of the program. This model helps detail the steps that will be taken to implement a program and allows for closer examination of the process. The *outcomes approach* model emphasizes the relationship of activities/resources to outcomes or desired results and is useful during the beginning or planning stages of a program. The emphasis is usually on intended results of program activities. There is no standard design of any type of logic model – they vary with program needs and emphasis. Logic models take on many shapes and forms, no formal template exists that must be utilized. Evaluators and/or administrators may choose one type of logic model or combine any two or three to fulfill their needs

Regardless of the type of logic model chosen, it is an excellent visual tool in a teacher preparation program. Students can see the picture of the model as it connects all the elements of the program together. It is this visibility that makes it congruent with the mission of our university lab school – making the theory to practice connection evident to the teacher education student. In the theory model, the heavy theory emphasis provided a strong element of reflective practice for the instructors, as they were forced to point out to the students the theoretical links to the lab activities. Theory-driven evaluations are often considered to increase the utility of an evaluation because of its emphasis on the underlying assumptions (or theories) about how or why a program is supposed to work (McLaughlin & Jordan, 2004).

The theory approach is not limited in scope – it uses the theory as a foundation for program practice, and the model allows for a visual representation of how the theory is directly related to program services and eventually to outcomes. So, even if the theory model is utilized, one is still able to examine the implementation process for program improvement (as is a frequent purpose of educational evaluation). Using the theory model, activities and outcomes can still be evaluated.

An activities approach would be another informative logic model to use in a lab school or other educational setting. The activity approach is useful because it too can provide detailed information regarding implementation and outcomes. Activities are common in educational settings; they would be referred to as "instructional activities" and/or methods – which are common topics of educational evaluation. Instructional activities can be examined in any type of logic model that is used in an evaluation.

However, the activities model lacks the direct correlation and visual connection to program theories, which play a significant role in a university laboratory school setting.

Before an evaluation can begin, input is needed from a variety of sources. Stakeholders in the program must be consulted before an evaluation can be designed and implemented. It is critical to get the perspectives of people involved at various levels of the program to make sure the questions asked the issues addressed are relevant and meaningful. Stakeholders can include, but are not limited to, funders, policymakers, administrators, clients/participants, staff, and service providers (Brun, 2007; McLaughlin & Jordan, 2004; O'Sullivan, 2004; Patton, 2008; Rossi, et al., 2004). The researcher or evaluator must actively seek input from interested parties in order to design appropriate evaluation questions and measures of program success.

The first thing needed to inform the logic model (or any evaluation) is knowledge of what needs to be evaluated. This information is gathered from appropriate stakeholders. It is also important that the evaluator understands what is expected of him or her (as far as role in the evaluation, consulting, how and what data to report, access to files and other resources, designing questionnaires, collecting, entering and analyzing data…). Budgets and timelines must be clearly communicated, as these will assist in the framing of any evaluation undertaking. It must be determined if outcomes and program impact are to be evaluated, if the process or implementation is going to be examined, or if both perspectives will be pursued. After stakeholder input has been gathered (stakeholders can be determined by program administrators, funders, and the evaluator), evaluation questions must be created that will best inform the data that is being sought.

Subsequent to the formulation of questions, methods and means of data collection must be decided upon. There can be considerable variance among projects and programs regarding who is responsible for making decisions about evaluation questions and design; it is typically recommended that stakeholders or program representatives work collaboratively with the evaluator for these tasks (Brun, 2007: McLaughlin & Jordan, 2004; O'Sullivan, 2004; Patton, 2008; Rossi, et al., 2004). At some point, in this initial process, it should be determined what type of logic model is best suited for the evaluation, or if it might be most appropriate to create a hybrid of different models to meet the evaluation objectives.

One of the benefits of a logic model is its attention to detail, so it is particularly helpful if the evaluator can gain as much detail as possible regarding inputs and activities (if a process evaluation). This detail will help create the logic model and assist in establishing the connection between inputs, activities, and outcomes. Evaluation questions can be specifically targeted to address different aspects of program activities, which should provide useful insight into implementation issues. It is also important to get accurate data regarding outputs, because many times programs are not executed as intended – through no fault of instructional strategy, but simply because service was not delivered as proposed (number or length of classes, visits, interventions…). It is critical in any evaluation to note this, because some may place blame on the actual implementation strategy or activities as opposed to the fact that they activities were never implemented!

There is no particular data that determine whether or not an evaluation was "successful," rather it is typically determined by the utility of the data that are uncovered – which is decided on a program to program, or even an individual basis. In an educational setting, the model is most informative when teachers improve their practice and students learn material more effectively or efficiently.

Using a theory approach logic model requires the recognition of various theories that inform the practice of the educational setting being evaluated. In this study, I discussed the theories behind the specific activities at our university laboratory preschool. Different educational theories were utilized to inform the logic model for the laboratory school. These theories were the basis on which the "activities" in the model were created and implemented – and these activities were under examination in the evaluation. The activities include: observing a model/mentor teacher, experience working with the children at the lab, pre and post conference discussions among the lab teacher and students, and one-on-one conversations between the student and mentor teacher (see Table 2). The theoretical contributions to these activities were discussed in detail in the previous section.

Appendix D

Design

The design of this study was a utilization-focused evaluation, which was formative in nature. The goal was to illicit data to inform decision-making that would improve our program (Patton, 2008). The study was also considered a process evaluation because the research focused on the implementation or "process" of the program, and targeted the instructional activities that were designed to meet course goals (Patton, 2008, Rossi, et al., 2004). Furthermore, this study employed a participatory approach, as I was also the Director of this lab school program (Lincoln & Guba, 1985; Merriam, 1998; Patton, 2008; Simons, 2002; Yin, 2004).

Utilization-focused evaluation, simply defined, is "intended use by intended users" (Patton, 2008, p. 37). Patton explained that utilization-focused evaluations ought to be designed and judged by their usefulness to impact the program being evaluated. The evaluator should consider how every part of the evaluation process will affect the program, either the implementation or the outcomes.

As Director and a participant in this study, it is my perspective that was shared throughout this dissertation. I interpreted the process of the evaluation and attempted to provide insights and perspectives of the other participants; I considered myself and other participants as "human instruments" and as primary sources of data (Lincoln & Guba, 1985). A trend in education evaluation is the participatory approach, in which the researcher has a role in the program being studied (Merriam, 1998; Simons, 2002; Waxman, Houston, & Cortina, 2002). It is considered by some to be a more suitable

method for formative studies because it is seen as more flexible, can result in increased communication among staff, and most of all, will likely enhance ownership and utility of the evaluation (Waxman, et al., 2002). The evaluation of the lab school was formative; its intent was to provide an account and analysis of the process so that the program could be improved and that others in the field may learn from the description of the evaluation process.

Further understanding of the participatory approach was offered by Yin (1994). He explained that the observer may not only be a participant in the organization under study, but may also take an active part in the events of the program being studied. One obvious benefit to participant observation is heightened opportunities for access; for example, inside access to staff and clients (or in this case, students), and access because of experience in or exposure to program activities. Another benefit was the ability to provide valuable insider perspective. Yin also pointed out that this can be a drawback, as well, to those who feel participant observers may prove biased and unreliable. However, triangulation of data and documentation of research protocol should reduce such concerns (Yin, 1994). Patton (2008) summarized an additional advantage to the participatory approach when he wrote, "the process of engaging in evaluation can have as much or more impact than the findings generated" (p. 175).

The proposed study employed a formative design that included a process assessment. "Formative evaluations are conducted for the purpose of improving programs – formative often includes a process evaluation strategy that can provide depth and detail about the program's strengths and weaknesses" (Patton, 1987, p. 28). This

assessment was a self-study that used a theory driven logic model design to evaluate a university laboratory preschool.

A wealth of information can be discovered through process evaluation. It can provide rich, descriptive data about program services and day-to-day operations. Useful data can be collected that documents information regarding actual services provided (time spent on activities, how often they were available…) and participant information (their perspectives and insights, frequency and depth of participation…). Is the program being implemented as intended? Are you providing the services you claim to be? These are critical questions that should be addressed. Instead of being fearful of the gaps that could be uncovered, it should be seen as an opportunity to close those gaps and improve services in order for programs to fulfill their missions. The information gathered should be seen as data that can be used as diagnostic and helpful in making appropriate and significant program improvements.

Given the goals of this project, I believed that a process /formative evaluation was most relevant and helpful. A utilization-focused evaluation was appropriate, because I wanted to use the results to make positive changes in the program. Utilization-focused evaluation seems to be common sense, but many times programs complete evaluations just to meet grant requirements or satisfy policymakers, with no intention of ever using the results. In the lab, instructors were very invested in learning all they could to improve the program for the undergraduate students. An evaluation that is designed to improve a program is also referred to as formative evaluation (Patton, 2008).

This study was also a process evaluation because it examined the implementation process to see if what was intended to be delivered actually was delivered (Scheirer, 1994). When assessing education programs for success, the question asked typically relates to the successful attainment of course objectives, which is referred to as summative or outcome evaluation. However, process evaluation focuses on the delivery (or activities) that are designed to facilitate learning, which sometimes identifies gaps in services and possibly insights into how to close those gaps (Scheirer, 1994). It has been noted in education evaluation literature that there is often little attention given to the environment that creates the effects on students, rather it typically just examines the effects (Eisner, 1985). This study specifically looked at the learning environment for the undergraduate early childhood education students.

Designing the Study

In the spring of 2007, I met with my supervisor and the other instructor at the lab and discussed my idea of evaluating our program using a logic model. I explained the different features of a logic model and gathered their input regarding what should be studied and an appropriate format for gathering data. I created a logic model to frame a formative, process evaluation of the undergraduate program laboratory school field component. A logic model is a visual representation that helps organize an evaluation, focusing on the critical elements of a program which help identify what questions should be asked (McLaughlin & Jordan, 2004). It can also serve to identify causal links between program activities and outcomes. Program theory, the theory that drives the interventions provided, is the basis for developing evaluation questions and designing logic models

(Rossi et al., 2004). Rossi et al. expanded on the topic of logic models, writing that they "lay out the expected sequence of steps going from program services to client outcomes" (p. 94).

The logic model (Figure 1) was created to represent the program theories at the lab school and the activities that reflect those theories. Instruments were created (discussed later) that would accurately assess students' ratings of the usefulness of those activities and imply linkages to the stated objectives. It was determined, for the practical purposes of this study, that student self-reports would be appropriate. There is evidence that using student views regarding their learning is a meaningful approach to evaluation. Taylor (1997) wrote that reports from students who are surveyed during a course and the year immediately proceeding are quite significant. I also met with a professor who taught program evaluation to review the preliminary logic model I had drafted and the questionnaires I was going to use. He provided feedback and I altered the model and the surveys based on this information.

This formative assessment of the lab school was done using a mixed-methods strategy. The goal was to collect frequencies of responses and also gather descriptive details that might lead to specific program improvements. The first part of this study, the written surveys, employed a mixed-method design approach, referred to by Creswell (2007), as the Triangulation Design: Validating Quantitative Data model. It involved acquiring quantitative and qualitative data simultaneously. This method was used on the surveys, as a way to elaborate upon rated responses. The qualitative data were analyzed to provide insights and context to clarify the quantitative responses. Tashakkori and

Teddlie (1998) defined this same idea as a parallel/simultaneous mixed-method design in which "data are collected at the same time and analyzed in a complementary manner" (p. 47). The second part of the study, which included interviews and conversations with students and the other instructor, and reviews of my reflective journal, was purely qualitative. Patton (1987) reminded us that the purposes of quantitative and qualitative data are different, yet they are complementary.

Overall, the study employed an embedded and triangulated, multi-level design (Creswell, 2007; Tashakkori & Teddlie, 1998). The embedded feature is apparent because the qualitative data are most useful in gathering formative data, but it is embedded as well, in the quantitative data, which provided the initial rating of activity significance. The multi-level design is also evident in this study because qualitative data were collected from students and from instructors, all in an effort to "address different levels within a system…where findings are merged together into one overall interpretation" (Creswell, 2007, p. 65).

Survey Development and Data Collection

Three surveys were designed for this study (see Appendix G). Survey development has been addressed by a number of researchers (e.g., Alwin, 2007; Braverman & Slater, 1996; Dillman, 2000; Thomas, 2004). Thomas (2004) and Dillman (2000) note that survey questions should be constructed with primary consideration given to the intended use of the data. The notions of usefulness and intention can supersede the various arguments pertaining to issues such as number of response items and whether or not to include a neutral category, for example. Determining the number of response

categories is dependent upon the experiences and knowledge of the respondents, as well as what the research is intending to find out (Thomas, 2004). Students are typically viewed as capable of handling higher number of responses, but for this survey, two rating scale measures were developed, using four-point and five-point scales, respectively. Rating scales were the most appropriate format for this study because they can be used to gather data regarding the degree to which a person finds something helpful. The quantitative portion of the surveys served a narrow purpose; the depth of the responses was to come from the open-ended portion of one instrument and from the interviews.

The first survey asked students to rate their experiences, "activities" (in reference to each of the learning objectives stated in the syllabus) at the lab school by level of significance. Using a 4-point number scale, they were asked to choose (1) not at all important, (2) not very important, (3) somewhat important, or (4) very important. Thomas (2004) wrote that if a researcher chooses not to include a neutral point, "…there should be room to avoid a firm stance" (p. 62). The two middle categories of "not very important" and "somewhat important" address this perspective. Thomas explained the use of a 4-point scale in a short questionnaire and stated "the number of choices depends on both the experience and knowledge of the respondent, as well as what you need to know" (p. 61). After more consideration, I determined that a "don't know" response was not necessary because of the students' familiarity with the material. Students had the opportunity to express themselves if they believed there were unreasonable constraints to respond or if they were not satisfied with their numerical response. They had a chance to reveal those concerns in the open-ended response questions and in follow-up interviews.

The second instrument asked students to rate themselves using a 5-point Likert rating scale on how they perceived their skills at the current time. A score of 1 indicated no skills evident pertaining to the course goal listed, and a 5 indicated reaching the goal successfully. A Likert scale design is intended to have the responses totaled for a cumulative score for a respondent; however, for this study, a cumulative score was not necessary or relevant. Frequencies of scores on each item (course goals) were reported to give me information regarding self-reported level of skills for the various course goals. I wanted to see if there were patterns of skill ratings linked to certain goals. A Likert scale has the advantage of familiarity to respondents and the use of five points is frequently employed (Dillman, 2000; Thomas, 2004).

The third survey consisted of open-ended response items where students could provide written responses that expanded on their ratings. Students were asked to give details as to how instructional activities may or may not have contributed to their learning, and also to offer suggestions on how to improve these activities. Patton (1987) stated, "narrative comments from open-ended questions are typically meant to provide a forum for elaborations, explanations, meanings, and new ideas" (p. 11). He also explained that process evaluation is useful for uncovering areas in which programs can be improved as well as areas that are successful and should be maintained.

The second part of the evaluation involved interviews in which participants could provide more depth in their responses. The questions were the same as those on the written survey, but the interviewer probed for further detail in the hopes of gaining more insight from respondents. I felt the students would be less likely to give truthful

responses to me (since I was their instructor and a teacher at the lab); I decided that a neutral, third party should conduct the interviews. A retired faculty member conducted the interviews with a sample of students. Students who didn't mind participating in the interview provided contact information on a sheet of paper and put it in an envelope that was collected by a student. This envelope was given to the interviewer, and then he chose randomly from that group of names to identify people to interview. The interviewer took notes and gave his notes to the researcher. The other instructor was also interviewed, and she provided her views of the various lab activities and how she felt they could be improved. I provided similar information through a reflective journal I kept during the process; this was also used as a data source. Throughout the course of this on-going self-study, data from the student surveys and interviews were discussed with the other instructor and we worked to change the lab activities to reflect what was reported. These discussions and changes were also part of the data for this study.

Additional data for this study consisted of notes from intermittent conversations and interviews with the lab instructor, students, and former students. My reflections and experiences during this process will also be considered as data. Merriam (1998) described one role of the researcher as an interpreter, "someone who studies a problem and hopes to connect it to better known things" (p.97). She used the analogy of an artist and wrote that the "artist is the agent of our knowledge" (p.99) and so is the researcher who attempts to become the agent of new knowledge and interpretation. Conversations with the other instructor were an on-going occurrence, as I was very interested in how she

interpreted the evaluation and how her behaviors may or may not have changed as a result. My reflective journal served this same purpose.

These multiple sources and use of various data collection methods enhanced triangulation and construct validity (Kidder & File, 1987; McGee-Brown, 1994; Yin, 1994). Triangulation occurs when, "distinctly different methods are aimed at measuring the same construct," (Kidder & File, 1987, p. 63). Kidder and File expanded on the use of triangulation when they further described it as occurring when different measures produce comparable results or if different participants (data sources) give similar accounts of an event.

Educational research continues to evolve. Fetterman (1988) and Miles and Huberman (1994) described the pluralistic epistemological and methodological approaches to qualitative study in education to be a current reality in the field (and that was more than fifteen years ago). Qualitative inquiry focuses on meaning in context (Merriam, 1998). There are several "recurring features" of qualitative study, as explained by Miles and Huberman (1994). Some of these features include:

- research that is conducted through "intense or prolonged" contact with the program or situation
- the researcher attempts to capture data on the perceptions of those involved in the program of study and then explain these perceptions
- typically little standardized instrumentation is used, as the researcher is the "measurement device" in the study

- most reporting and analysis is done through words, sometimes through more formal, positivistic representation, or shared through a more narrative form that resembles storytelling (pp. 6-7).

Because I was also a course instructor, it was important for participation to be voluntary and anonymous. Students who were currently enrolled at the lab were given surveys during an undergraduate course. I told the students about the research and explained the survey instruments. I gave them each a letter of information that described the research; letters of consent were not collected from the students so anonymity could be maintained. I was out of the room while the undergraduate students completed the questionnaire. The completed surveys were collected by a student and put in an envelope and returned to me. A consent letter was collected from the other instructor.

Data Analysis

Numerical data were entered into an SPSS database and frequency and cross tabulation reports were run. Narrative data were coded by simple response themes (Merriam, 1998). Lincoln and Guba (1985) provided more detail about analysis when they described the constant comparative method for data analysis. As I read and re-read the interviews and qualitative responses, I identified repeated themes (or categories of responses) that emerged. I categorized the responses and then re-read and compared the responses and assigned categories, reflecting on the appropriateness of each placement, and made adjustments as necessary. The themes that emerged provided insights for later interviews with students and the other instructor.

Appendix E

Results

There were 71 surveys completed by undergraduate early childhood education students over a three year time period (2007, 2008, 2009; three student cohorts). The student participants, at the time they completed the surveys, were all participating in a one year (two semester) field placement at the laboratory preschool. Surveys were completed during the spring semesters. Six interviews were conducted in the spring of 2007 and four in the spring of 2009. The instructor at the lab school was interviewed several times over the course of the three years. I also contributed my thoughts about the research in a reflective journal.

Numerical data from the surveys were entered into an SPSS database and crosstab tables were run. The first survey required students to rate the importance of instructional activities and the second survey students were asked to rate their skill levels with regard to course goals. Tables displaying the frequencies and percentages of responses were created to compare data from both surveys over the three-year time span (Tables 5 - 9). Narrative data from the surveys were coded by simple response themes and through the constant comparative method (Merriam, 1998; Lincoln & Guba, 1985).

Quantitative data regarding ratings of instructional activities will be described first, followed by the narrative responses regarding those activities. The data from the student interviews will be reported after the narrative, survey responses. Next, the data

from the students' self-report of goal attainment will be described (Table 10). Finally, data from the instructor's interviews and my reflective journal will be reported.

Table 5

Frequencies of Responses: *Observing Instructor or Intern*

Cohort	**N**	**Not at all important**		**Not very important**		**Somewhat important**		**Very important**	
		n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
				Goal 1 – anecdotal and running records					
2007	22	5	23	8	36	8	36	1	5
2008	21	6	29	6	29	6	29	3	14
2009	27	4	15	7	26	9	33	7	26
				Goal 2 – active listening and problem-solving					
2007	22	0	0	0	0	3	14	19	86
2008	21	0	0	2	10	6	29	13	62
2009	27	0	0	1	4	4	15	22	81
				Goal 3 – positive phrasing and modeling					
2007	22	0	0	0	0	2	9	20	91
2008	21	0	0	1	5	5	24	15	71
2009	27	0	0	1	4	5	19	21	78

Table 5, continued

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 4 – applying theory in classroom situations									
2007	22	0	0	3	14	10	46	9	41
2008	21	1	5	6	29	5	24	9	43
2009	27	1	4	1	4	10	37	15	56
Goal 5 – effective observer of children									
2007	22	0	0	4	18	8	36	10	46
2008	21	0	0	5	24	6	29	10	47
2009	27	2	7	2	7	9	33	14	52
Goal 6 – facilitate play situations									
2007	22	0	0	0	0	4	18	18	82
2008	21	0	0	2	10	4	19	15	71
2009	27	1	4	0	0	3	11	23	85
Goal 7 – utilize theory in interactions with children									
2007	22	0	0	0	0	12	55	10	46
2008	21	1	5	3	14	9	43	8	38
2009	27	1	4	0	0	8	30	18	67

Table 5, continued

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 8 – practice professional behavior									
2007	22	1	5	0	0	4	18	17	77
2008	21	3	14	1	5	5	24	12	57
2009	27	1	4	1	4	6	22	19	70

Note. Percentages were rounded to the nearest whole number.

Table 6

Frequencies of Responses: *Experience in Lab Working with Children*

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 1 – anecdotal and running records									
2007	22	0	0	1	5	4	18	17	77
2008	21	0	0	0	0	4	19	17	81
2009	27	0	0	0	0	3	11	24	89
Goal 2 – active listening and problem-solving									
2007	22	0	0	0	0	0	0	22	100
2008	21	0	0	0	0	2	9	19	91
2009	27	0	0	0	0	0	0	27	100

Table 6, continued

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 3 – positive phrasing and modeling									
2007	22	0	0	0	0	0	0	22	100
2008	21	0	0	0	0	2	10	19	91
2009	27	0	0	0	0	2	7	25	93
Goal 4 – applying theory to classroom situations									
2007	22	0	0	0	0	12	55	10	46
2008	21	0	0	1	5	7	33	13	62
2009	27	0	0	0	0	7	26	20	74
Goal 5 – effective observer of children									
2007	22	0	0	0	0	0	0	22	100
2008	21	0	0	0	0	0	0	21	100
2009	27	0	0	0	0	1	4	26	96
Goal 6 – facilitate play situations									
2007	22	0	0	0	0	3	14	19	87
2008	21	0	0	0	0	1	5	19	95
2009	27	0	0	0	0	5	19	22	81

Table 6, continued

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 7 – utilize theory in interactions with children									
2007	22	0	0	0	0	6	27	16	73
2008	21	0	0	0	0	5	24	16	76
2009	27	0	0	0	0	4	15	23	85
Goal 8 – practice professional behavior									
2007	22	0	0	0	0	3	14	19	86
2008	21	0	0	2	10	2	10	17	81
2009	27	0	0	4	15	3	11	20	74

Note. Percentages were rounded to the nearest whole number.

Table 7

Frequencies of Responses: *Pre-conference*

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 1 – anecdotal and running records									
2007	22	5	23	7	32	10	46	0	0
2008	20	2	10	5	25	11	55	2	10
2009	27	3	11	6	22	10	37	8	30

Table 7, continued

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 2 – active listening and problem-solving									
2007	22	2	9	7	32	10	46	3	14
2008	20	2	10	5	25	9	45	4	20
2009	27	3	11	8	30	9	33	7	26
Goal 3 – positive phrasing and modeling									
2007	22	1	5	5	23	10	46	6	27
2008	20	2	10	5	25	10	50	3	15
2009	27	2	7	10	37	8	30	7	26
Goal 4 – applying theory to classroom situations									
2007	22	1	5	7	32	11	50	3	14
2008	20	4	20	6	30	9	45	1	5
2009	27	1	4	0	0	15	56	11	41
Goal 5 – effective observer of children									
2007	22	0	0	4	18	13	59	5	23
2008	20	3	15	3	15	10	50	4	20
2009	27	1	4	8	30	11	41	7	26

Table 7, continued

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Goal 6 – facilitate play situations									
2007	22	1	**5**	3	**14**	12	**55**	6	**27**
2008	20	2	**10**	4	**20**	10	**50**	4	**20**
2009	27	1	**4**	8	**30**	13	**48**	5	**19**
Goal 7 – utilize theory in interactions with children									
2007	22	2	**9**	4	**18**	15	**68**	1	**5**
2008	20	3	**15**	8	**40**	7	**35**	2	**10**
2009	27	2	**7**	5	**19**	13	**48**	7	**26**
Goal 8 – practice professional behavior									
2007	22	1	**5**	2	**9**	4	**18**	15	**68**
2008	20	3	**15**	2	**10**	5	**25**	10	**50**
2009	27	0	**0**	3	**11**	7	**26**	17	**63**

Note. Percentages were rounded to the nearest whole number.

Table 8

Frequencies of Responses *: Post-conference*

Cohort	**N**	**Not at all important**		**Not very important**		**Somewhat important**		**Very important**	
		n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Goal 1 – anecdotal and running records									
2007	22	1	5	6	27	11	50	4	18
2008	20	1	5	5	25	9	45	5	25
2009	27	1	4	5	19	10	37	11	41
Goal 2 – active listening and problem-solving									
2007	22	1	5	4	18	10	46	7	32
2008	20	0	0	4	20	10	50	6	30
2009	27	2	7	3	11	12	44	10	37
Goal 3 – positive phrasing and modeling									
2007	22	0	0	4	18	8	36	10	46
2008	20	0	0	4	20	9	45	7	35
2009	27	1	4	5	19	15	56	6	22
Goal 4 – applying theory to classroom situations									
2007	22	0	0	5	23	14	64	3	14
2008	20	1	5	5	25	10	50	4	20
2009	27	0	0	0	0	13	48	14	52

Table 8, continued

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 5 – effective observer of children									
2007	22	1	5	4	18	8	36	9	41
2008	20	0	0	5	25	7	35	8	40
2009	27	1	4	6	22	13	48	7	26
Goal 6 – facilitate play situations									
2007	22	0	0	3	14	10	46	9	41
2008	20	0	0	3	15	12	60	5	25
2009	27	1	4	5	19	10	37	11	40
Goal 7 – utilize theory in interactions with children									
2007	22	1	5	4	18	15	68	2	9
2008	20	0	0	8	40	8	40	4	20
2009	27	1	4	2	7	13	48	11	41
Goal 8 – practice professional behavior									
2007	22	1	5	2	9	3	14	16	73
2008	20	1	5	2	10	5	25	12	60
2009	27	0	0	2	7	7	26	18	67

Note. Percentages were rounded to the nearest whole number.

Table 9

Frequencies of Responses : *One on One Discussion with Instructor*

Cohort	**N**	**Not at all important**		**Not very important**		**Somewhat important**		**Very important**	
		n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Goal 1 – anecdotal and running records									
2007	22	0	0	2	9	13	59	7	32
2008	21	0	0	2	10	9	43	10	48
2009	27	2	7	2	7	4	15	19	70
Goal 2 – active listening and problem-solving									
2007	22	0	0	3	14	6	27	13	59
2008	21	0	0	1	5	9	43	11	52
2009	27	1	4	2	7	7	26	17	63
Goal 3 – positive phrasing and modeling									
2007	22	0	0	2	9	2	9	18	82
2008	21	0	0	1	5	10	48	10	48
2009	27	0	0	2	7	7	26	18	67
Goal 4 – applying theory to classroom situations									
2007	22	1	**5**	2	9	10	46	9	41
2008	21	0	**0**	1	5	8	38	12	57
2009	27	0	**0**	1	4	7	26	19	70

Table 9, continued

Cohort	N	Not at all important		Not very important		Somewhat important		Very important	
		n	%	n	%	n	%	n	%
Goal 5 – effective observer of children									
2007	22	0	0	3	13	8	37	11	50
2008	21	0	0	3	14	9	43	9	43
2009	27	1	4	4	15	3	11	19	70
Goal 6 – facilitate play situations									
2007	22	1	5	1	5	6	27	14	64
2008	21	0	0	3	14	8	38	10	47
2009	27	0	0	4	15	5	19	18	67
Goal 7 – utilize theory in interactions with children									
2007	22	1	5	2	9	11	50	8	36
2008	21	0	0	4	19	8	38	9	43
2009	27	1	4	2	7	3	11	21	78
Goal 8 – practice professional behavior									
2007	22	0	0	1	5	5	23	16	73
2008	21	1	5	1	5	5	24	14	67
2009	27	1	4	3	11	4	15	19	70

Note. Percentages were rounded to the nearest whole number.

Table 10

*Student Self-ratings of Skill Level, 1=low, 5 = high**

Cohort	**N**	**2**		**3**		**4**		**5**	
		n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Goal 1 - anecdotal and running records									
2007	22	2	9	3	14	13	59	4	18
2008	21	0	0	0	0	8	38	13	62
2009	28	0	0	2	7	12	43	14	50
Goal 2 - active listening and problem-solving									
2007	22	0	0	2	9	19	86	1	5
2008	21	0	0	0	0	10	48	11	52
2009	28	0	0	2	7	10	36	16	57
Goal 3 - positive phrasing and modeling									
2007	22	0	0	2	9	17	77	3	14
2008	21	0	0	0	0	6	29	15	71
2009	28	0	0	1	4	12	43	15	54
Goal 4 - applying theory to classroom situations									
2007	22	2	9	9	41	9	41	2	9
2008	21	0	0	3	14	13	62	5	24
2009	27	0	0	6	22	18	67	3	11

Table 10, continued

Cohort	N	2		3		4		5	
		n	%	n	%	n	%	n	%
Goal 5 - effective observer of children									
2007	22	0	0	1	5	16	73	5	23
2008	21	0	0	0	0	5	24	16	76
2009	28	0	0	1	4	9	32	18	64
Goal 6 - facilitate play situations									
2007	22	1	5	4	18	13	59	4	18
2008	21	0	0	0	0	7	33	14	67
2009	28	0	0	0	0	12	43	16	57
Goal 7 - utilize theory in interactions with children									
2007	22	1	5	9	41	10	46	2	9
2008	21	0	0	3	14	9	43	9	43
2009	28	0	0	6	21	17	61	5	18
Goal 8 - practice professional behavior									
2007	22	0	0	2	9	4	18	16	73
2008	21	0	0	0	0	2	10	19	91
2009	28	0	0	0	0	3	11	25	89

Note. There were no responses for category "1". Percentages were rounded to nearest whole number.

Student Responses

Observing Instructor or Intern

The data from all three cohorts indicated that students rated observing the instructors or interns as important in helping them achieve all of the course objectives, with the exception of taking anecdotal and running records, which were marked as not very or not at all important by a majority percentage in the 2007 and 2008 cohorts. On the open-ended portion of the survey, several students indicated that observing instructors and interns helped them see appropriate teacher-child interactions and how to promote problem-solving among the children. Two particular statements stood out, "Having the opportunity to see such great modeling has had a huge impact on the amount I have learned at the lab," and "…just watching how *Jenny* or the interns approached a problem-solving moment was extremely helpful. I picked up key phrases to use and appropriate developmental practices."

Some students reported negative comments on the open-ended portion of the survey. These comments typically addressed the behavior of the student interns. Students reported that interns would occasionally interrupt their attempts to resolve conflict with the children. They wrote that they wanted the instructors to tell the interns to show them (undergraduate students) more respect and let them try and handle difficult situations.

The interviews with the students from the 2009 cohort yielded a little more insight into their feelings about observing instructors and interns. These students revealed they would appreciate more time to observe outside the classroom, in the observation booth.

This cohort of students was exceptionally larger than the other two years, and there would sometimes be seven teachers in the classroom with 18 children. Students reported feeling overwhelmed and that they might benefit more from having some time to watch the instructors and children from the observation booth.

Hands-on Experience in Lab Working With Children

More than 98% of the students in each cohort reported that hands-on experience at the lab, working with the children, was either somewhat important or very important in meeting all eight course goals. The open-ended portion of the survey confirmed these numbers; students often reported that working with the children was an obvious benefit and helped them apply what they have learned in their classes. They also wrote that it boosted their confidence level. A few specific comments taken from the survey summed up the overall sentiment about working with the children, "working with kids helps me solidify theories and practice what we learn", "I don't know how else we would learn it if it wasn't hands-on", "I feel experience with the children is the most direct way to learn about interacting with children and how to facilitate their play." The student interviews did not uncover any other themes about the benefits of hands-on experience at the lab.

Pre-conference

The pre-conference session received the highest frequency of "not very important" or "not important" ratings for the course goals of taking anecdotal and running records, and engaging in active listening and problem solving. The percentages of positive ratings for the pre-conference activity, relating to goal four (applying theory to

classroom situations), increased dramatically over the three years (64, 50, 96, respectively).

There were several responses on the open-ended portion of the survey regarding the pre-conference. Typical comments addressed the lack of structure and focus of the pre-conference session and the need for more details regarding the theories and rationales that were behind the specific activities on the schedule. In the 2007 cohort, there was not one comment that indicated the pre-conference played a significant role in achieving their objectives. Comments from students in the 2009 cohort were slightly more positive; several indicated an understanding of its usefulness in preparing them and going over expectations for the day, but did not indicate that the pre-conference activity contributed to fulfillment of course goals. However, the 2009 cohort of students made fewer requests (than the other two cohorts) for the theoretical connections; the jump in the frequency of positive ratings for goal 4, of applying theory to classroom situations, supports this change in students' perspectives.

The pre-conference session elicited the most comments from students in all three cohorts that suggested improvements. General remarks suggested keeping the session more focused and providing more discussion that would connect theories from their coursework. The students in the 2009 cohort wrote that assigning a specific objective (recognizing developmental milestones, writing anecdotal records, looking for examples from their courses) for the day would be helpful. Some also believed that walking through the classroom to look at the center activities would be more beneficial than just talking about them. Two quotes that represented these generalizations were found in the

open-ended part of the surveys, "I do not feel like I benefit from the conferences as much as I could if they were set up in a more organized or formal setting"; "I liked the pre-conference just so you could be aware of what was happening for the day."

The student interviews confirmed the comments from the survey. The students from the 2009 cohort provided more insight into their opinions about the pre-conference session. After reading comments from the first two years of surveys, I added more specific interview questions regarding the pre-conference session. Every student interviewed in the 2009 cohort agreed that reviewing the planned preschool activities, discussing curriculum rationales, and discussing particular issues that were relevant to that day, were all necessary and important to facilitate a successful experience at the lab. They also reported that these things needed to happen more consistently and with a little more depth to facilitate their learning.

Post-conference

The post-conference activity was rated as "somewhat important" or "very important" for each course objective by at least 60% of the students in every cohort. Seventy percent of the students felt it was important in meeting all course objectives, with the exception of the 2007 cohort and goal 1 (writing anecdotal and running records), and the 2008 cohort and goal 7 (utilizing theory in interactions with children). Just as it did for the pre-conference activity, the percentage of positive ratings rose impressively over the three years for the post-conference activity and goal 4, applying theory to classroom situations (77, 70, 100, respectively).

Overall comments about the post-conference on the open-ended portion of the survey, from all three cohorts, were positive. Students reported that this was a good time to reflect on the day, share experiences, and ask questions of and get feedback from the instructor and their peers. Some wrote that the post-conference time made a major contribution to their attainment of course goals. Specific quotes that corroborate these ideas were taken from the written surveys: "I feel post conferencing is very important because each person can reflect on and share their experiences for the benefit of others and work on problem-solving", "This is more helpful than pre-conference because we have a chance to discuss what is happening in certain situations and get feedback from peers", "Gave me the opportunity to know what I could improve on", "Mostly productive, helps wrap things up and discuss any issues."

A few students offered suggestions on how to improve the post-conference, some related to the course goals, and others were general suggestions. Some indicated a need for more discussion of theories and specific connections to ideas from other courses. A couple mentioned that it would be helpful to go over specific anecdotal or running records that were taken during the day. Some students commented that we needed to make sure parents pick their children up on time so the instructor can spend the full thirty minutes participating in the post-conference session with the students.

Data from the interviews confirmed what was reported on the written survey and provided more detail to some issues about the post-conference. Several reported that post conference was very informative and provided a valuable conclusion to the day; students expressed they felt comfortable asking questions and discussing their experiences. Some

noted that they would prefer more specific feedback regarding their work in the laboratory school, as opposed to more general comments that were shared in order to spare someone hurt feelings. They indicated they would rather be told where they were making mistakes so they could work toward improvement.

One-on-one Discussions with Instructor

At least 81% of students from each cohort indicated that discussions with the instructor were either somewhat important or very important in reaching each of the eight course goals. The activity that provided the most help for students in meeting goal one (writing anecdotal and running records) was one-on-one discussions with the instructor.

Written feedback regarding one-on-one discussions with the instructor was overwhelmingly positive. Students reported that this time was helpful because they got specific feedback and questions answered, and the instructor was able to go into depth and provide insights into particular areas of interest or concern to the individual student. Students wrote that they appreciated the privacy and felt comfortable discussing their feelings or concerns. The most evident theme among students was their desire to have more scheduled time for these discussions. Quotes from students that captured these sentiments were: "This was helpful because we didn't have to worry about what our peers thought and I felt I still feel I can be totally honest about my feelings and concerns", "This helped because it let me know what I needed to work on and what I was doing correctly", "Would like more one-on-one discussions to better understand how to handle certain situations better & know what I did right and wrong." Student interviews from 2007 and 2009 corroborated these reports. Students in the 2009 interviews added that

they felt the instructors were accessible and they felt good about having the instructors' cell phone numbers if they needed help.

Self-Report of Goal Attainment

The undergraduate students rated their skill levels for each of the eight course goals using a 5-point Likert scale, where "1" indicated not reaching the goal at all and "5" indicated reaching the goal successfully. Students reported the most confidence in their abilities for goals 5, 8, and 3 (becoming an effective observer of children, practicing professional behavior, and positive phrasing and modeling, respectively). Over the three-year time period, the scores for those goals did not vary much. Goals 7 and 4, both related to theory, were consistently the lowest among the three cohorts. In 2007, students indicated a lower success rate for goals 1 and 6 (writing anecdotal and running records and facilitating play situations).

Overall, the students reported a high level of confidence in their attainment of course goals, with the exception of one cohort (2007), for one goal. Fifty percent of these students reported a rating of two or three for their success in accomplishing goal 4 (applying theory in classroom situations). There were only six instances where students marked themselves with a score of "2" on an item (goals 1, 4, 6, 7), and all of these students were in the 2007 cohort. No students in the study reported a score of "1."

Instructors

For this section, I am reporting the results from interviews with one instructor and my personal reflections, since I am also an instructor at the lab. Any references I make to "the instructor" will refer to the other lab instructor, not myself.

The instructor at the lab indicated that the data from the surveys and interviews were very useful. She reported that her practice for the last two years was directly related to what was discovered after the initial round of research in 2007. She said it was very helpful to get direct feedback about specific aspects of the lab, not only to know what we need to work on, but also what we are doing well. The data also provided her insight into the students' perspectives. The information gained about pre and post conferences helped her see which goals were not being addressed sufficiently at those times. Overall, she felt like the evaluation was a catalyst to think more critically and systematically about strengthening her practice with the students.

After the initial collection of data in 2007, we immediately made changes in our practice. The main focus of these changes, centered on structuring the pre-conference session, increasing one-on-one time with instructors, and incorporating more discussion of theories and anecdotal record taking. These actions were a direct result of data that reported concerns about those particular activities and those specific course goals.

When asked about adaptations she has made based on the evaluation data, she shared two major changes. The first change she made was the creation of a lab debriefing form, which helped focus the content of the pre and post conferences. On this form, students would write down a specific goal to focus on for the day, report how that goal was met, and write down any questions they had for the instructor. They also had room to report any theoretical connections they were looking for or experienced during the lab time. At the end of each semester, she gathered feedback about this form and made minor adjustments accordingly.

The second major change the instructor reported was scheduling more one-on-one time with students, typically in the observation booth, during free-play center time for the preschool children. The large number of undergraduate students made this easier to accomplish this academic year (2008-2009). She said she focused on what was most important to each student. The instructor reported that scheduling of regular meeting times with students has made a big impact on the students' learning.

The whole process of the evaluation over the last three years has impacted her practice at the lab school. She said she has experienced a "big shift" in accountability and is much more focused on goal-oriented teaching and developing the specific skills that are stated in the syllabus. She reported that after examining the goals so closely, we might want to consider changing some of them or adding more. Some goals are difficult to interpret and need to be defined in more detail, and others are difficult to measure in a laboratory setting. Overall, the instructor felt that the evaluation process was extremely beneficial for the undergraduate students and her development as a professional.

I had similar experiences with the evaluation process. It was an extremely powerful and useful undertaking. I felt one of the biggest benefits to the lab school and our whole early childhood program, was our modeling of self-study and reflective practice. We were transparent in our pursuit of more effective teaching and better learning for our students, and I believed this was a great example for pre-service teachers. I also felt a new focus on accountability and goal-directed teaching; I made matrices for the other courses I taught that aligned the course objectives with class assignments and instructional activities.

The changes I made at the lab were similar to those of the other instructor. I adopted the same lab debriefing form that she created. I did not implement it as regularly, I typically alternated the form each week with a form for completing anecdotal records. I felt completing both forms would address the data from the surveys: the need for a more focused pre-conference, help with applying theory, and a lower rating of success in ability to write anecdotal and running records. I also began to meet with students in the booth and to schedule mid-semester conferences with each student to discuss her progress. The other instructor and I agreed that the pre and post conferences and one-on-one discussions with us would be the easiest activities to modify to meet the students' needs.

The data from the evaluation was insightful and it motivated me to improve my practice, however I was not as successful in implementing all the changes I wanted to. I found that the biggest obstacle for me was finding the time in my schedule to respond to questions on the lab debriefing form, review anecdotal records, and regularly meet with each student in the booth during center time. I continued to attempt these practices but not with the consistency I preferred. However, I felt that the 2009 cohort that reported more positive data relating to goal four and the pre-conference session indicated that some of my efforts were making a difference.

As a program administrator, this evaluation was a valuable experience and it contributed to my development as a leader and professional in the field of early childhood and teacher education. I realized the significance of on-going formative evaluation and was embarrassed that it took a formal dissertation project to get this started. After two

years, I finally figured out that it would be of even greater benefit to us (instructors) if I aggregated the data by morning and afternoon session - that way we would know which comments applied directly to which instructor. For this study, I did not report the separate data, but I did enter it and analyze it for discussions with the other instructor. Overall, this evaluation experience was very positive; I am confident I will continue to pursue formative evaluations in any context in which I work.

Appendix F

Discussion

The purpose of this study was to use a theory approach logic model to frame a utilization-focused, formative, process evaluation of the undergraduate program at a university laboratory preschool. Data gathered from students and instructors provided helpful feedback that has been utilized to make changes in teaching activities. The logic model proved a useful tool (that was easily constructed) to show the linkages between the program theory, the activities intended and provided, and the projected outcomes.

As stated earlier, this was a utilization-focused evaluation. The process of creating the model was a catalyst for analysis and reflection for the lab school instructors. The total program evaluation experience exemplified Patton's (2008) definition of "intended use by intended users" (p. 37). The data yielded three major areas we could focus on for improvement at the lab school. The two activities that deserved the most attention were the pre-conference session and one-on-one time with the instructor. The third issue that warranted attention was not an instructional activity, but a course goal. The students' ratings of their skill levels helped us see how the students were struggling with connecting theory to practice. We were able to utilize this information to adapt those two instructional activities and place more emphasis in our discussions and other activities on bridging the gap between theory and practice.

Upon review and reflection of the data from 2007, a pattern emerged that students felt that the pre-conference was the least favorite or least helpful part of the learning

activities. After discussion of the data, we changed our practice accordingly. However, a similar pattern emerged in the 2008 data, and we were quite frustrated feeling as if our efforts to accommodate student needs and interests made little difference. After further discussion, the other instructor and I concluded that part of the lower rating was due to the nature of the pre-conference activity itself. It is difficult to make interesting or controversial the schedule of the day and the explanation of the center activities and their developmental rationales. This "debriefing" is a necessary component of good practice and it provides students with essential information to know what to expect for the day – but it did not typically provide the same stimulus for discussion and debate that the post-conference usually did. To verify this conclusion, I adapted the questions for the 2009 interviews and students confirmed that preparing them for the day and going over curriculum rationales is important for their learning; they did find value in the pre-conference activity. Discussing daily activities and reviewing rationales are critical components of the pre-conference session – even if it does not specifically address their course goals. The feedback from the evaluation was still very useful in that it let us know that sometimes we were easily led off task and that we needed to focus and get to the point, which would give the session more meaning. Also, we were able to combine what we learned about students' self-reported lower level of understanding of the connections between theory and practice, and would spend time covering this topic specifically during the pre-conference session.

Another strong pattern that emerged from the data was the significance of the one-on-one time spent with the instructor. This data support the strong theoretical tie to

the activity and emphasizes the importance of dialogue between a mentor and student (Bruner, 1966, 1996; DeVries, 1997; Dewey, 1976; Jacobs, 2001). I knew that these discussions were a valuable part of the students' experience, but this was something that was easily overlooked due to feeling overwhelmed with all of the other responsibilities of running a lab school. In the past, I would meet with students once or twice a year for 15 or 20 minutes to discuss how things were going, but after seeing these data on paper, repeatedly, I realized I had to re-arrange my priorities to make sure these students were getting sufficient one-on-one time with me (and the other instructor). It made such an impact, I found myself sitting in the office of the Chair of our department, telling him that the lab instructors should not be over-burdened with faculty responsibilities. I felt our primary mission of providing a solid undergraduate field placement was suffering when we were expected to wear too many hats!

After realizing I needed to make some priority shifts, I now schedule a minimum of three meetings with each student, each 15 or 20 minutes. I also meet informally with each one or in groups of two, during the preschool class session, at least twice each semester (I pull them out of the classroom, and observe with them from the observation booth). The practice of more frequent one-on-one discussion has provided another outlet to address theoretical connections between their course readings and their practice and observations at the lab.

During interviews and informal conversations with students, it was often repeated that it was difficult to make connections to theory while students were at the lab. They expressed it was easier and more natural to make these connections later while they were

reading their textbooks or discussing issues in their classes. It was a much more natural and comfortable process to remember the events that happened at the lab and tie to the reading, than it was to pull from all of their reading and course discussions and apply them to our discussions at pre and post-conference. We felt that this made sense and it provided validation to our work at the lab. Even if the students were not able to articulate specific theory-to-practice connections at the pre- and post-conference sessions, their experiences at the lab were still providing an opportunity for them to make the connections over the course of the semester, albeit in different instructional settings. Again, this ties directly to the literature that supports a strong theoretical connection between laboratory experiences and coursework (Christensen, 1989; Henry, 1989).

Implications

Teacher education curriculum is rich with instruction that addresses evaluation – assessment of children and reflection upon their own (student) practice. Program evaluation of a lab school is critical because a lab serves as an ideal site for training teachers, and therefore should be of the highest quality. Evaluation allows opportunities for critical reflection and program improvement. A lab school must also demonstrate self-study and evolution – a program that actively practices what it preaches. A model school should routinely examine its practice and make changes accordingly. This reflective practice is a teaching opportunity in itself, showing the students how to systematically evaluate a program and make appropriate adaptations. The evaluation process should be transparent, and the students should be seen as significant stakeholders, learning more through participation and understanding of their role in program

improvement. The use of a logic model facilitates this transparency, as it can be a simple, visual representation of an evaluation that is easy to explain. The students also benefit from participating in a program of higher quality, assuming that after self-study and program modifications, the learning and field experience provided would be of improved value.

Students are learning about assessment practices with young children and are (hopefully) seeing it modeled in the lab setting, so why not experience firsthand through an evaluation study? Lab schools have the unique opportunity to measure not only their practice of teaching young children and working with families, they also can evaluate their role in the development of pre-service teachers. Program evaluations make valuable contributions to the field of evaluation and education and can also be catalysts for reflection and program improvement.

The benefits to pre-service teachers participating in a lab school evaluation are many. As active participants as stakeholders and data points, they experience firsthand the process and value of evaluation for program improvement. A good teacher is well versed in reflection, and a teacher education program should find diverse applications and opportunities for students to witness and practice this skill.

Evaluation not only benefits students, but instructors, as well. The reflective process involved in self-study is rigorous. Instructors must utilize the data and make appropriate changes to benefit students. Teachers also can share the results found through an evaluation with other educators, who may benefit from the information. Disseminating information is a form of leadership and contributes to the teacher's

personal and professional development. The process of self-study, program evaluation, and adaptation is another form of professional development and sign of growth, therefore becoming a tool in the development of the teachers involved.

Improvements made to a laboratory preschool would have obvious benefits for the children and families participating in the program. These benefits would vary dependent upon what type of evaluation is taking place. Evaluation of a lab school could examine the preschool program and/or the teacher education component of the program. Parents who are aware of the preschool program evaluation might feel more confident in the school and the teachers, knowing that they are working to evaluate and improve upon their program. Children obviously benefit from a school program that undergoes evaluation; instructional activities and other aspects should improve as a result of an evaluation of the preschool program. If the teacher education program is studied, the parents can benefit from knowing that their children are participating in a program that is concerned with providing a high quality teacher training facility, which should go hand in hand with a quality children's program.

The broader implications regarding the significance of program evaluation are many. Laboratory preschools serve as models to the community and to the students participating in a teacher preparation program. It is surprisingly rare to read published reports of lab school evaluations (Clawson, 1999). A program that undergoes and documents assessment of the children's program and/or the teacher training program should be seen as a leader and a model for other laboratory school settings. Beck and Kosnik (2006) point out the importance of self-study research and evaluation as a form of

learning; that there is more research using self-study being conducted. This makes a case for program self-study and evaluation as a contribution to higher education and various fields of research. The significance is not limited to practical use of program study and improvement, but also for teacher education research purposes, as we continue to look for factors that contribute to quality teacher preparation programs and field experiences.

Evaluation research is its own area of academic study. Any research of an educational program contributes to the fields of evaluation and education (and a lab preschool evaluation also contributes to the field of early childhood education). On a university and national level, published reports can lend credibility to a program. The subject of laboratory preschool lab school evaluations is so slim, the likelihood that published evaluation processes will provide meaningful and relevant insights to inform the field is highly probable (McBride, B., personal communication, March 23, 2008).

Conclusion

The process of conducting a formal evaluation of our lab school utilizing a theory approach logic model proved beneficial on many levels. The obvious value was the immediate feedback obtained from students that permitted us to more formally view and understand their perspective. This insight was especially valuable because it reminded us that even though we approach our teaching with (what feel to be) the most appropriate and applicable teaching theories and strategies, we cannot dismiss the value of the students' perceptions and understanding of our purpose and approaches. I know it has reinforced, for me, that the value I put into the developmentally appropriateness of my early childhood instruction and the concept of teaching the children as individuals, so

must I approach teaching at the college level. That does not mean I should abandon what I know and have experienced to be effective, but to be more sensitive to the context of the teaching environment and the unique responses that individual or groups of students may have.

This study provides evidence that a logic model can be an effective evaluation design in a lab school environment. It is impossible to project that other lab schools would experience similar success, but this study does suggest that it is quite plausible. It is hopeful that laboratory schools would participate in more systematic evaluations (self-studies) and make public their processes and findings. Schools that are intended as models for pre-service educators should demonstrate self-examination and analysis for program improvement. It is hypocritical for lab schools (and teacher preparation programs) to encourage young teachers to be reflective practitioners and use assessment to guide student learning if they are not participants in the evaluation process. Argyris and Schön (1974) wrote that programs operate under a relevant assumption that the theories of action will yield intended consequences. This statement is congruent with the earlier comment by Walker (2006) addressing the need to have the results live up to predictions. It makes sense that those theories and practices need to be evaluated.

The evaluation process made an impact on our program as well. Patton (2008) described "process use" as impacts made on programs from the thinking required to engage in the evaluation, not the actual findings from the evaluation. The ongoing evaluation of our teaching practices with the undergraduate students at the lab preschool will continue to evolve. The data gathered were helpful and insightful; the process of

collecting, analyzing, and discussing how we can address issues, was a professional development experience and gave us a renewed sense of commitment and value to our work. The transparency of the model and our willingness to share this experience provides an opportunity to demonstrate ongoing reflective practice to our pre-service teachers. The students were also aware of changes we made throughout the year that reflected their responses to our evaluation. This was evidence to them that we valued their opinion and feedback, and again, provided a model to them of what we would expect these students to do in their future classrooms.

The flexibility of the logic model allows for application to programs ranging from simple to complex. Program stakeholders (or educational leaders) have the freedom to construct the model to their liking and design or choose instruments that will address the issues or activities uncovered in the model. However, it is true that further examination is needed to test the utility of the logic model in other educational settings.

References

Argyris, C. & Schön, D.A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.

Baker, M.C. (1966). *Foundations of John Dewey's educational theory.* New York: Atherton Press.

Barbour, N.E. (2003). The early history of child development laboratory programs. In B. McBride & N. Barbour (Eds.), *Bridging the gap between theory, research and practice: The role of child development laboratory programs in early childhood education* (pp. 9-29). Advances in Early Education and Day Care, (12). Amsterdam: Elsevier.

Beck, C. & Kosnik, C. (2006). *Innovations in teacher education: A social constructivist approach*. Albany: State University of New York Press.

Bersani, C. & Hutchins, P. (2003). Reconceptualizing the child development laboratory school. In B. McBride & N. Barbour (Eds.), *Bridging the gap between theory, research and practice: The role of child development laboratory programs in early childhood education* (pp. 113-139). Advances in Early Education and Day Care, (12). Amsterdam: Elsevier.

Bolin, F.S. (1988). Helping student teachers think about teaching. *Journal of Teacher Education*, 39, 48-54.

Braun, J.A. (Ed.). (1989). *Reforming teacher education: Issues and new directions*. New York: Garland.

Brun, C. F. (2007). *A practical guide to social service evaluation.* Chicago: Lyceum Books.

Bruner, J. (1966). *Toward a theory of instruction.* Cambridge: Belknap Press.

Bruner, J. (1996). *The culture of education*. Cambridge: Harvard University Press.

Caswell, H.L. (1949). The place of campus laboratory schools in the education of teachers. Teachers College Record, 50(7), 441-450. Retrieved August 2, 2008, from http://www.tcrecord.org.

Christensen, J.C. (1989). Master teachers: A way to restructure the profession. In J. A. Braun, Jr. (Ed.), *Reforming teacher education: Issues and new directions* (pp.) New York: Garland.

Clawson, M.A. (1999). Continuity between course content and lab school practice: outcomes of a self-study of the lab school at Syracuse University. *Journal of Early Childhood Teacher Education*, 20,7-17.

Clawson, M.A. (2003). The dilemma of linking theory and research with practice and innovation in child development laboratory programs. In B. McBride & N. Barbour (Eds.), *Bridging the gap between theory, research and practice: The role of child development laboratory programs in early childhood education* (pp. 51-87). Advances in Early Education and Day Care, (12). Amsterdam: Elsevier.

Clift, J.C. & Imrie, B.W. (1980). The design of evaluation for learning. *Higher Education,* 9(1). 69-80.

Cronbach, L.J. (1963). Course improvement through evaluation. *Teachers College Record*, 64, 672-683.

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence [Electronic Version]. *Education Policy Analysis Archives*, 8. Retrieved September 5, 2007.

Darling-Hammond, L. (2003). Keeping good teachers: Why it matters...What leaders can do. In A. f. S. a. C. Development (Ed.): EBSCO Publishing.

Darling-Hammond, L. (2004). Inequality and the right to learn: Access to qualified teachers in California's Public Schools. *Teachers College Record, 106*(10), 1936-1966.

Darling-Hammond, L., Berry, B., & Thoreson, A. (2001). Does teacher certification matter? Evaluating the evidence. *Educational Evaluation and Policy Analysis, 23*(1), 57-77.

Darling-Hammond, L., & Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge. [Electronic Version]. *Education Policy Analysis Archives*, 11. Retrieved September 17, 2007.

Darling-Hammond, L., & Baratz-Snowden, J. (2007). A good teacher in every classroom: Preparing the highly qualified teachers our children deserve. *Educational Horizons, Winter 1997*, 111-132.

DeVries, R. (1997). Piaget's social theory. *Educational Researcher*, 26(2). 4 – 17.

Dewey, J. (1976). *The school and society*. J. Boydston, (Ed.). Carbondale: Southern Illinois University Press.

Eisner, E. (1985). *The art of educational evaluation*. Lewes: Falmer.

Fetterman, D.M. (1988). A qualitative shift in allegiance. In D.M. Fetterman, (Ed.). *Qualitative approaches to evaluation in education: The silent scientific revolution,* (pp. 1-17). New York: Praeger.

Flavell, J.H. (1977). Cognitive development. Englewood Cliffs: Prentice Hall.

Fromberg, D.P. (2003). The professional and social status of the early childhood educator. In J. P. Eisenberg & M.R. Jalongo (Eds.), *Major trends and issues in early childhood education: Challenges, controversies, and insights,* (2nd ed.). New York: Teachers College.

Gage, N. L., & Winne, P. H. (1975). Performance based teacher education. In K. Ryan (Ed.), *Teacher Education: The Seventy-Fourth Yearbook of the National Society for the Study of Education, Part II*. Chicago: University of Chicago Press.

Hedegaard, M. (1990). The zone of proximal development as a basis for instruction. In L.C. Moll (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology.* Cambridge: Cambridge University Press.

Henry, M.A. (1989). Change in teacher education: Focus on field experiences. In J. A. Braun, Jr. (Ed.), *Reforming teacher education: Issues and new directions* (pp.) New York: Garland.

Horm, D.M. & Warford, S.D. (2003). Bridging the gap through community collaboration: An evolving role for child development laboratory programs. In B. McBride & N. Barbour (Eds.), *Bridging the gap between theory, research and practice: The role of child development laboratory programs in early childhood education* (pp. 141-161). Advances in Early Education and Day Care, (12). Amsterdam: Elsevier.

Isenberg, J.P. (2001). The state of the art in early childhood professional development. In D. Horm-Wingered, M. Hyson, & N. Karp (Eds.), *New teachers for a new century: The future of early childhood teacher preparation.* National Institute on Early Childhood Development and Education. U.S. Department of Education.

Jacobs, G.M. (2001). Providing the scaffold: A model for early childhood/primary teacher preparation. *Early Childhood Education Journal,* 29(2). 125-130.

Kidder, L.H. & File, M. (1987). Qualitative and quantitative methods: When stories converge. In M.M. Mark & R. L. Shotland (Eds.). *New directions for program evaluation*, a publication of the American Evaluation Association, (35). San Francisco: Jossey-Bass.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park: Sage.

McBride, B.A. (1996). University-based child development laboratory programs: Emerging issues and challenges. *Early Childhood Education Journal,* 24(1), 17-21.

McCarthy, J. (1990). The content of early childhood teacher education programs: Pedagogy. In B. Spodek & O.N. Saracho (Eds), *Yearbook in early childhood education (1), Early childhood teacher preparation* (pp. 82-101). New York: Teachers College.

McGee-Brown, M.J. (1994). Qualitative and ethnographic evaluation. In D.A. Payne's, *Designing educational project and program evaluations: A practical overview based on research and experience* (pp. 121-141). Boston: Kluwer Academic.

McLaughlin, J., & Jordan, G. (2004). Using logic models. In J. Wholey, et. al. (Eds.), *Handbook of practical program evaluation* (pp. 7-32). San Francisco: Jossey-Bass.

Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.

Morgan, H. (2007). *Early childhood education: History, theory and practice.* New York: Rowman & Littlefield Education.

National Association for the Education of Young Children (1993). *Conceptual framework for early childhood professional development: A position statement*. Retrieved July 6, 2008,http://www.naeyc.org/about/positions/pdf/psconf98.pdf.

O'Sullivan, R.G. (2004*). Practicing evaluation: A collaborative approac*h. Thousand Oaks: Sage.

Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Newbury Park: Sage.

Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park: Sage.

Patton, M. (2008). *Utilization-focused evaluation* (4th ed.). Thousand Oaks: Sage.

Payne, D.A. (1994). *Designing educational project and program evaluations: A practical overview based on research and experience*. Boston: Kluwer Academic.

Peck, R. F., & Tucker, J. A. (1973). Research on teacher education. In R. M. Travers (Ed.), *Second Handbook of Research on Teaching*. Chicago: Rand McNally College Publishing Company.

Peters, D.L. & Klinzing, D.G. (1990). The content of early childhood teacher education programs: Child development. In B. Spodek & O.N. Saracho (Eds), *Yearbook in early childhood education (1), Early childhood teacher preparation* (pp. 67-81). New York: Teachers College.

Popham, W.J. (1993). *Educational evaluation* (3rd ed.). Boston: Allyn and Bacon.

Ritchie, R. (2007). School self-evaluation. In S. Kushner & N. Norris (Eds.). *Advances in Program Evaluation,* vol. 10, *Dilemmas of engagement: Evaluation and the new public management.* Amsterdam: Elsevier.

Robert Wood Johnson Foundation, Ounce of Prevention Fund (2003). *Planning for success: Mapping goals, services, and outcomes for program improvement: Birth to five best practices* (Report No. 2). New Brunswick: Yarbrough, K.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A systematic approach*. Thousand Oaks: Sage.

Scheirer, M. A. (1994). Designing and using process evaluation. In J. Wholey, et. al. (Eds.), *Handbook of practical program evaluation* (pp. 40-68).

Scheerens, J. (2002). School self-evaluation: Origins, definitions, approaches, methods and implementation. In D. Nevo (Ed.). *School-based evaluation: An international perspective*, (pp. 35-69). Advances in Program Evaluation, vol. 8. Amsterdam: Elsevier.

Scriven, M. (1988). *Evaluating teachers as professionals*. U.S. Department of Education. Office of Educational Research and Improvement.

Simons, H. (2002). School self-evaluation in a democracy. In D. Nevo (Ed.). *School-based evaluation: An international perspective*, (pp. 17-34). Advances in Program Evaluation, vol. 8. Amsterdam: Elsevier.

Spodek, B. & Saracho, O.N. (1997). Evaluation in early childhood education: A look to the future. In B. Spodek & O.N. Saracho, (Eds.). *Yearbook in Early Childhood Education*: Vol. 7, *Issues in early childhood educational assessment and evaluation.* New York: Teachers College.

Stake, R.E. (1995). *The art of case study research*. Thousand Oaks: Sage.

Stremmel, A.J., Hill, L.T, & Fu, V.R. (2003). An inside perspective of paradigm shifts in child development laboratory programs: Bridging theory and professional preparation. In B. McBride & N. Barbour (Eds.), *Bridging the gap between theory, research and practice: The role of child development laboratory programs in early childhood education* (pp. 89-111). Advances in Early Education and Day Care, (12). Amsterdam: Elsevier.

Tashakkori, A. & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* Applied Social Research Methods Series, vol. 46. Thousand Oaks: Sage.

Taylor, I. (1997). *Developing learning in professional education: Partnerships for practice.* Buckingham: Society for Research Into Higher Education.

Thomas, S.J. (2004). *Using web and paper questionnaires for data-based decision making: From design to interpretation of the results.* Thousand Oaks: Corwin Press.

W.K. Kellogg Foundation. (2004). *Logic model development guide*. Battle Creek, Michigan.

Walker, D. (2006). Toward productive design studies. In J. van den Akker, K. Gravemeijer, S. McKenney, and N. Nieveen, (Eds.), *Educational Design Research.* London: Routledge.

Waxman, H.C., Houston, W.R., & Cortina, L. (2002). Determining program quality of a social service collaborative using case study methods and moving toward participatory evaluation. In A.P. Benson, D.M. Hinn, & C. Lloyd (Eds.), *Advances in Program Evaluation, vol. 7, Visions of quality: How evaluators define, understand and present program quality* (pp.135-151). Amsterdam: Elsevier.

Weiss, C.H. (1997). Theory-based evaluation: Past, present, and future. *New Directions for Evaluation*, 76 (pp. 41- 55).

Werner, A. (2004). *A guide to implementation research.* Washington D.C.: Urban Institute.

Wholey, J.S. (1991). Evaluation for program improvement. In W.R. Shadish, Jr., T.D. Cook & L.C. Leviton (Eds.), *Foundations of program evaluation: Theories of practice*. Newbury Park: Sage.

Wolf, R.M. (1990). *Evaluation in education: Foundations of competency assessment and program review*. New York: Praeger.

Yin, R.K. (1994). *Case study research: Design and methods*, 2nd ed. Thousand Oaks: Sage.

Appendix G

Survey Instruments

Please indicate the importance of each of the lab experiences listed at the left, as to how it contributes to reaching the goals listed across the top. Use the following rating system:

1 – not at all important 2 – not very important 3 – somewhat important 4– very important

	Goal 1	**Goal 2**	**Goal 3**	**Goal 4**	**Goal 5**	**Goal 6**	**Goal 7**	**Goal 8**
Experience at lab ↓								
Observing Instructor or Interns								
Experience in lab/ working with children								
Pre Conference								
Post Conference								
1 on 1 discussion w/ instructor								

**survey was originally printed in landscape orientation, and description of each goal

was listed on the instrument, could not fit here because of formatting restrictions

Please indicate on the scale below the number that best represents your accomplishment of the following goals:

1 indicates not reaching the goal at all, and 5 indicates reaching goal successfully

1. Become familiar with and practice the process of writing anecdotal notes and running records.	1	2	3	4	5
2. Engage in active listening and problem-solving skills with children.	1	2	3	4	5
3. Use positive phrasing and model appropriate behavior to guide children.	1	2	3	4	5
4. Apply theoretical concepts to classroom situations.	1	2	3	4	5
5. Become a more effective observer of children	1	2	3	4	5
6. Demonstrate an ability to facilitate appropriate play situations.	1	2	3	4	5
7. Demonstrate understanding of the theory building process by utilizing that process in interactions with children.	1	2	3	4	5
8. Practice professional & responsible behavior while working within a team.	1	2	3	4	5

Please provide comments that explain your number ratings on the previous survey:

Observing Instructor or Interns	
Experience in lab/ working with children	
Pre Conference	
Post Conference	
1 on 1 discussion w/ instructor	

Please provide comments about **how to improve these activities** to facilitate your successful completion of course goals:

Observing Instructor or Interns	
Experience in lab/ working with children	
Pre Conference	
Post Conference	
1 on 1 discussion w/ instructor	

Appendix H

Interview Questions

What suggestions do you have to make improvements to the laboratory undergraduate program (that expand upon what you wrote on the survey)?

- Observing instructor or intern
- Working with children
- Pre-conference
- Post-conference
- 1-on-1 with instructor

With regard to the pre-conference, do you agree:
That its purpose of reviewing daily activities is important? Y N

- Please explain.

The discussion of curriculum rationales and purpose behind activities is helpful? Y N Please explain.

Discussion of particular children or issues relevant to the week or certain activities or situations that have been occurring is helpful? Y N Please explain.

Do you have any more suggestions for making the pre-conference session more helpful?

With regard to applying theoretical concepts to classroom situations:

Would it be helpful for the laboratory instructor to have a specific theory or idea from a course to discuss in pre-conference and/or post conference? Something already planned out versus whatever may come up? Please explain.

What is the best way the laboratory activities can facilitate the theory to practice connection?

What is the best way for the laboratory instructor to assess your ability to apply theoretical concepts to classroom situations? Is this an appropriate expectation for the laboratory? Why or why not?

Would a laboratory debriefing form be helpful? If so, how should it be utilized?

Should the post-conference be more structured – with a standard format? Why or why not?

1. What is the best way for you to receive feedback from your instructor?
2. Any other comments?

Appendix I

Letter of Information

INFORMATION SHEET FOR CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Dear early childhood student or lab instructor,

My name is Lisa Monroe, and I am a student in College of Education, Educational Leadership and Policy Studies Department at the University of the Oklahoma. I am requesting that you volunteer to participate in a research study titled Evaluation of a laboratory preschool. You were selected as a possible participant because of your current or prior participation at the Institute of Child Development. Please read this information sheet and contact me to ask any questions that you may have before agreeing to take part in this study.

Purpose of the Research Study: The purpose of this study is to improve the undergraduate program at the Institute of Child Development.

Procedures: If you agree to be in this study, you will be asked to complete a questionnaire rating your experiences at the Institute and asked to provide comments clarifying your ratings. The survey will take approximately 15 – 25 minutes to complete. Students will be given class time to complete the survey and there will be no way of figuring out who has participated and who has not. The instructors will complete the survey on their own time and will participate in the interview process at the lab school during work hours. The interview is expected to take less than 30 minutes and the questions asked are designed to provide greater detail and insight to the answers provided on the written survey.

Risks and Benefits of Being in the Study: The study has no risks. The benefits to participation are your own professional growth and development and also your contribution to the improvement of OU's laboratory preschool and the field of early childhood education.

Compensation: You will not be compensated for your time and participation in this study.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not result in penalty or loss of benefits to which you are otherwise entitled. If you decide to participate, you are free not to answer any question or withdraw at any time.

Confidentiality: The records of this study will be kept private and your supervisor will not have access to your responses. In published reports, there will be no information included that will make it possible to identify you as a research participant. Research records will be stored securely, kept in a locked file cabinet at the Principal Investigator's home. Only approved researchers will have access to the records.

Contacts and Questions: The researcher(s) conducting this study can be contacted at lmonroe@ou.edu or 325-1641. You can reach my supervisor, Dr. Gregg Garn at garn@ou.edu or 325-1275. You are encouraged to contact the researcher(s) if you have any questions. If you have any questions about your rights as a research participant, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405.325.8110 or irb@ou.edu.

Please keep this information sheet for your records. By completing and returning this questionnaire, I am agreeing to participate in this study.