

# RELEVANCE AND EFFECTIVENESS OF VYGOTSKY'S THEORY IN EARLY CHILDHOOD EDUCATION:

## *STUDENT-TEACHERS' PERSPECTIVE*

<sup>1</sup> Jawaher Fahad Alghofaili

PhD candidate, The University of Alabama, Birmingham

### *Abstract :*

This study investigated student teachers' perspectives on their experiences regarding the relevance and effectiveness of Vygotsky's Theory in Early Childhood Education. The researcher examines whether or not training in a high quality grow professionally in learning through Early childhood education (ECE) theory to classroom practice. Sixteen student -teachers were placed in ECE classrooms. A 10-item survey was used as pre-test and post-test. The results show that the student teaching experience provided at the ECE lab school was highly effective in helping student teachers achieve experience with NAEYC standards and yielded positive outcomes for the student teachers. An aspect that requires more attention is the student teachers' need for more feedback from classroom teachers to enhance their preparation for teaching

**IndexTerms - Early childhood, Vygotsky's Theory, quality practice, student teacher, written reflection, project activities, teacher effectiveness**

### **I. INTRODUCTION**

Teachers play a major role in all of these approaches, with each approach providing a different method for the teachers to follow. For example, teachers of the Waldorf method are leaders in the classroom on many levels, and also provide a moral model for the students.

Waldorf teachers have more command of the classroom and are more direct in teaching their students. Montessori encourages a teacher to be mentally present in the classroom, but not to be overtly involved or disruptive to the natural learning process of the students. The Montessori classroom should be a place of peace and serenity as well as learning. Teaching methods with Montessori are often characterized by long periods of quiet but intense concentration followed by moments of respite. On the other hand, Reggio teachers facilitate learning by listening to the children, engaging their students in the learning process, giving them attention when necessary and encouraging the children to resolve conflicts among themselves. In Reggio Emilia schools, importance placed on the teacher as guide who offers provocative materials, ideas and experiences that allow the natural flow of knowledge to occur among the students (Edwards, 2002).

Assessment of the students is the natural conclusion of the learning process and with each of these methods; a detailed report is given to the parents of the child. In some cases, as in Reggio Emilia, documentation of learning in the form of photos, narrative descriptions or diaries may be used to show student progress and comments. Because of the interest in integrating these approaches into the public school system, there has been a call for a more empirical research on the benefits of these ECE approaches. With the exception of Montessori Method, limited research on these approaches has been conducted (Edwards, 2002). Children need interaction with others to develop mentally and learn effectively.

Vygotsky's Cognitive Social-Historical Theory (1930-1934/1978) suggests that the interaction a child has with peers, parents, and teachers greatly helps to foster this development and has a positive impact on the learning of a child. Group work and language development are some of the most important aspects of this development, and is important to support social construction of science concepts based on Vygotsky's (1930-1934/1978) social theory; however, the main question is, how can teachers do this? This theory seeks to demonstrate that designing science instruction based on social interactions increases student learning and fosters language development in science for preschool children (1930-1934/1978).

### **STUDENT TEACHING PROGRAM**

Teaching today is more complex and demanding than it was before, teachers must promote tolerance while working more effectively with students from diverse backgrounds. Student teachers today are required to be "adaptive experts," that are able to adapt quickly to the diverse classroom contexts (Harford, Macruairc, & McCartan, 2010, p 57). Bell and Odom (2012) believe that teachers should be able to implement practices that they have not personally experienced. While first-hand experience is ideal, it is not always practical. Bell and Odom (2012) suggest that personal preferences must be disregarded in order to come to a common understanding of the particular professional practice. In order to acquire improve their pedagogical skills, teachers must experience authentic inquiry processes.

One place student teachers should be able to engage in this inquiry process and observe models for ECE best practices based on theory is through a lab school experience. Since the 1920s, many college campuses have created laboratory schools for the purpose of child development. These schools teach young children, train new teachers, and research new methods of education (McBride, 1996).

Teachers meet and bring documentation to show each other and display the progress and learning levels of students, and discuss different aspects of what they are currently teaching and make plans for future activities that will encourage learning (Abramson, 2012). The first phase of the learning cycle is exploration, where students reflect on their practices and experiences. Reflection helps them to improve their level of teaching (Bell and Odom, 2012). The environment of lab schools encourages student teachers to reflect on their practices and experiences in order to learn from them (Monroe & Horm, 2012). In the second phase, concept introduction, the students construct knowledge based on the experiences gathered from the first phase. The students will verbalize the data they collected, which encourages students to debate, argue, hypothesize, and discuss the meaning of the data (Bell and Odom, 2012). Monroe and Horm (2012) found that the student teachers in the lab schools benefited by observing lessons, working first-hand with children, and engaging in discussions with experienced educators. In the third phase, application, the students take the concepts they learned through the first two phases and apply them to related situations or concepts. During application, no new concepts are introduced (Bell and Odom, 2012). Monroe and Horm (2012) also reported that lab schools were beneficial, because they give the student teachers the opportunity to practice and apply education theories and ideas that they learned about in other courses.

Students can use the narrative authority theory in writing reflections, which is similar to the idea of writing a diary, but involves other people (LaBoskey 2002). According to LaBoskey the narrative authority theory is knowledge that we develop from our experiences. These communities are safe because they can discuss their thoughts, feelings and concerns without being supervised. They also learn from the experiences of their peers and change their own behavior based upon their discussions (LaBoskey, 2002).

## II. REVIEW OF LITERATURE

This study focuses on the quality of training available to student teachers that train in the lab school and the importance of the lab school's program in the development of the student teachers. This literature review provides background and research related to the project on quality ECE practices. The review begins with a discussion of Vygotsky's Cognitive Social-Historical Theory and how the interaction of children with parents, peers, and teachers contributes to development. The concept of the Zone of Proximal Development (ZPD) is explained and how interaction between children and more knowledgeable others fosters development. As part of student teaching and in relation to Vygotskian theory, the value of student teacher reflection including the use of inquiry, group collaboration, communication and feedback from peers teachers and supervisors are considered.

According to Vygotsky's theory, "higher mental functions begin outside the person in the social environment and become internalized" (Newman & Newman, 2007, p. 264). Therefore all learning is social. Vygotsky also believes that social learning makes it possible for children to learn new information and develop problem-solving skills, and this learning is carried out within the Zone of Proximal Development (ZPD). ZPD is the "distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1930-1934/1978, p 86).

In the ZPD, the child develops the skills to solve more difficult problems with the help of a more knowledgeable other as they move toward the upper boundary of the ZPD. At a certain point, the child will actually enter into a new ZPD where the problems that they once needed help to solve are now the problems that may be solved independently, and we see the entire ZPD process begin to repeat again (Newman & Newman, 2007). In her study, Papandreou (2014) found that children observe how others act and begin to build their own attitudes and actions, which she calls *meaning-making*. Papandreou showed that meaning-making also helps their development, as the activities that children engage in during meaning making develop in social environments through processes which are communicative in nature. In these ways, communication appears to be essential to a child's development (Papandreou, 2014).

Solving scientific problems is an extremely effective way of encouraging children's development of problem-solving skills. This is because children have a strong desire and sense of curiosity to explore the natural world around them. As they develop, children are trying to discover how the world around them works, and science fits very naturally into children's processes and experiences; as they are repeatedly exposed to scientific events, children are able to understand how certain things work and even start to make predictions of their own. As it takes children until they are from the age of 4 to 5 years of age be able to understand something just by being told about it, until they reach this point, the best evidence children have for understanding the world around them is experience (French, 2004).

By using a variety of engaging activities that teach scientific knowledge and assist learning, students are able to understand how the world works and learn basic problem solving skills which can be difficult to learn in the ECE classroom. This instruction also encourages self-regulation skills. Nayfeld, Brenneman, and Gelman (2011) find that children are more motivated to participate in science related activities after an intervention that was designed to encourage them in this area; in effect, their autonomous exploration of science was increased as a result of working with more knowledgeable others and participating in group learning experiences (Nayfeld, Brenneman & Gelman, 2011).

For children to develop their cognitive capacity, they must be exposed to experience- and language-rich environments (French, 2004). Preschool-aged children (4-6 years of age) reach milestones as they develop the skills necessary to extend their ZPD and increasing their "potential to function at a more advanced mental age" (Newman & Newman, 2007, p 250). Vygotsky did see a possibility for determining ZPD, which was just giving the child the problem and letting them try to solve it, or beginning to solve a problem and letting a child complete it (Newman & Newman, 2007). Essentially, asking the child to solve a range of different problems both within and above the child's range is the most effective tool for determining ZPD levels (Zaretskii, 2009). Another factor that needs to be addressed is that not all thought is controlled by language, while Vygotsky's

theory focuses on the idea that language controls thought. However, as stated above, it can be argued that while language may not completely control thought, it surely influences it.

### III. METHODS

The goal of the study is to gather descriptive details about the student teachers' experience in the lab school, the ECE quality factors that they observed or practiced at the lab school and any areas that might need specific improvement. This study uses a pre- and post-survey to collect data from currently enrolled credential students who participate as student teachers in the ECE lab school over a four-week period. Three methods for data collection are used for this study: pre- and post- student teaching surveys, observations, and conversations after each observation between the professor and the student teachers.

#### INSTRUMENTS AND STRATEGIES

The two survey instruments are described in the following section. The first survey, prior to student teaching, asks students to rate their expectations about student teaching using a Likert scale having four category responses. On the survey, in response to each statement about their student teaching, each student teacher is asked to choose one of the following responses (1) Strongly agree (2) Somewhat agree (3) Disagree (4) Strongly disagree.

The second student teacher survey, completed after teaching, uses the same four responses to nearly identical statements on the pre-student teaching survey, except that they refer to the evaluation of the experience instead of the expected experience. See Appendix for the pre- and post- student teaching surveys and the responses to the surveys. Another data collection strategy is the observation and documentation by the researcher of the student teachers while teaching at the lab school. The lessons, reflections on their lessons documentation and class presentations made by the student teachers offer additional data sources and are used to ascertain the quality of their experiences at the lab school.

#### SETTING

This study was made at the Huggins Center. The center provides training, demonstration and research opportunities for undergraduate and graduate students in education; child development; marriage, child and family therapy; and other related areas as well as for professionals in the field. The Huggins Center is one of the three centers operated by the Fresno State Programs for Children and is located in the Kremen School of Education and Human Development. The centers provide services for children between the ages of 3 months and 10 years. The program works in partnership with Fresno State and the larger community to provide opportunities for learning and for developing partnerships that will benefit young children and families (Perry, Henderson, & Meier, 2012).

#### OBJECTIVES

- 1-To know about the relevance of anecdotal notes about children's activities,
- 2- to apply ECE theoretical concepts to classroom situations,
- 3- to gain practice giving guidance to children,
- 4-to become an effective observer of children,
- 5-to facilitate appropriate play experiences to enhance ECE,
- 6-to be professional and responsible while working as a teaching team,
- 7-to design and practice a writing lesson plan effectively,
- 8-to utilize feedback to improve teaching,
- 9: to learn the techniques of teaching small groups, assessing the children's skills.
- 10: to learn

#### RESEARCH QUESTIONS

- 1-Why are anecdotal notes about children's activities important ?
- 2-How to apply ECE theoretical concepts to classroom situations?
- 3-How can I gain practice giving guidance to children?
- 4-How to become an effective observer of children?
- 5-How can one facilitate appropriate play experiences?
- 6-How to be professional and responsible while working as a teaching team?
- 7-How to design and practice a writing lesson plan effectively?
- 8-How to utilize feedback to improve teaching?
- 9: What are the techniques of teaching small groups? learn assessing the children's skills?
- 10: How to

#### PARTICIPANTS

Student teachers in the second semester of the Multiple Subject teacher preparation program (ECE emphasis) during fall, 2014 participated in this study. These 16 ECE student teachers were given the two surveys that included questions about their experiences in the classroom and how the students felt about their experiences in order to determine whether or not these experiences were seen as beneficial to their preparation as teachers. These questions examined the areas of ECE quality practice identified for this study.

## ETHICAL CONSIDERATIONS

This study posed minimal risks for the participants. Some ethical issues that should be considered include participants' feelings toward giving opinions regarding the survey's findings. Also, some participants may experience feeling uncomfortable during the survey per se and when they ask about getting feedback from the teachers in the center. This discomfort may also arise when asked to give an opinion about another teacher at the center. These feelings may arise as they talk about their experiences such as finding out the diagnosis, and other relevant information they wish to share. If the participants do feel any discomfort, then they had the option to withdraw from the study at any time.

**IV. RESULTS**

Table 1

Means, Modes and Median Responses for Pre-Survey and Post-Survey of Student Teaching Experiences

Item	Pre-Survey Mean Score	Pre-Survey Mode	Pre-Survey Median	Post-Survey Mean Score	Post-Survey Mode
Anecdotal	1.68	2	2	1.68	2
Theories	1.06	1	1	1.33	1
Guidance	1.12	1	1	1.43	1
Observer	1.37	1	1	1.31	1
Play	1	1	1	1.43	1
Professional	1.06	1	1	1.5	1
Lesson Plan	1.43	1	1	1.18	1
Feedback	1.06	1	1	1.68	1
Small Group	1.06	1	1	1.37	1
Assess	1	1	1	1.5	1

In the above Table 1, the mean, modes and median of the pre and post survey on ECE student teachers who participated in the study has been mentioned. On the survey, each student teacher is asked to choose one of the following responses: 1) Strongly agree 2) Somewhat agree 3) Disagree 4) Strongly disagree.

**RESEARCH QUESTION #1: WHY ARE ANECDOTAL NOTES ABOUT CHILDREN'S ACTIVITIES IMPORTANT ?**

On the Pre-survey, the mean response was 1.68, the mode was 2 and the median was 2. The student teachers somewhat agreed to learn how to write subjective notes about children's activity. On the Post-survey, the mean response was 1.68, the mode was 2 and the median was 2. After the training the student teachers had the same response. It means the expectations have not changed, they are satisfied with their training.

**RESEARCH QUESTION #2: HOW TO APPLY ECE THEORETICAL CONCEPTS TO CLASSROOM SITUATIONS?**

On the Pre-survey, the mean response was 1.06, the mode was 1 and the median was 1. The student teacher strongly agreed to learn how to apply ECE theoretical concepts to the classroom situation. On the Post-survey, the mean response was 1.33, the mode was 1 and the median was 1. After the training there is a slight change in the mean, however the student teachers strongly agree and it means the outcome of the training was positive and the student teachers learned how to apply theoretical concepts to practice.

**RESEARCH QUESTION #3: HOW CAN I GAIN PRACTICE GIVING GUIDANCE TO CHILDREN?**

On the Pre-survey, the mean response was 1.12, the mode was 1 and the median was 1. The student teacher strongly agreed to gain practice by giving positive guidance to children. On the Post-survey, the mean response was 1.43, the mode was 1 and the median was 1. After the training there is a slight change in the mean and no change in the mode and median. The student teacher practiced constructive and positive guidance to the children.

**RESEARCH QUESTION #4: HOW TO BECOME AN EFFECTIVE OBSERVER OF CHILDREN?**

On the Pre-survey, the mean response was 1.37, the mode was 1 and the median was 1. The student teacher strongly agreed with the importance of observing children. On the Post-survey, the mean response was 1.31, the mode was 1 and the median was 1. After the training there is no change in the median and the mode, however there is a slight change in the mean. The student teacher experienced how to be a good observer and they learned when to pay much attention to the children.

**RESEARCH QUESTION #5: HOW CAN ONE FACILITATE APPROPRIATE PLAY EXPERIENCES?**

On the Pre-survey, the mean response was 1, the mode was 1 and the median was 1. The student teachers strongly agreed and they had the desire to learn how to provide appropriate play experiences. On the Post-survey, the mean response was 1.43, the mode

was 1 and the median was 1. After the training there is no change in the median and the mode; however there is a change in the mean. The student teacher needs excess opportunities` to practice more play experiences with children.

**RESEARCH QUESTION #6: HOW TO BE PROFESSIONAL AND RESPONSIBLE WHILE WORKING AS A TEACHING TEAM?**

On the Pre-survey, the mean response was 1.06, the mode was 1 and the median was 1. Before their student teaching, student teachers expected to learn how to be professional and responsible while teaching. On the Post- survey, the mean response was 1.5, the mode was 1 and the median was 1. After student teaching, showed that student-teachers felt they received the experience needed to support the children's learning and they found their expected.

**RESEARCH QUESTION #7: HOW TO DESIGN AND PRACTICE A WRITING LESSON PLAN EFFECTIVELY?**

On the Pre-survey, the mean response was 1.43, the mode was 1 and the median was 1. Student teachers were strongly agreed the important of lesson plans. On the Post-survey, the mean response was 1.18, the mode was 1 and the median was 1. After teaching in the classroom, the student teachers had good experiences and they learned how to plan the lessons.

**RESEARCH QUESTION #8: HOW TO UTILIZE FEEDBACK TO IMPROVE TEACHING?**

On the Pre-survey, the mean response was 1.06, the mode was 1 and the median was 1 The student teachers strongly agreed that feedback is important to improve the teaching. On the Post- survey, the mean response was 1.68, the mode was 1 and the median was 1.5 After the training there was a significant change in the mean and the median i.e. the studentteachers didn't receive enough feedback which would help them to improve their teaching.

**RESEARCH QUESTION #9: WHAT ARE THE TECHNIQUES OF TEACHING SMALL GROUPS?**

On the Pre-survey, the mean response was 1.06, the mode was 1 and the median was 1. Student teachers were enthused to learn how to teach small groups, On the Post-survey, the mean response was 1.37, the mode was 1 and the median was 1. After the training, they had practices in this area.

**RESEARCH QUESTION #10: HOW TO LEARN ASSESSING THE CHILDREN'S SKILLS?**

On the Pre- survey, the mean response was 1, the mode was 1 and the median was 1 The student teachers strongly agreed to learn to asses children's skills. On the Post -survey, the mean response was 1.5, the mode was 1 and the median was 1. After the training there was a slight change in mean the student teachers didn't receive the expected amount of children assessment in this area.

A t-test was also conducted to determine how well the experience of student teaching at the lab school matched the initial expectations of the student teachers. Table 2 shows the results of this comparison between student teacher's expectations prior to student teaching with their post-student teaching evaluation of the extent to which their expectations for each area were met.

Table 2

Comparison of Student Teacher's Expectations Prior to Student Teaching Pre-Survey with Perceived Learning Outcomes of Student Teaching Post-Survey

Pre/post (N=16)	Paired Samples T-test	Sig (2-tailed)	Sig (1-tailed)
Anecdotal	-.222	.827	0.413
Theories	-1.379	.188	0.094
Guidance	-1.000	.333	0.166
Observer	1.074	.300	0.15
Play	-2.236	.041	0.02
Professional	.000	1.000	0.5
Lesson Plan	1.431	.173	0.086
Feedback	-3.093	.007	0.003
Small Group	-.808	.432	0.216
Assess	-2.406	.029	0.014

Note. \* denotes significance value of  $p < .05$ , two-tailed; \*\* denotes significance value of  $p < .01$ , two-tailed; \*\*\* denotes significance value of  $p \leq .001$ , two-tailed.

**ANECDOTAL NOTES.**

Prior to student teaching, the student-teachers strongly desired to learn how to write professional notes about the children's activities. After student teaching, the t-test  $0.413 > 0.05$  showing that they felt that the student teaching experience supported their growth in this area. One student said in the comment section of the post-survey that she had never written anecdotal notes before and found that "the greatest benefit" of her student-teaching "was learning to write anecdotal notes about children's activities."

**THEORY TO PRACTICE.**

In relation to learning to apply ECE theories, the student-teachers' post-student teaching perspectives on applying theory to classroom situations was at .0945 Pre/post (N=16) Paired Samples T-test Sig (2-tailed) Sig (1-tailed) Anecdotal -.222 .827 0.413 Theories -1.379 .188 0.094 Guidance -1.000 .333 0.166 Observer 1.074 .300 0.15 Play -2.236 .041 0.02 Professional .000 1.000 0.5 Lesson Plan 1.431 .173 0.086 Feedback -3.093 .007 0.003 Small Group -.808 .432 0.216 Assess -2.406 .029 0.014 38  $> 0.05$  indicating that their expectations for learning how to apply theory toward practice was met during student teaching by doing lesson activities and creating documentation and observing one another. One student had high agreement in the area of theory application and said that Dr. Abramson gave her feedback that helped her apply ECE theories to her teaching. Another student teacher also had a positive experience in theory and practice. She said, "I had the opportunity to see and hear a lot of information relating to the developmental stages of young children."

**POSITIVE GUIDANCE.**

Student-teachers expected to gain practice of giving positive guidance to children before they began student teaching. After their experience, the t-test  $0.166 > 0.05$  showed that student-teachers felt that they had received sufficient practice in this area. One student teacher noted the importance of learning to use positive guidance and also learned how to encourage children in positive ways while student teaching at the Huggins Center.

**DEVELOPMENT AND LEARNING.**

Before student teaching, student teachers had a strong desire to learn about infants and toddlers (0-3 years) and to learn about preschool-age children (3-5 years). After student teaching, the t-test showed that they learned about infant development through observation of infants and toddlers at the center. Similarly, in regards to student teachers' desire to learn about preschool-age children, the t-test showed  $0.15 > 0.05$ , indicates that student teachers believed they had learned about preschool development through observation in the preschool classroom.

**PLAY.**

Prior to student teaching, student-teachers were highly motivated to learn about play experiences. After completing student teaching the t-test  $0.02 < 0.05$  shows that the student teachers did not feel that they received the enough opportunities to use play experiences with children that they wanted further experiences. One student teacher pointed out the importance of 39 play and felt like she needed more chances to see it being used. Another student also wanted more opportunities to learn about to encourage play.

**PROFESSIONAL RESPONSIBILITY.**

Before their student teaching, student teachers expected to learn how to be professional and responsible while teaching. After student teaching, the t-test results of  $0.5 > 0.05$ , indicate that student-teachers felt they received the experience necessary to support the children's learning and were able to reflect on their activities in teaching.

**LESSON PLANS AND DOCUMENTATION.**

Student teachers were highly motivated to learn about using lesson plans and documentation. Following student teaching, the t-test  $0.086 > 0.5$  shows that these student teachers felt a higher level of confidence in their abilities to design and use these tools. The student teachers had good experiences taking photos and writing notes. It helped them remember the activities and made it possible for them to reflect on their teaching. Another student had high agreement with her documentation experiences and said in the survey comment section that: "It was really great seeing how documentation can help you facilitate future activities and lessons." A third student teacher found that "the value of documentation is to get to know how each student plays/works independently and/or with groups." A fourth student also expressed high agreement and said that she learned that "documentation is very important [for keeping] track of student learning and their progress." Another student was initially confused about what documentation was and how to use it. After student teaching, she was really happy and said she had a lot of practice using documentation to "facilitate students learning." A sixth student teacher said that documentation was beneficial for her because it raises her awareness as a teacher and makes it possible "to fix and implement new things in your instruction."

**FEEDBACK.**

Before student teaching, student teachers strongly desired feedback from mentor teachers in the classroom. Following student teaching, the t-test  $0.0035 < 0.05$  showed that these student-teachers did not get the level of feedback that they felt they needed to improve. One of the student teachers said she needed more feedback on her teaching from her mentor.

However, another student teacher gave high agreement on feedback from her professor during the teaching experience. She said the feedback from her professor "Dr. Abramson was extremely helpful and beneficial to my teaching,"

**SMALL GROUPS.**

Student teachers were motivated to learn how to teach small groups, and after student teaching, the t-test  $0.216 > 0.05$ , indicating that they had experiences in this area.

**ASSESSMENT.**

The student teachers felt strongly that they needed to learn how to assess the children's skills. Following student teaching, the t-test  $0.014 < 0.05$  indicates that these student teachers felt that they did not receive the experience in assessing children that they had expected in this area.

**V. DISCUSSION**

The ratings on the pre-and post-student teacher survey examined the students' perceived skills and development levels in a number of areas identified the areas that student-teachers were confident and the areas where they struggled as they learned how to put theory into practice in at the lab school. This information was helpful in determining potential gaps between course work and

actual practice in the classroom. Based on the surveys, the paired t-tests show that the student-teachers' experiences in the Huggins center were mostly positive in the following areas: observation and documentation applying theories to practice; positive interaction with the children and adults; writing lesson plans; and collaborative teamwork.

#### OBSERVATION AND DOCUMENTATION

The first area that student teachers reported satisfaction in was their training in observing children and using documentation, taking notes and photos on project activities including adult-child interactions and interactions among the group of children. To assist with documentation, the student teachers worked in pairs. While one student teacher did the activities with the children, the other recorded the process. This practice and training gave them experience in teaching, and also helped them to develop positive documentation skills as they learned through doing and worked together on their professional development. This is significant because, according to Vygotsky (1930-1934/1978), group-work and communication are essential in the learning and development process. In addition, the use of peers as more knowledgeable others in discussion enabled student-teachers to use scaffolding to build their knowledge simultaneously.

Students reported high satisfaction in their increased ability to observe children's development and learning. Observation practices consist of observing other student teachers and the children. These observations occurred in an observation room with a one-way mirror and in the classroom. Students were able to observe one another and write comments and feedback to help each other develop and improve their teaching skills. Observation assists student teachers in keeping track of each child's progress so that they can more accurately identify their needs. Student teachers can then use this information at a later point to facilitate and extend learning experiences if necessary.

#### NEED FOR MORE TRAINING.

While there were many positive areas of development, student teachers did identify areas in which they felt that they needed more assistance. The t-tests show that there was a significant decrease in satisfaction with the following areas: facilitating appropriate play experiences; acquiring feedback from their master teachers, and assessing children's skills.

#### FACILITATING PLAY.

The first area in which student teachers expressed the need for learning was in facilitating appropriate play experiences. Play assists with the development of social skills, rules of normalcy, and language and writing skills (Vygotsky, 1930-1934/1978). Children's imaginative play, drawings, and other play activities contribute to early literacy development. According to Vygotsky, play is an indicator of how the child's skills in representing objects symbolically and the connection between memory and imagination develop. Student teachers were interested in learning more strategies in how to facilitate play for this reason (Vygotsky, 1930-1934/1978).

#### NEED FOR FEEDBACK.

Another area that student teachers reported less satisfaction was in obtaining feedback from master teachers on their student teaching performance. Feedback from a mentor is extremely important in that it allows the student to benefit from the knowledge of an experienced teacher and adjust their strategies and skills so that they may improve more quickly. In the pre- and post-surveys, the student teachers were unsure if feedback referred to feedback from the college supervisor or from the master teacher who was their mentor. While the feedback students were getting from their supervisor was helpful in their instruction, some student teachers felt that feedback from master teacher mentors at the Huggins Center was lacking. Mentor feedback is particularly important as this one-on-one discussion provides another way to address the connection between course work and actual classroom practice (Monroe & Horm, 2012).

#### ASSESSMENT.

The final area that student teachers struggled with was the ability to assess children's skills. Assessment is critical to determining each child's ZPD, allows the teacher to engage and challenge children differently according to their needs and because the use of comprehensive assessments such as the Desired Results Developmental Profile are mandated by the state as a condition of program operation. Assessments are essential in planning activities that fit the class and develop the strengths of the children and work with their weaknesses as well. This assessment also lets the teacher to know the levels of curiosity and desire to learn in the children, so that they can plan lessons that are motivating.

### VI. IMPLICATIONS AND RECOMMENDATIONS

This study supports the value of high-quality ECE lab school setting for preparing ECE teachers. Student teachers significantly benefit from a lab school placement, and their participation in an accredited program. In addition, student teachers were able to understand better their own individual needs, both their strengths, and weaknesses as a result of their experiences. In the lab school, the supervisor and master teacher mentors are able to identify the needs of the student-teachers in order to provide guidance and support for their developing skills. The recommendations of this study for improving student teaching through more emphasis on the areas of play, assessment and feedback would also be beneficial to children in the program and their families.

Examining the student teaching experience is also important for identifying the factors that help improve teacher preparation, children's learning in the classroom and the lab school as a resource. Through this study, the researcher was able to identify key areas that contribute to student teacher success in the Huggins Center, as well as areas in which some improvement would be beneficial to the program. This study gives evidence of the importance of an environment, resources and teachers that represent ECE best practices to develop the skills of student teachers. Working as small group in the classroom allows student teachers to communicate with one another and develop through modeling and support (Vygotsky, 1930- 1934/1978).

### VII. CONCLUSION

This study has made apparent the benefits of a high quality ECE lab school for the preparation and training of student teachers. Through the study of 15 student teachers using surveys, self-reports, observations, student work and reflections, the researcher was able to pinpoint areas that were effective in the professional development of student teachers and areas needing improving. The importance of social interaction according to Vygotsky's Cognitive Social-Historical Theory was emphasized by this study as

the student teachers learned through interaction with each other and with the teachers, children and families at the Huggins Center.

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## APPENDICES

(Surveys: ECE Student Teacher Survey (Before Student Teaching))

### Appendix. A

To match before and after responses, please put the first two letters of your first name and a color you can remember for next time:

Please indicate your expectations for student teaching. Use the following rating system: 1 –strongly agree 2 – somewhat agree 3 – disagree 4– strongly disagree

As a student teacher at the Huggins Early Education Center:

1	I learned how to write anecdotal notes about children's activities.	1	2	3	4
2	I learned how to apply ECE theoretical concepts to classroom situations.	1	2	3	4
3	I gained practice giving positive guidance to children.	1	2	3	4
4	I was able to become an effective observer of children.	1	2	3	4
5	I learned how to facilitate appropriate play experiences.	1	2	3	4
6	I learned how to be professional and responsible while working as a teaching team.	1	2	3	4
7	I practiced writing a lesson plan.	1	2	3	4
8	I got feedback to improve my teaching.	1	2	3	4
9	I had practice teaching in small groups	1	2	3	4
10	I learned to assess children's skills	1	2	3	4

1. Of the ten listed expectations for student teaching, which three are of greatest importance to you? Please prioritize, giving the number and the statement of most important to you as #1, next importance, #2, and next after that as #3. (1. 2. 3.)

2. Are there any other expectations you have not on the list? Please describe these additional expectations below:

**Appendix. B****ECE Student Teacher Survey (After Student Teaching)**

To match before and after responses, please put the first two letters of your first name and a color you can remember for next time:

Please indicate your expectations for student teaching. Use the following rating system: 1 – strongly agree 2 – somewhat agree 3 – disagree 4 – strongly disagree

As a student teacher at the Huggins Early Education Center:

1	I learned how to write anecdotal notes about children's activities.	1	2	3	4
2	I learned how to apply ECE theoretical concepts to classroom situations.				
3	I gained practice giving positive guidance to children.				
4	I was able to become an effective observer of children.				
5	I learned how to facilitate appropriate play experiences.				
6	I learned how to be professional and responsible while working as a teaching team.				
7	I practiced writing a lesson plan.				
8	I got feedback to improve my teaching.				
9	I had practice teaching in small groups				
10	I learned to assess children's skills				

**Q.** Of the ten listed expectations for student teaching, which three are of greatest importance to you? Please prioritize, giving the number and the statement of most important to you as #1, next importance, #2, and next after that as #3. (1. 2. 3.)

**Q.** Discuss your experiences documenting children's learning using observation, technology, etc. at the Huggins Center? What is the value of documentation to you as a student teacher and future teacher?

**Appendix C: Observation (ECE Student Teacher Observation Form)**

Teacher \_\_\_\_\_ Classroom \_\_\_\_\_

- 1- Applying a theory to a classroom situations.
- 2- Supports individual culture and diversity
- 3- Observes children from 0-3 years
- 4- Observes children from 3-5 years
- 5- Professional and responsible while working as a teaching team
- 6- Using a lesson plan and documentation
- 7- Gets feedback from professors and mentors
- 8- Appropriate and effective activities
- 9- Use of Reggio Emilia approach
10. Facilitates appropriate play experiences in groups