A Picturesque View of Dispositions, Autonomy, and Efficacy during the Educational Preparation of Early Childhood Educators

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Abstract

The intent of this qualitative study was to examine preservice teachers' growing awareness of the role dispositions and autonomy play in the classroom and the implications these constructs have for teaching and learning. Teacher candidates' written reflections and focus group statements revealed three robust emergent themes: engagement, empowerment, and meaning making. When taking a wide lens view, these robust emergent themes nurtured certain dispositions, autonomy, and teaching efficacy. Teaching strategies such as the project approach (adult-oriented and with children) and the construction of math games were considered valuable assignments that strengthened a variety of dispositions by providing on-going opportunities for teacher candidates to engage in experiences that promoted autonomous thinking and actions during their preparation program. Teaching efficacy emerged as a related construct and became an integral component of this study. As teacher educators help pre-service teachers wrap their minds around the sometimes illusive dispositions construct, this study suggests that autonomy and efficacy should be included in this effort. In so doing, these constructs provide a meaningful foundation upon which teacher candidates can build and apply teaching and learning theories.

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In an educational era influenced so strongly by issues of accountability, standards, and the call for change, an important catalyst for educational reform is the individual teacher and that teacher's values, behaviors, and beliefs**.** In this article the authors propose that dispositions, autonomy and efficacy play important roles in the educational preparation of future early childhood teachers. Previous anecdotal feedback from students resulted in the hypothesis that when dispositions, autonomy, and efficacy are nurtured, pre-service teachers are more likely to be empowered to use developmentally appropriate activities in practicum settings (Parrott & Da Ros-Voseles, 2004). Prompted by these experiences, this qualitative study proposes to ascertain pre-service teachers' growing awareness of the role dispositions and autonomy have in the classroom and how these constructs were nurtured in pre-service teachers during one semester of their educational program. The authors mindfully provided opportunities for students to construct their own understanding of dispositions and autonomy and the implications these constructs have for teaching and learning. In so doing, the construct of teaching efficacy emerged as a related construct and thus became an integral component in this qualitative study thereby linking dispositions and autonomy with efficacy.

The Nature of Dispositions

Increasingly, teacher educators are confronted with the prospect of providing evidence that pre-service teachers possess appropriate professional dispositions and are able to nurture dispositions in the children they teach (National Council of Accreditation of Teacher Education, 2006). Fortunately, early childhood teacher educators are potentially better informed about the nature of dispositions than their colleagues due to the thinking and writing of Lilian Katz (Katz,

1993b; Katz & Raths, 1985) when she alerted the early childhood community more than two decades ago about the pivotal role of dispositions in teaching and educating young children.

Katz (1993a) defined "a disposition as a pattern of behavior exhibited frequently and in the absence of coercion and constituting a habit of mind under some conscious and voluntary control, and that is intentionally and oriented to broad goals" (p. 16). Katz's writing often includes the role of dispositions (e.g. Katz, 1987; Katz, 1993b; Katz, 1995; Katz, 1999; Katz & Chard, 2000; Katz & Helm, 2001) in the education of young children. For example, she suggested the damage dispositions hypothesis which urged the reader to contemplate how inappropriate "instructional processes by which some knowledge and skills are acquired may themselves damage or undermine the disposition to use them" (Katz, 1993a, p. 17 – 18). She is acutely aware that curricula and appropriate teaching strategies must be planned to support children's dispositions plus provide opportunities for children to manifest various dispositions. Moreover, interactions with significant adults and peers can potentially support or weaken dispositions.

When the National Council of Accreditation of Teacher Education (NCATE) included dispositions in its revised standards, interest in the construct increased dramatically. This interest can be gauged by the sudden increase in the number of titles or descriptions contained in the 2005 American Association of Colleges of Teacher Education conference program. This accrediting body defines dispositions as:

> the values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities and affect student learning, motivation, and development as well as the educator's own professional growth. Dispositions are guided by beliefs and attitudes related to values such as caring, fairness, honesty,

> responsibility, and social justice. For example, they might include a belief that all students can learn, a vision of high and challenging standards, or a commitment to a safe and supportive learning environment (NCATE, 2006, p. 54).

Recently, at National Association of Early Childhood Teacher Educators (NAECTE) conferences, teacher educators dialogued among themselves about dispositions (Quiping, Nissen, McMurray-Schwartz, Baum, 2005). As a result, a list of dispositions were generated and grouped into three categories:

1) commitment to best practice, individual children and families

2) characteristics that engender dispositions such as respect flexibility, open-mindedness, and inquisitiveness

3) skills that support dispositions such as perspective taking and communication

Additionally, conference participants identified several strategies for nurturing dispositions.

Increased awareness of the role dispositions play in the education of young children requires teacher educators to employ strategies that heighten pre-service and in-service teachers' awareness of their dispositions via repeated opportunities to identify, reflect on, and analyze their dispositions. This is an important starting point. In so doing, teachers and teacher candidates come to a better understanding of the interplay of forces that drive their classroom decisions.

The Nature of Autonomy

In a position statement on developmentally appropriate practices, Bredekamp and Copple (1997) heed the call for teachers to become sound decisions-makers. A critical starting point for promoting and developing teachers as decision-makers is during the preparation of early childhood professionals. In order for teacher to make informed decisions, they must possess a sense of autonomy. Constance Kamii (1985) refered to autonomy as being governed by oneself,

both morally and intellectually. “Moral autonomy refers to the ability to make moral judgments and decisions for oneself, independently of the reward system, by taking into account the points of view of the other people concerned” (p. 39). Moral autonomy involves questions related to right and wrong. Intellectual autonomy means governing oneself and making decisions based on questions of true and false. Heteronomy is the opposite of autonomy and means being governed by others and their points of view (Kamii, 1985). She considered teacher autonomy as “the right and responsibility to make professional decisions” (Kamii, 1981, p. 5). With autonomy as the aim for educating pre-service teachers, programs progress toward the development of professionalism. Pre-service teachers can examine practices from a critical stance and make decisions based on what they believe in the best interest of children.

Castle (2004) provided reasons that Piagetian autonomy should be supported in early childhood teacher education programs. Teachers who have participated in programs that emphasize how children learn are more likely to provide an environment relevant to children’s learning. They will have a foundation based on a scientific theory of how children learn guided by developmentally appropriate practices for children. They will be able to critique and provide evidence to challenge inappropriate practices for children. Autonomous teachers will encourage autonomy in their students, co-creating curriculum through topics of interest to the children. They will collaborate and engage in dialogue with other teachers, parents, and administrators concerning educational decisions based on what is best for children. Experiencing a sense of autonomy themselves in preparation of becoming teachers will help to ensure the capability and appreciation for promoting autonomy in children.

Castle (2004) suggested, “Teacher autonomy can be promoted through engaging students in choice, decision making, and goal setting as well as through reflective practice and the

exchange of points of view" (p. 8). Pre-service teachers will be engaged in "knowledge construction through questioning, observing, analyzing and synthesizing, researching, reflecting, writing, and compiling documentation of learning" (Castle, 2004, p. 8). She believed it is critical that early childhood preparation programs emphasize autonomy as their aim in an effort for teachers to promote autonomy in the early years of a child's schooling. The impact can have a life-long effect on young children. Pre-service teachers need to experience firsthand their own construction of knowledge concerning their practice in order to thoughtfully reflect upon the best educational practices for children. Pre-service teachers who experience programs based on constructivism with its aim as promoting autonomy may in turn view autonomy central to their own classroom practices.

The Nature of Efficacy

Just as the constructs of dispositions and autonomy are receiving increased attention today, so too has the construct of teaching efficacy. Teaching efficacy has been the focus of studies by several researchers (Ashton & Webb, 1986; Enoch & Riggs, 1990; Gibson & Dembo, 1984; Guskey, 1988; Woolfolk & Hoy, 1990) and as postulated by Tschannen-Moran, Hoy, and Hoy (1998), a teacher's sense of efficacy has a powerful role in schooling. Consequently, it is important to examine how efficacy develops, when it is most capable of being shaped, and what variables influence its improvement. Bandura (1977) suggested that efficacy is most malleable early in learning. Hence, researchers have explored the construct of efficacy not only within the context of in-service teachers but also with pre-service teachers because "once efficacy beliefs are establish, they appear to be somewhat resistant to change" (Tschannen-Moran, et al.1998, p. 235).

The powerful role that teaching efficacy can have on schooling is further defined through research that suggests levels of teaching efficacy are known to influence a novice teacher's willingness to stay in the profession (Hall, Burley, Willeme & Brockmeier, 1992) and resilience in the face of obstacles (Ashton & Webb, 1986). Stronger levels of teaching efficacy are linked with stronger commitments to teaching (Coladarci, 1992; Evans & Tribble, 1986; Trentham, Silvern, & Brogdon, 1985), and behaviors such as use of innovations, persistence at a task, and risk taking are also related to degrees of efficacy (Ashton & Webb, 1986; McMullen, 1999).

When Bandura's (1981) theory of efficacy is applied to teaching, the construct of teaching efficacy comprises two domains, namely an outcome expectancy belief and a self-efficacy belief (Enochs & Riggs, 1990). Admittedly, the terms used to describe these two dimensions are the subject of much debate. Self- efficacy, also commonly referred to as personal teaching efficacy (Tschannen-Moran, et al., 1998), implies a belief in one's own ability to perform a specific behavior. Self -efficacy, then, is a future-oriented judgment about an individual's ability to execute the action necessary for producing a given outcome. Bandura (1986) suggested that individuals develop specific beliefs related to their ability to cope with change. In the domain of schooling, self- efficacy has to do with one's own perception of competency as a teacher. Separate and apart from self-efficacy is the outcome expectancy dimension of this teacher belief construct. Outcome expectancy is commonly referred to as general teaching efficacy (Tschannen-Moran, et al., 1998) and implies an individual's expectation that certain behaviors will result in specific outcomes.

Speaking about the difference between self-efficacy and outcome expectancy, Enoch, Smith, and Huinker (2000) suggest, "Personal teaching efficacy [self-efficacy] has been defined as a belief in one's ability to teach effectively and teaching outcome expectancy as a belief that

effective teaching will have a positive effect on student learning" (p. 94). Conceivably, teachers could model a strong sense of outcome expectation while sporting a low sense of self-efficacy because they might not believe they have the ability to accomplish the level of performance so desired through outcome expectation. However, "Teachers who believe that they can teach well are also likely to believe that their students can learn well" (Raudenbush, Rowan, & Cheong, 1992, p. 151) thus implying that outcome expectancy and self efficacy are related while not one in the same.

Methodology

In order to learn more about how to nurture dispositions, autonomy, and efficacy in future early childhood teachers, the authors mindfully provided, over the course of one semester, experiential based learning opportunities related to dispositions and autonomy and thereafter observed the implications these experiences had on participant teaching efficacy belief systems. Data for this study were collected and analyzed via constant comparison.

Participants

The participants (N=30) in this study comprise students enrolled in two sections of ECED 4213 Cognitive Development of Young Children and the Integrated Curriculum. All participants were Caucasian women whose ages ranged from early twenty to mid-forty except for one Asian. The course is designed to link constructivist theory with classroom practices. ECED 4213 is a required course for all junior or senior level university students majoring in early childhood education. The two sections were taught in the 2006 spring semester, one on the main campus and the other at a branch campus. The main campus is a traditional, residential campus. The students enrolled are predominately from surrounding rural communities. The course section was scheduled at 8:00 a.m. in three 50-minute blocks. The branch campus is located 55 miles from

the main university. Most students live in a nearby, large metropolitan area and are non-traditional. The course is offered once a week in a two-hour and 40-minute block. This regional university prepares the greatest number of future teachers in the state.

Course Structure

The course was structured to provide participants opportunities for collaboration in small and large groups. Participants engaged in dialogue, activities, and reflection related to theory and classroom practices. Team-based learning groups were established at the beginning of the semester in an effort to promote collaboration, support, perspective-taking, and responsibility within each group. Class meetings began with learning groups sharing information and insights acquired from the assigned readings. Whole class discussions and activities often followed the learning group work. Activities involved conducting Piagetian tasks, creating math board games, cooking experiences, engaging in an adult-oriented project, and implementing a project in an early childhood classroom based on the project approach (Katz & Helm, 2001). Participants implemented several out-of-class assignments with early childhood aged children. Each participant was asked to reflect on specific experiences through the use of three one-minute papers and one ten-minute paper.

Data Collection

Multiple sources of data were collected and analyzed. These include focus group interviews and written reflections in the form of three one-minute papers and one ten-minute paper per participant. The one-minute and ten-minute papers were collected from participants at times which spanned the duration of the semester. By contrast, the focus group interviews were conducted near the end of the spring semester in order to promote self-disclosure among students in the study. The same individual, not connected with the university, conducted both focus

groups. A technical assistant videotaped both sessions. On the main campus, all students were available to respond to seven questions during the 50 minute class period. On the branch campus, seven students volunteered to participate in the interview for the same length of time during a portion of the class period. Due to the wealth of data of data videotaping provides, DVDs were selectively transcribed for evidence of dispositions, autonomy, and efficacy.

Regarding the use of one-minute and ten-minute papers, each offers a brief form of reflective writing. They are suggested as a non-time consuming strategy for students to write a short answer to a question (Angelo & Cross, 1993; Bean, 1996). These short reflective papers were written at the end of predetermined classes. The purpose of these papers was two-fold: A first purpose was to help teacher educators understand students' perceptions of the significance and meaning of learning experiences and understanding of key concepts. A second purpose was to help the writer to be aware of her reactions to learning experiences.

Regarding the use of focus groups, there are many advantages to this form of data collection as well. Two advantages salient for collecting qualitative data for this research include the social orientation of the process which allows participants to react and build upon each others' responses. Responses among participants produce a greater range of information and deeper insights than is typically volunteered by individuals who are interviewed (Greenbaum, 1998; Krueger, 1994; Madriz, 2000; Morgan, 1997). The second advantage for using a focus group is that it generates large amounts of data on precisely the topic of interest to the researchers (Greenbaum, 1998; Krueger, 1994; Morgan, 1997). A focus group was conducted for both sections of the early childhood course in an attempt to capture "shared understanding from several individuals as well as set views from particular people" (Creswell, 2002, p. 206). Seven questions were posed to the students by a facilitator not connected to the research project.

Results

Based on anecdotal evidence from pre-service teachers, the authors' found dispositions, autonomy, and efficacy were evidenced in their courses (Parrott & Da Ros-Voseles, 2004). As a result, further research was conducted to explore if and how students expressed an evolving understanding of dispositions and autonomy and if these constructs became more robust as specific course tasks were completed (with the intention of nurturing students' dispositions and autonomy). In addition to pre-service teachers' written and expressed understanding and interpretations of the children's behaviors they observed, were their projections. These projections comprised visions of how they would include projects and math games in their future classroom which indicated a strong sense of efficacy. Moreover, through the iterative process of constant comparison of the one-minute and ten-minute papers and taped focus group sessions, three robust themes emerged: engagement, empowerment and meaning making. The data indicate that these robust themes provide a foundation that supports the development of dispositions, autonomy, and efficacy among pre-service teachers.

Math Game Experience

One of the earliest experiences pre-service teachers encountered was a math game assignment. The overarching goals were: First, create a learning activity for students' particular stage of development. Second, observe children using their knowledge and skills in mathematics. Third, infer children's feelings and reflect on their own feelings during the children's playing of the game. Teacher educators simultaneously attempted to facilitate future teachers' understanding of best practices and a willingness to teach mathematics in a way that invited learners to develop their number sense. The following are the steps involved in the creation of the math game.

1. Reading about children's construction of mathematical knowledge and the value of mathematical games;

2. Playing a variety of math board games, card games, and on-line math games;

3. Creating a board game using the criteria established by the instructor's rubric to include a children's literature extension;

4. Obtaining peer feedback after playing a partially completed math board game in class;

5. Writing field notes based on teacher candidates' observations of children playing their newly created board games;

6. Completing a reflection about various aspects of the math game play experience using the field notes;

7. Having self-assessed their board games, pre-service teachers submitted their completed rubric with the game and reflection plus field notes for the instructor's evaluation; and

8. Displaying their math games for all classmates to see.

The open ended question posed to the teacher candidates regarding their math experience was, "Reflect back on the children's game playing experience plus your own experience playing the math games in class. How might those experiences impact your teaching and children's learning of mathematics concepts?" What emerged from the one-minute math reflections were teacher candidates' growing understanding of best practice and confidence to implement developmentally appropriate learning activities. Teacher educators facilitate future teachers' understanding of best practices and hope teacher candidates will implement these practices in their future classroom. Megan, a teacher candidate, reflects on her experience and writes, "As I watched children playing games and as I played math games myself, I realized that there are many different ways to teach math concepts to children." The data collected from Megan and

others give the authors' hope that students will go beyond the mandated curriculum to provide developmentally effective practices like math games (Table I).

Table I

Response from Math Game One-Minute Paper

Significant Statement	Robust Emergent Themes	Constructs Nurtured by Emergent Themes
As I watched children playing games and as I played math games myself, I realized that there are many different ways to teach math concepts to children. **When I begin teaching, I will look back at this experience and use the knowledge I've gained to create games and fun ways to teach my students about math.** *I know that children will learn more when they are interacting with the materials and playing something that will cause them to think more about what they are doing. Games help them to learn something and for it to have meaning*. Megan	Engagement **Empowerment** *Meaning making*	Dispositions: flexibility, best practice **Self-efficacy: outcome expectancy** *Autonomy*

The researchers observed a positive buzz in the classroom as teacher candidates shared their experiences. By all observation, pre-service teachers were deeply engaged and passionately empowered by the opportunity to create a learning experience for their children. This in turn provided opportunities for reflection and thereafter episodes of meaning making. Promising outcomes of the mathematics game experience include growth and development in terms of increased awareness of the role dispositions and autonomy play in the education of young children. As pre-service teachers became more aware of their own dispositions and sense of autonomy, they in turn became more comfortable with their ability to nurture the same constructs

in their future students. Linked to this increased sense of awareness is a growing sense of efficacy both in terms of self efficacy and outcome expectancy.

Adult-Oriented Project Approach

As we conceptualized ways to help our students become more knowledgeable about developmentally effective methods for curriculum and instruction, we simultaneously focused on their learning processes. We believed engaging teacher candidates in the Project Approach (Katz & Helm, 2001) as adults would provide a mechanism for students to construct their own personal knowledge. One of our goals was to provide these future teachers with an opportunity to engage in meaningful investigative tasks using the 3-phase structure embedded in all project work which they read about in *Young Investigators: the Project Work in Early Years* (Katz & Helm, 2001). For example, at the university's main campus, the College of Education course schedules were going to be modified from Monday, Wednesday, and Friday 50 minute sessions to twice a week. Students were outraged. For many, the changes would affect their plan of study, graduation dates, and require traveling to other campuses. The focus of the class meeting on that particular day was to choose a topic of interest for investigation. When brainstorming ideas as a class, naturally, the class voted to inquire about the impending scheduling changes. They interviewed administrations, teacher educators, and conducted research about scheduling practices. They also began considering what kinds of adaptations would need to be made to accommodate the changed schedules. Small groups or students reported their findings to the whole class. In so doing, the teacher candidates experienced the power of being invested in a topic of interest that had meaning to their lives. "Now, after investigating, I can tell people that have questions the correct answers. I am glad that I was able to do a project approach investigation that was important and relevant to me (Mattie)."

Another goal was to increase students' understanding and comfort level when they began implementing a project with a group of children. We reasoned that after completing an adult-oriented project, teacher candidates' familiarity with the process would transfer when it came time to guide children during the three phases of their project. Table II outlines the specific steps involved in the implementation of the adult oriented project. Our rationale held up as indicated by Kay who wrote, "Now that I know what is expected for each of the phases, I feel that the project that I conduct with the students will be a success. I am looking forward to making the panel and displaying everything that the students and I have accomplished."

Table II

Teacher Candidates Engage in the Adult-Orientated Project Processes

Phase I	Phase II	Phase III
• Each team decides on a topic of interest that meets specific criteria • Create an anticipatory web • Complete at KWL chart • Formulate questions that are to be research (decide who is responsible for each question) • Write narrative of phase I process • Decide which primary and secondary methods of inquiry will be used to answer the questions • Construct phase I (as much as possible) documentation and determine what needs to be completed before next class	• Each team establishes what methods of inquiry were used to answer the questions • Each team determines how knowledge was constructed, the learning that occurred, and dispositions supported • Determine how to organize phase II • Coordinate efforts to aesthetically construct documentation panel • Create narrative for phase II • Brainstorm culminating activity as an expression of what was learned/skills developed	• Complete phase III of documentation panel • Ask, "Does the documentation tell the story of our project completely?" • Create narrative depicting what occurred in phase III • Present the team's project to the class • Complete an in-class reflection responding to the following questions: 1. What knowledge was gained? 2. What skills were strengthened? 3. What dispositions supported? 4. What feeling do you have about the project experience?

After the preservice teachers' completed their adult-orientated project, they were asked to reflect on their immediate feelings about their experience and to respond to the question, "Now that you have had experience investigating a topic of interest, describe your personal feelings about the process." The researchers read and reread students' one-minute papers for statements indicating dispositions, efficacy and autonomy that coalesced with the emergent themes of engagement, meaning making, and empowerment. Notably, Mindy is projecting using this curricular approach in her future classroom (Table III).

Table III

Response from the Adult Oriented Project – One Minute Papers

Significant Statement	Robust Emergent Themes	Constructs Nurtured by Emergent Themes
I really like the project approach. **It gives the children the opportunity to investigate on their own and find the answers to their questions.** *I will use this in my own classroom.* *Mindy*	Engagement **Meaning making** *Empowerment*	Dispositions: use developmentally appropriate practices **Autonomy** *Self-efficacy and Outcome expectancy*

Mindy understands and indicates her willingness to use a curricular method that values children's interests. In so doing, Mindy respects children's lively intellects by anticipating she will provide them with opportunities to engage in inquiry to find answers to their own questions. Her statement tacitly addresses components of Standard 4 Teaching and Learning (NCATE, 2006). Using inquiry tools is viewed as an effective approach to positively affect children's learning.

Project Approach with Children

After experiencing the adult project as a learner, pre-service teachers conducted an abbreviated project with children. Students were guided by class discussions, viewing a video, *A Children's Journey: Investigating the Fire Truck* (Illinois STARnet, 2000) and utilizing the required text, *Young Investigators* (Katz & Helm, 2001) as a resource. After completing the project with children, students were to prepare a documentation panel to display their project work. To bring closure to the experience, thoughts and feelings about project work were expressed through a written reflection.

A major source of preservice teachers' anxiety was whether or not they would be able to tap into children's interests by posing questions. Suggestions for engaging children's thinking were highlighted in their textbook *Young Investigators* (Katz & Helm, 2001). Additionally, in-class discussions had occurred about the characteristics of project topics, so informing their instructor of the topics of interest generated by children were, for the most part, affirming but also served a gate keeping function. Overwhelmingly, teacher candidates were quite amazed by the diversity of children's interests and were eager to embark on co-constructing projects with the children. Because of time constraints, the projects were short-- two to three weeks in length. One might call it a "toe in" strategy so students could get a sense of the structure, the learning opportunities afforded children, the skills that were used during the inquiry, and the dispositions that were supported. Also, to help insure a successful project, students completed several pages of the *Project Planning Journal* located in the back of *Young Investigators* (Katz, & Helm, 2001). Answering the questions for each phase helped students make decisions during the implementation of the project. Moreover, they were able to view several documentation panels completed by former students. By comparing the panels, preservice teachers attained a strong

sense of different layout strategies. After completing the project, students combed the state mandated grade level objectives to determine which were addressed in the project. Teacher candidates are always surprised by how many PASS (Priority Academic Student Skills) project work addresses.

During a designated class period, students display their panels. A rubric was used to grade the documentation panels along with the completed project journal. At the end of that class period, students were asked to analyze the experience through a written reflection of their thoughts and feelings about the project work. They responded to the following questions: "Now that you have implemented a project with children, do you see any benefits for children? Yourself? Would you use this approach to provide learning experiences even if you were the only teaching using the approach?" Tahesha's response supports the emerging themes of engagement, empowerment and meaning making which nurture the confluent nature of dispositions, autonomy, and efficacy (Table IV).

Table IV

Response from the Project with Children Ten-Minute Paper

Significant Statement	Robust Emergent Themes	Constructs Nurtured by Emergent Themes
I really enjoyed the project approach and think that it benefits both the children and the teacher. It was a wonderful way for the children to engage and participate in their own learning. **The teachers are allowed to control and guide their learning experiences and that is what I love about the project approach.** *Not only do the students benefit from the project, I believe the teacher learns new things about the topic as the project approach progresses.* (Tahesha)	Engagement **Empowerment** *Meaning Making*	Dispositions: professional image, best practice **Autonomy** *Self-efficacy* *Outcome Expectancy*

Focus Group Discussion

As a final source of data collection, the researchers elicited student volunteers to participate in a focus group session near the end of the semester. The participants were provided the opportunity to reflect on their experiences throughout the semester and share insights and responses with their peers. An outside facilitator agreed to conduct focus group interviews on both the main campus and the branch campus. All students participated on the main campus and seven students out of thirteen participated at the branch campus. The facilitator was given a list of the questions (Appendix A) prepared by the researchers as a guide to conduct the interviews.

Five of the seven questions asked students to project into the future about their perceptions of how their current experiences would impact their teaching. At the branch campus, four of the seven students who participated in the focus were currently employed as non-degreed preschool teachers or aides; they tended to be the most vocal. Moreover, the majority (75%) were at least forty years old contributing to distinct points of view as indicated by Jessica, “For twenty years I’ve been a mother. I’m quite opinionated in my feelings about my classroom.” While Jessica found that what she was doing in her classroom was congruent with best practices, Paula, a student on the main campus, came to a different conclusion (Table V).

Table V

Focus Group Response

Significant Statement	Robust Emergent Themes	Constructs Nurtured By Emergent Themes
This is my second year teaching in a preschool class, two days a week and this class has shown me I have created some bad habits I need to change…I didn't see anything wrong with the way I was doing it but now I can see that I can do it so much better.	Meaning Making	Dispositions: responsibility, flexibility, best practice
Since it's [preschool] just a two day a week program that leaves a two week unit, four days of coverage, and we move on to something else before the kids are ready. And they are thrown so much they don't take in anything and that's what I think I would change.	**Empowerment**	**Self-efficacy: outcome expectancy**
If they want to spend four weeks doing farms, then spend four weeks doing farms. Paula	*Engagement*	*Autonomy*

Paula is referring to her child- oriented project course assignment in which she chose to use a prescribed farm unit at her place of work and modify it in order to approach the topic from a project perspective. Her students investigated a farm and were given cameras to take pictures of what interested them. She comments, "They were excited about what they took pictures of and found and discovered." Paula's project experience leads her to discover that curriculum planning was much more than preplanned curriculum. "They're [children] controlling you in a certain way because they're guiding you as to what direction they want to take." She not only discovered her own voice as an autonomous teacher, she realizes the benefits of providing children the opportunities to have choices and share in the decision-making process.

Implications

We considered the project approach (adult-oriented and with children) and math games valuable assignments that strengthen a variety of dispositions and provided on-going opportunities for our students to engage in theory building. We also recognize other assignments such as pre-service teachers attempt to understand a child's lived experience in the classroom equally valuable (Da Ros-Voseles & Moss, 2007). Taken together, these assignments were particularly rich with opportunities for students to reflect, consider, modify, or deepen their theories about teaching and learning.

According to Chaille and Britian (1997), theory building is an interactive learning process. Current understanding can be affected by one's environment and both physical as well as mental activity. The process of theory building relies on reflection, collaboration, and experimentation and can be "full of error, conflict and contradiction" (p. 6). Theories may be modified or may stimulate new theories by considering new perspectives and changing old ways.

At the beginning of the semester, teacher candidates viewed themselves as learners with various preconceived notions concerning the teaching/learning process. After the math game experiences, one student wrote, "I knew that it could probably help math concepts, but I didn't know just how much until we researched it in this class." Throughout the course, they engaged in reading materials, reflection, expressing opinions, considering other perspectives, and became actively involved in activities. Students considered their theories about teaching and learning and began modifying or building new ones. Although it was not evidenced that participants underwent major transformations, many found their experiences validated, refined, or broadened their theories. After the adult-oriented project, one student's growth was evidenced by writing, "Personally, I feel that the project approach did a lot of good for me because it allowed me to see

beyond my own judgment/opinion of the topic." Other participants had very little foundation in which to build theories as one student noted, "At first this process seemed pretty confusing, but once we got going it all made sense. It was neat to see what information we discovered through the investigation process."

Through the course of the semester, it was evident many became more confident during the process of building their initial theories concerning teaching and learning. After completing a project with children, Ann writes, "I hope that by seeing the benefits that my students are gaining from it (the project approach) that other teachers will want to learn more about it and try it in their classroom." She not only displays the disposition of confidence in her statement, she shows potential for becoming an autonomous educator in the future. The course was a springboard for preparing future early childhood teachers to continue to build upon their theories of the teaching learning process.

The researchers acknowledge numerous dispositions can potentially be identified as important for early childhood teacher candidates to possess. Notably, Katz (1995) cautioned against generating a list of unmanageable long dispositions. To resolve this conundrum, it was decided to use the dispositions generated by members of NAECTE who have been conversing about the nature of dispositions. (Qiuping, et al., 2005).

Due to the nature of the questions posed in the one-minute and ten-minute exit slips and during the focus groups (Appendix A), several dispositions were automatically excluded (i.e. social justice, sense of humor, non-verbal skills). What did emerge was students' commitment to best practice. "I would use the project approach again and again with children to enhance learning where students make meaningful connections and be lovers of learning."

Equally robust were comments by teacher candidates indicating a growing confidence in themselves as providers of curricular experiences. “I realize that I do have what it takes to be a teacher. I need that little boost.” Other dispositions that emerged were advocacy, flexibility, professional image, deep knowledge life-long learning and responsibility. Moreover, it was gratifying that the “mega-disposition” being engaged in life-long learning was an identified disposition based on students’ written responses.

One of our goals was to empower future teachers so that they consider themselves able to make reasoned and conscious curriculum decisions based on the interests of their students (Paris, 1993) and to buffer them against the continued trend toward the “deskilling” of teachers (Apple & Weis, 1983). Currently teachers are faced with the dilemma of whether to focus their curriculum decisions on the mandated standards and emphasize testing or plan a developmentally appropriate curriculum. Engaging in experiences that promote autonomous thinking and actions during their preparation program can become the catalyst for pre-service teachers to develop a sense of teacher autonomy. As we pondered the results of this study, what has come to light is that our students began our courses without an understanding of the role of dispositions. When they finished the course, they understood and were aware of the important role dispositions plays in teaching and learning. Subsequent linking of our findings to NCATE’s requirement that teacher candidates possess the dispositions necessary to help children learn was heartening.

Concluding Thoughts

The purpose of this qualitative study was to learn more about pre-service teachers’ growing awareness of the role dispositions and autonomy have in the classroom and how these constructs may be nurtured during the educational preparation of future early childhood educators. Prompted by the hypothesis that when dispositions, autonomy and efficacy are

nurtured, pre-service teachers are more likely to be empowered to use developmentally appropriate activities in practicum settings (Parrott & Da Ros-Voseles, 2004), the authors mindfully provided opportunities for students to construct their own understanding of dispositions and autonomy and the implications these constructs have for teaching and learning. Teaching efficacy emerged as a related construct and thus became an integral component in this qualitative study thereby linking dispositions and autonomy with efficacy. As the data were analyzed, it became clear that what one researcher considered an indication of a disposition, another researcher viewed through the lens of autonomy, interpreting the same data as an example of autonomous thinking or acting. The third researcher, looking for evidence of efficaciousness, also found students repeatedly demonstrating efficacy.

The original intent of the researchers was to explore the confluent nature of dispositions, autonomy and efficacy. However, during the process of exploration what was observed were emergent themes related to the constructs themselves. As a result, the researchers concluded that when teacher education programs provide experiences that solicit engagement, nurture student empowerment, and encourage meaning making, then the interconnectedness of the constructs of dispositions, autonomy, and efficacy becomes readily apparent. While we have described learning experiences in the form of adult and child oriented projects as well as the creation of mathematics games, in the end, the researchers noted that it was not the type of experience, whether it be project, field experience, or mathematics game, but rather those attributes that characterized the experience itself [engagement, empowerment, meaning making] that ultimately nurture the confluent nature of dispositions, autonomy, and efficacy.

The data provided in this study offer a picturesque view of the confluent nature of dispositions, autonomy, and efficacy. It sends a powerful message about how the these constructs

work in concert to influence not only the learning that takes place at the university level but also, and perhaps more importantly, on the learning that takes place in early childhood classrooms. In response to the need to provide evidence that pre-service teachers possess appropriate professional dispositions and are able to nature them in the children they teach (NCATE, 2006), teacher preparation programs have wrapped their minds around the disposition construct. This study suggests that autonomy and efficacy should be a part of the mix. Together, these constructs provide a meaningful foundation upon which pre-service teachers may build and apply theory.

For some time, teacher educators have acknowledged the importance of providing experiential based learning opportunities for future teachers (Peck & Tucker, 1973; Andrew & Schwab, 1995; Darling-Hammond, 2003; Latham & Vogt, 2007). Pre-service teachers need to be in the field experiencing what they read about in textbooks. This study contributes to the body of knowledge related to teacher preparation by suggesting that teacher educators must be mindful of and plan for opportunities that lend themselves toward the development of dispositions. The data also encourage teacher educators to plan for opportunities that will enable future teachers to grow in their understanding of autonomy, not only for themselves as professionals but also for the students they will teach. The realization that efficacy can become the glue that links dispositions with autonomy may be key in maximizing learning outcomes for pre-service teachers. Clearly, each construct is strengthened by the other and as such they provide the springboard for growth and development during the educational preparation of future early childhood educators.

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Appendix A

Focus Group Interview Questions

1. Describe what you believe to be meaningful learning experiences in the early childhood classroom.

2. Describe what you believe to be meaningful teacher behaviors in the early childhood classroom.

3. A) In this course, you had opportunities to provide children with learning experiences. One experience was the math board game and another opportunity was when you implemented the Project Approach. What is the likelihood that you will use these strategies to help children learn when you have your own classroom? (If the response is generally positive, ask the follow up question)

   B) Would you still be inclined to use experiences like math games or the Project Approach if you were the only teacher using these teaching strategies?

4. What dispositions have you nurtured in children during the implementation of learning opportunities like the project approach?

5. Reflect on your time in this course. Do you believe you have grown as a future early childhood teacher as a result of the experiences you have had while in this course? Why or why not? If you have grown as a future teacher, tell me about how you have grown as a teacher.

6. What experiences have you had in this course that help you know how to support dispositions of students in your own classroom?

7. Is there something about this course that you believe will have a lasting influence on you as a future early childhood teacher? Please describe.