Fostering teacher candidate dispositions in teacher education programs

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Abstract: The role of teacher preparation programs is to ensure that candidates are effectively prepared in the knowledge, skills and dispositions needed to be an effective educator. However, dispositions have always been a challenge to the field of teacher education, particularly in response to assessing dispositions and in answering the question; can dispositions be taught? Many professionals in education and career counseling believe that candidates come endowed with the dispositions needed to be an effective teacher and this "endowment" is the reason the candidate has chosen the career of teaching. Though, to a certain degree this premise may hold true, this article discussing a study done in an early childhood teacher preparation program with teacher candidates and demonstrated dispositions can be "taught" if there is intentionality with effective teaching methods related to dispositions. Pre and post assessment results of 99 teacher candidates are compared in an introductory early childhood education course to measure candidates' tendencies to act in ways conducive to appropriate professional dispositions. A teaching intervention related to dispositions is also discussed and provided the premise that with intentional and effective teaching, comes intentional and effective learning.

Keywords: teacher preparation, fostering dispositions, assessment

Recent trends within school systems have made it increasingly important that teacher education programs ensure their teacher candidates are prepared to become effective teachers in the classroom. In order to ensure this effective preparation, national accreditation bodies, as the National Council for Accreditation of Teacher Education (NCATE), has mandated programs assess the acquisition of knowledge, skills, and dispositions of teacher candidates (NCATE, 2010). While skills and knowledge in the field of education are fairly easy to define, cultivate, and assess, dispositions have always been difficult to define. Cultivating them within teacher education programs has been questionable, and some have even challenged the validity of assessing dispositions (Stooksberry, Schussler, & Bercaw, 2009; Schussler, 2006; Mullin & Jung, 2003; Rhodes, 2008).

Schussler (2006) challenged teacher education programs to consider a greater purpose beyond assessment of dispositions required for program accountability and accreditation. He indicated that it would be more beneficial to clearly define dispositions and to identify how they contribute to and become an intricate part of teacher education programs; in essence, to focus on the scholarship of teaching and learning related to dispositions. By doing so, teacher education programs could tailor their courses and experiences to foster development of dispositions and provide authentic assessments related to them, thus reducing the inordinate amounts of time figuring out how to assess them. Assessment of dispositions would then intentionally and

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effectively measure a candidate's awareness, knowledge, or application through intentional learning experiences and serve the program's improvement cycle.

This study worked off the premise of Schussler and was built on the hypothesis that dispositions can be fostered and supported through teaching interventions provided in teacher preparation courses; answering the age-old question; Are dispositions caught (inherent to personality) or taught (able to be fostered and learned)? In order to shed some light on the complicated tenets associated with this premise, the literature review focused its attention on the definition of dispositions and highlighted the varying views associated with programming for dispositions, including fostering and assessing dispositions. The writers' intent of this study was to build on the premise that dispositions can be fostered within teacher education programs; thereby, encouraging programs to take the responsibility for building experiences that nurture their development. This will then insure that assessment is more meaningful, leading to effective program improvement.

I. Literature Review.

A. Defining Dispositions.

According to Whitsett, Roberso, Julian, and Beckham (2007) studies about dispositions began in the 1960's with Arthur W. Combs' series of studies on personal perceptions of effective helpers (educators). In an effort to distinguish effective helpers from ineffective helpers, Combs, Soper, Goodling, Benton, Dickman, and Usher (1969) came up with five categories of perception; perception about self, perception about others, perception about subject field, perception about the purpose of education and the process of education, and a general frame of reference perception. Perception and disposition were used interchangeably. Combs' studies also identified that dispositions, or an individual's behavior, was a depiction of the perceptions he/she has been exposed to over time. A habit of "thinking and doing" had occurred (DeRos-Voseles & Fowler-Haughey, 2007, p.1). Beteram and Fascal (2002) continued along this line and stated that dispositions were behaviors or traits that were environmentally sensitive; meaning they could be fostered, refined, and weakened by an individual's interactions with others around them. Some of these personality traits could be identified as; responsibility, dependability, creativity, empathy, and professionalism (Davis & Stewart, 2005).

Sociologist J. L. Holland (1997) related career paths to personal dispositions and stated individuals were endowed with dispositions that often propelled them to choose a specific career path. Through his theory, he stated the single most important factor to career choice, satisfaction, and success was personality. He identified six different personality types. Each of the six types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional) had specific attributes and work categories. Individuals however, could be strong in more than one personality type and gravitated to a career applicable to these traits. For example, the social personality had traits, which worked well in an educational setting and included caring, communicative, responsible, compassionate, helpful, team-spirited, nice, and dependable. An artistic personality had the traits of creative, reflective, original, and imaginative. Holland stated both personalities might gravitate to teaching; since the individual thought they had the capability of changing and improving these same traits within others who would be their own students.

There are several psychological assessments used in career counseling such as the Self Directed Search [SDS] (Holland, Powell, & Fritzsche, 1970-1997), Strong Interest Inventory

[SII] (Donnay, Morris, Schaubhut, Thompson, Grutter, & Hammer, 1927-2005), and NEO Personality Inventory-Revised [NEO PI-R] (Costa & McCrae, 1978-1992) that supported this premise. The SDS and the SII is based on John Holland's theory of vocational choice and identified distinct personality types that work well in specific occupational environments (Holland, Powell, & Fritzsche, 1970-1997). Therefore, through Holland's theory and work, it would seem apparent that candidates came endowed or pre-disposed with the dispositions they would need to be a successful educator when they entered a teacher preparation program. This "endowment" was a direct result of being exposed to the needed attitude, beliefs, and ways of being, which became a part of their personality.

If this premise is true, it could also be said if candidates were weak in professional dispositions, exposure to and application of these dispositions over time during their four-years of preparation could also support and help develop effective dispositions. This is an important premise, because if personality characteristics are developed over time, teacher preparation programs could intentionally use the four years of preparation to foster professional characteristics/dispositions, possibly as effective as candidates who come to programs prepared with them. Diez (2007) identified the fundamental difficulty in defining dispositions lied in the debate of dispositions being fixed and unchangeable versus being flexible and changeable. If dispositions were fixed traits, then development of them is of no importance and very little if any can be done by teacher educators to influence change (Stooksberry, Schussler, & Bercaw, 2009). On the other hand, when dispositions are identified as malleable as proposed by Diez, teacher educators can define their role in effecting change, refocusing their attention to dispositions can and should be 'shaped.'

Much of what is expected in teacher preparation today, related to defining dispositions has a direct implication with accreditation. Accreditation bodies define dispositions for the field and require assessment, which mandates some form of a definition. NCATE (2010) defined professional dispositions as constructive behaviors such as professional attitudes, values, and beliefs exhibited by educators through verbal or nonverbal means to students, families, colleagues, and the communities. In its standards, NCATE specified dispositions should be assessed based on observable traits or behaviors within an educational setting. It also identified two dispositions that must be assessed by all institutions; 1-fairness and 2-the belief that all students can learn. NCATE also stated that for assessment purposes, teacher candidates' dispositions are on target, if the following conditions prevail:

- Candidates work with students, families, colleagues, and communities in ways that reflect the professional dispositions expected of professional educators as delineated in professional, state, and institutional standards.
- Candidates demonstrate classroom behaviors that create caring and supportive learning environments and encourage self-directed learning by all students. Candidates recognize when their own professional dispositions may need to be adjusted and are able to develop plans to do so (NCATE, 2008)

NCATE (2010) also mandated that institutions identify additional professional dispositions based on their own mission and conceptual framework. As a result, many colleges and universities have identified dispositions unique to their conceptual framework and have to some degree created inconsistencies in how dispositions are defined and assessed. This has been confirmed at several universities including Western New York, Eastern Kentucky, University of Vermont and Aubury College (Rinaldo, Denig, Sheeran, Cramer-Benjamin, Vermette, Foote, & Smith, 2009). At Western New York, dispositional values were defined as professional

commitment, professional relationships, and critical thinking. These three values were defined using the three tenets of the university's mission statement (process-product, constructivism, reflective practice). However, at Eastern Kentucky University dispositions were identified as empathy, positive view of others, positive view of self, authenticity, and meaningful purpose and vision at various stages in the program. The University of Vermont identified dispositions as collegiality, response to feedback, interpersonal skills, intrapersonal skills, oral communication and diversity. Washington State University identified dispositions as character, leadership, human interaction, communication, and self-development. Finally, Aubury College defined dispositions as moral and ethical integrity, respect and compassion, personal emotional wellness, passion for teaching, and spiritual sensitivity and purpose. The variations in definitions that have been identified above have matched the variations in how to assess them; from conducting interviews and assessing candidates at the beginning of the program, to writing journals, joining teacher professional organizations, and developing instruments for measuring dispositions for candidates during student teaching.

Other individuals in their work have defined dispositions in a manner that reflected their understanding of how dispositions supported professional practice. For instance, Katz (1993) stated there were three conditions or patterns of behavior that should be exhibited in order to identify if a teacher was demonstrating effective teacher dispositions. The three conditions included; professional behaviors should be exhibited often, the disposition should be done willingly and knowingly, and it should be goal-directed. Katz understood the importance of intentionality behind a teacher's behavior, and recognized dispositions needed to reflect principle-based behavior. This may differ slightly from the latter views on dispositions, since personality traits are not intentional behavior. However, individuals can intentionally respond in educational settings with reflective thought and purpose.

Though there appeared to be no agreement with the definition of dispositions, all researchers appeared to agree that dispositions were critical for teachers to succeed in the profession. Without effective dispositions, teaching and learning would suffer. Therefore, it is critical to not only understand what they are, but also understand strategies that can (if possible) nurture and refine their development.

B. Developing and/or Assessing Dispositions.

A study on dispositions conducted at Arkansas State University Mountain Home, a two-year affiliated with the four-year Arkansas State University (Stewart & Davis, 2005) identified that in order to develop effective dispositions in teacher candidates, students needed to develop certain traits. The university defined the traits as: responsibility, dependability, creativity, empathy and professionalism. Similar to Katz's (1993) intentionality and principle-based behavior, the college's conceptual framework stated expertise in content, knowledge of students, and dispositions formed the basis of teacher beliefs and values. Because of this, the university provided teacher candidates with numerous opportunities to build these traits by shadowing classroom teachers at the beginning of the program, through the end of the program. and provided opportunities to volunteer at social and community organizations where they could improve their diversity awareness, caring, and nurturing qualities. From these experiences, the university assessed what they identified as the most effective source in building effective dispositions, student organizations.

If we revisit earlier theories about learning, it would be found that earlier theorists and philosophers such as Vygotsky and Locke have supported the notion of humans having the

potential to change based on their experiences (Obara, 2009; Aldrich, 1994). Both Vygotsky and Locke proposed that people are social beings and social experiences influence what is learned and developed. Thus, if teacher preparation programs are seen as social experiences that influence learning and development, dispositions could be learned and developed at anytime. Additional studies have supported this view (Splitter 2010, Schulte, Edick, Edwards, & Mackiel, 2004). Stooksberry, Schussler, and Bercaw (2009) defined dispositions by citing Schussler's (2006) and stated that a "disposition was an awareness, inclination, and reflection on behaviors and thinking, not just the behavior or thinking itself" (p. 257). This is important, since a reflective teacher preparation program can support candidates in their awareness and understanding of professional dispositions and help them to reflect on them through continued application in field-based experiences. Splitter (2010) continued along this line by saying that dispositions were conscious responses to situations. He also stated that it was not enough for an individual to be able to define what a disposition was, but an individual must apply these dispositions in the field; demonstrating a willingness on the part of the learner to show what has been internalized and learned.

Since people are by nature, socialized differently, it is quite easy to presume that people's understanding of certain concepts, such as dispositions, will also be different. Perhaps teacher education programs could be developed so that dispositions would actually be part of the teacher education curriculum. Carroll (2005) in his work wrote about how dispositions were developed, stated that dispositions are not developed naturally and that acquiring dispositions can be perceived as a "community effort." In essence, teacher candidates will have to be served by learning communities where instructors and experienced professionals provide the needed scaffolding for teacher candidates related to dispositions.

Programs that have worked off the premise that students come endowed with the necessary dispositions and focused their attention mainly on assessment, working to create a universal assessment system (Harrison, McAfee, & Caldwell, 2002). Henderson State University, Arkansas, conducted a study investigating the interview process that was used as a criterion for admission (Harrison, McAfee, & Caldwell, 2002). The interview was to ensure that teacher candidates had the appropriate teacher dispositions upon entering the program. Assessment and levels of proficiencies were developed using rubrics. The rubric was created and was sent to other colleges within the university for validation and it was approved. A training video that depicted the proficiency levels of *unsatisfactory, basic* and *proficient* was also developed to help both students and raters have a better understanding of what each of the levels required. The instrument was used and was considered an effective assessment tool because of inter-rater reliability. In general, most students were satisfied with the process and were able to pass. However, those who did not pass were given remedial interventions to help them get to the recommended standard. The recommendation that was given to meet the standards was to change the proficient level in the rubric to target. This was considered important because target was the specific language used by NCATE. It also provided opportunity for the program to have some impact on development and/or refinement of these dispositions.

In a similar way, the Joint Education Department of the College of Saint Benedict and Saint John's University in Minnesota created a behavioral assessment instrument, which required an interview with a director of student teaching or the department chair during the admission process (Mullin, 2003). Interview questions were focused on intrinsic motivation and the zeal for learning, as well as other relevant dispositions identified by the group such as effective communication, reflection, and collaboration. As students answered questions they were able to

reflect and share life experiences that allowed them to focus on dispositions for effective teaching.

Existing instruments have also been used to assess the extent to which teacher candidates have qualities in place for effective teaching to occur. In an effort to assess teacher candidates' dispositions as required by NCATE, Singh and Stool (2008) developed a disposition tool, which they named Eastern Teacher Dispositions Index (ESTDI). This was a self-assessment instrument that was intended to assess candidates' disposition based on Combs (1969) and his colleague's five characteristic scale of perceiving. Forty-six Likert-type items were developed using these scales. The ESTDI was administered to 86 teacher candidates at a state university located in the rural part of Eastern Connecticut. These were undergraduate and graduate students, but the majority were undergraduate students, who were enrolled in pre-professional courses and introductory graduate courses respectively. It was realized that most students strongly agreed in each of the scales, which indicated that they have a good understanding of the dispositions needed for effective teaching.

In a similar study (Albee & Piveral, 2003), ten dispositions were selected and developed in an instrument to determine effective management process for identifying dispositions in teacher candidates. The unique thing about this process was the fact that the developers decided to use a survey to determine what dispositions seemed relevant to teacher candidates, practicing teachers, professors, and administrators. It was realized that all participants valued similar dispositions. With this information, they developed the instrument using ten dispositions, and then field-tested it with a different sample group using A Pearson Chi-Square. They also identified the dispositions as being valuable. Finally, they needed to ensure that "a disposition monitoring process" was established. It was decided that at the beginning of each field experience candidates would be exposed to this assessment. This was to insure the teacher candidate can be assisted in making a decision as to whether they possess the needed commitment for the profession and be knowledgeable about the level of their own growth in relation to what is ideal for the teaching profession. This whole process helped bring clarification in identifying and monitoring dispositions. Even though this seemed to be a fairly reliable instrument, Albee and Piveral (2003) concluded that further studies would be needed to validate this instrument as reliable.

It is quite apparent that the tenets of defining, fostering and/or assessing dispositions have left holes for teacher preparation institutions and in their ingenuity, programs have tried to fill these holes by putting measures in place to ensure a fair, acceptable means of assessment. Most of these institutions have tried to create assessment methods that support assessment systems and therefore, guarantee the training and education of an effective teacher. However, there is still very little research to support the importance of cultivating and supporting dispositions during teacher preparation to insure success with assessment of dispositions.

II. Methodology.

The catalyst for this study came from the hypothesis that dispositions can be fostered and supported through teaching interventions provided in teacher preparation courses. The study question therefore was; can teaching interventions in a course change the knowledge and understanding levels of students related to dispositions? The study followed a qualitative methodology, with some numerical analysis using mean scores. The levels of learning chosen by the writers reflected Bloom's (1956) levels of learning and included knowledge and understanding of dispositions. Application was not explored. The study was based on the

premise that dispositions can be viewed like other professional skills, mainly observable behaviors that are intentional and applied within an educational setting. Therefore, they can be taught and supported by educational experiences building on the knowledge and understanding needed to be a professional educator. It was also assumed by the writers that some dispositions can be observed and transferred to a variety of settings including a class on campus (i.e. cooperation). However, the most ideal way to observe professional dispositions is to witness them within the context of the profession or to recreate settings having similar expectations on behavior as; case studies, simulations, or role play that can be used in the college classroom, along with the field and clinical experiences where dispositions are put into place and monitored by university supervisors and cooperating teachers.

The setting for this study took place in an urban university in an early childhood education course the candidates took during their freshman or sophomore year. The course; *Best Practices in Early Childhood Education* was a course that provided a foundational understanding in early childhood education, providing content knowledge in such topics as development and learning, early childhood programming, developmentally appropriate practice, professionalism/dispositions, and parent partnerships. Candidates had two field experiences in the course; one was a child-study experience asking candidates to interview a parent and observe a child within the context of their home. The other experience was an observational experience in a K-3 classroom to understand key components of a developmentally appropriate classroom. Both of the experiences had a reflective piece asking candidates to apply course content to what they observed.

The course was also was one of four courses students had to be successful in order to gain entry into upper division for their major. Because the course was placed near the beginning of the sequence of preparation, the study sought to identify if dispositions could be taught through course experiences that increased knowledge and understanding of dispositions. Most, if not all of the candidates would have taken a Foundations Course in Education, and may possibly have taken a reading course, or human ecology course as well, and these courses would have talked to some degree about dispositions. However, the context of teaching about these dispositions in other courses or the notion that candidates may have acquired dispositions through other experiences as family life were not important for the study. The ability to impact knowledge and understanding of dispositions through a teaching intervention was the purpose. Therefore, it was not the intention of this study to compare or contrast data results based on gender, socioeconomics, age, or culture.

The pre-assessment provided data related to what candidates already understood about dispositions by asking them what behavior they would tend to display in a given, professional situation. The post-assessment, which posed the same questions, had the intent of providing data to demonstrate an increased knowledge and understanding as a result of teaching interventions in the course. These results would support the thinking that dispositions could be taught.

During the fall and spring semesters of two academic years, 99 teacher candidates in the above early childhood education course were given a pre and post assessment that were developed by the faculty member who taught the course and is one of the writers of this article. This assessment was to identify the candidates' tendencies or knowledge to act in a certain situation related to the three professional dispositions of collaboration, professionalism, and inclusivity. These three dispositions were part of the College of Education's Conceptual Framework and were required to be assessed for NCATE accreditation. The pre-assessment was

given the first day of class, before any course content was provided and the post assessment was given the last day of class.

Since teaching about dispositions was a normal topic for the course, an assessment related to dispositions was not out of the realm of their experience. However, the researcher filed with the university IRB and candidates were informed prior to taking the pre and post assessment that they had the option of not taking either of the assessments. To respect confidentiality, candidates were asked not to put their names on the assessments and were given a letter or number which was to be recorded in a course notebook by the candidate. The pre-assessments were also put in sealed envelopes with the letter or number written on top to insure respect of confidentiality and to allow the pre-assessment to be passed back to assist in answering a reflective open-ended comparison question on the post assessment.

The design of the pre and post assessment questions was developed by the faculty writer, using the style of the Diagnostic Inventory for Selective Prescription on Self-Evaluation (Harrison, McAffee, Smithey, & Weiner, 2005). However, each question differed from this inventory and was developed to measure behavior tendencies or knowledge linked to the three dispositions of the College of Education for the study (see Appendix 1). Questions 1-5 measured the disposition of _collaboration_. Those who scored a total of five on these five questions (answering 1 for each question) would have the **least** understanding, belief and/or tendency to be collaborative (see Table 1). The total score of 25 on these five questions indicated a **stronger** tendency, belief and/or understanding. Questions 6-10 measured the disposition of _inclusiveness_ and reversed the scoring, hoping to eliminate guessing by candidates on the _questions_. Therefore, those who scored 25 for the total of the five questions would have the **least** understanding, belief and/or tendency to be inclusive. The total score of five, for the five questions indicated a **stronger** tendency to be inclusive. Questions 11-15 measured the disposition of _professionalism_. Those who scored a five would have the **least** understanding, belief and/or tendency to be professional. The score of 25 would indicate a **stronger** tendency to be professional. In addition to the 15 Likert questions, there were three open-ended questions and one additional question on the post assessment. A question on the post-assessment asked for a personal reflection related to any change in knowledge and understanding which may have resulted in a changed answer from pre to post assessment.

Table 1. Scoring Guide-Pre and Post Assessment.

1-5 Collaboration	5- least likely to have the tendency or understanding of collaboration	25- greatest tendency or understanding of collaboration
6-10 Inclusiveness	5- greatest tendency or understanding of inclusiveness	25- least likely to have the tendency or understanding of inclusiveness
11-15 Professionalism	5- least likely to have the tendency or understanding of professionalism	25- greatest tendency or understanding of professionalism

The three open-ended questions were scored either acceptable or not acceptable based on the congruence of their answers related to the particular answer for each question. Answers that were within the parameters of correctness were scored acceptable, similar to open-ended questions on a test. (see Appendix 2). The questions included:
1-Definition-What is a disposition?

2-Do you feel dispositions are important for effective teaching? Why or why not?

3-If you answered yes to number two, name the dispositions needed to be an effective teacher?

During the semester of the course, two consecutive weeks towards the end of the semester were devoted to the topic of dispositions. The teaching methods included digital stories created by two practicing teachers; one was a seasoned teacher, the other a new teacher. Within each digital story, the practicing teachers discussed the three dispositions of the college of education, how these applied to their own teaching, and why they were important. After the digital stories, teacher candidates were given discussion questions related to what they saw in these stories. The candidates also played a disposition game, role-played effective and ineffective teacher dispositions, discussed mini case-studies and had small group discussions related to the National Association for the Education of Young Children (NAEYC) Ethical Practices (Feeney, Freeman, & Pizzolongo, 2012).

III. Results.

Based on results from a paired T-Test (.05167), the data from pre to post assessment was not statistically significant. However, the results from the pre and post assessment did demonstrate some growth in knowledge and understanding by the candidates in all three dispositions. This was demonstrated by increased mean scores on the post assessment in the two dispositions of collaboration (from an average mean score of 4.16 to 4.43 from pre to post) and professionalism (from average means score of 4.30 to 4.52 from pre to post). These increases indicated a positive change in a tendency to exhibit collaborative or professional dispositions. For the disposition of inclusivity, the decrease of mean score (from an average mean score of 2.1 to an average 1.76) indicated this same growth. On average, each of the dispositions differed in mean scores from .2 to .4 (see Table 2).

The aim of the "desired" ratings score was to identify an increase in awareness/knowledge and/or a tendency to display the disposition in educational situations that warranted demonstration of the dispositions (see Table 2). When looking at the change in the distribution of scores (number of candidates) from pre to post, collaboration had an increase of 8%. This was at the desired ratings of 4 or 5 (agree to strongly agree). Question 1 had the most increase at 18% of the candidates scoring in the 4-5 range. Question 1 identified the tendency to join a professional book club with other classroom teachers that dealt with the topic of classroom guidance.

For the disposition of being inclusive, the increase of candidates to the desired range from pre to post was 11%. The largest increase for this disposition was question 10, which asked students to decide between allowing an engaging project to continue or stopping children and asking them to move on, since time and self-discipline were crucial. Twenty-two percent of candidates moved to the desired range from pre to post for this question.

Table 2. Pre & Post Mean Scores and Distribution.

Question/ Disposition N=99	Pre						Post				
Ratings: **1**-Strongly Disagree **2**-Disagree; **3**-Neutral; **4**-Agree; **5**-Strongly Agree	**M**	**Distribution**					**M**	**Distribution**			
COLLABORATION		1	2	3	4	5		1	2	3	4	5
Question 1	3.93	1	1	24	51	22	4.38	0	0	8	45	46
Question 2	4.20	0	0	12	55	32	4.47	0	0	8	36	55
Question 3	4.28	0	1	11	46	41	4.57	0	0	7	29	63
Question 4	3.79	0	4	30	48	17	4.00	0	1	21	54	23
Question 5	4.60	0	0	2	36	61	4.74	0	0	1	24	74
Average M	*4.16*				*47*	*35*	*4.43*				*38*	*52*
		83% agree or strongly agree						*91% agree or strongly agree*				
INCLUSION		1	2	3	4	5		1	2	3	4	5
Question 6	1.88	38	43	11	6	1	1.48	59	34	4	2	0
Question 7	1.75	38	51	8	1	1	1.54	58	33	4	4	0
Question 8	2.28	22	39	26	12	0	1.86	35	39	17	5	0
Question 9	2.12	23	47	23	6	0	1.99	29	47	18	5	0
Question 10	2.45	15	41	27	15	1	1.94	36	42	13	7	1
Average M	**2.1**	*27*	*44*				**1.76**	*43*	*39*			
		72% strongly disagree or disagree						*83% strongly disagree or disagree*				
PROFESSIONALISM		1	2	3	4	5		1	2	3	4	5
Question 11	4.61	2	0	2	27	68	4.84	0	0	0	16	83
Question 12	3.88	0	8	19	49	23	4.06	1	5	14	46	33
Question 13	4.06	0	6	14	47	32	4.29	0	3	7	47	42
Question 14	4.22	0	3	8	52	36	4.49	0	1	4	39	55
Question 15	4.74	2	0	2	14	81	4.92	0	0	0	8	91
Average M	**4.30**				*38*	*48*	4.52				*31*	*61*
		87% strongly agree or agree						*93% strongly agree or disagree*				

For the last disposition of professionalism, there was an increase of 7% of candidates who moved to the desired rating. This disposition had two questions where 99 candidates or 100% were in the desired rating at the post assessment. This included question 11, which dealt with choosing between partying with friends into the late night or staying home in order to be fresh for kindergarten students and question 15, which dealt with looking at parents as integral to an effective early childhood education classroom.

From the data it could be assumed that candidates appeared to have come into the course with a slightly better understanding of the disposition of professionalism than the other two dispositions, with a pre-assessment average mean that was the closest to the desired score than the other two dispositions of collaboration and inclusiveness and with 93% of the candidates scoring in the desired range on the pre-assessment. It can also be assumed that candidates gained a greater understanding of inclusivity, with an 11% increase in scores to the most desired ranged.

Open-ended questions (see Appendix 2- Part I) were rated by the faculty writer to be acceptable or unacceptable based on candidates' answers staying within the parameters of what

was correct for that question. Therefore, these questions were scored similar to open-ended questions on a test. It was not required to have the exact words in any of the three open-ended questions. Out of 99 answers 55% (54 candidates) of the answers were considered unacceptable on the pretest, compared to 16 answers or 16% unacceptable on the post assessment. The most interesting piece of evidence was what candidates perceived as dispositions on the pre assessment. Answers ranged from; " a way of teaching children, a plan, your opinion or idea on an issue, to how you feel a lesson, project or experience went." Nineteen of the 89 candidates were unable to provide any definitions compared to two candidates on the post.

For the second question of why dispositions were important for effective teaching; 56% (55 candidates) did not know why dispositions were important on the pretest by either giving an unacceptable answer or leaving the answer blank. Though more candidates could not clearly define what dispositions were in question one, more of the candidates had a sense or may have guessed why these "things" might be important as; "Dispositions affect the classroom, the style of teaching, the environment, class atmosphere." The post assessment identified 31 candidates with misperceptions of why effective dispositions would be important with answers as; "Teachers need to constantly improve and work towards new goals. Working and learning from each other gives the teacher added practice and continued success." This demonstrated an increase of 25% of candidates who demonstrated from their answer that they understood the importance of effective dispositions from the teaching interventions.

Question three had 59 candidates or 60% who were not able to name the dispositions that were important for education. Again, specific dispositions were not required to be an acceptable answer, but acceptable, congruent answers. This was reduced to 27% of candidates who could not name what the professional dispositions were for the teaching field on the post assessment. It could be assumed that the 27% were probably students who still did not have a clear understanding of what dispositions were with answers as; "Following developmentally appropriate practices and complying with standards."

The last question was on the post assessment only. It dealt with candidates' own perceptions about their change in understanding and why it might have changed. Candidates were passed back their pre-assessments that were identified by letters and numbers only. Eighty-three percent of candidates stated that their perceptions reflected in their answers did change. Seventeen percent of the candidates either did not answer the question or identified that they were not aware if they had a change in perception or not. Of those who did have a change in perception, all identified that course content, including the specific teaching interventions related to professional dispositions were reasons for their change in understanding. Many of the candidates also felt that the course content sensitized them to understand best practices better and hence, increased their knowledge and understanding about professional dispositions.

IV. Discussion.

The scoring from both the Likert questions and the open-ended questions identified some level of learning and retention related to the three professional teaching dispositions of collaboration, inclusion, and professionalism. Candidates also appeared to have come into the course with a slightly better understanding of the disposition of professionalism than the other two dispositions from the pre-assessment scores (see Table 2). This may have been related to previous courses or field placement experiences in courses, which required them to have an understanding of professionalism. This would definitely be true in the Foundations in Education course, which

required candidates to have field hours in tutoring through local schools and included a college of education handbook, which highlights professional behaviors needed for the field of education. The behaviors of professionalism would also be required in any work-related experience, so application would be easier to apply within the context of course content. Finally, it may have been what students learned as they were growing up, since respect and an ability to meet the expectations of others, which is closely aligned with professionalism may have been learned through their family experiences. It is puzzling that that there was still a percentage of candidates in each of the dispositions that did not come to a clearer understanding of the disposition. However, the study's focus was not to measure the effectiveness of the teaching intervention, time spent on task, along with a variety of other learning variables may have come into play.

Question 12; "A team teacher has been consistently abrupt with a child in your class, you feel it is important to talk directly to him/her before you seek the advise of your principal" was the question that candidates struggled with the most. Though professionalism may be understood, how to communicate to colleagues through a line of respect may not have been addressed. Candidates may also have felt more comfortable talking to a principal then directly talking with the teacher who she/he is concerned about. This may be one area that is a weak area for candidates to understand and more direct conversations and case studies may be needed to directly address lines of communication. The evidence is clear however, that experiences that fostered understanding in appropriate teaching skills as dispositions can and should be built overtime. Hence, more than two weeks are needed to have candidates acquire a level of understanding that they could apply in professional situations and additional courses that take the responsibility to provide teaching methodologies related to dispositions was also needed.

The understanding of the disposition of inclusion had the greatest gain at 11% of candidates who changed their answers at the post assessment to be in the acceptable range. In some ways this was not surprising, since it would be safe to assume that the understanding of diversity, collegial relationships, and classroom practices that reflect this disposition may be new to many students, even those who may have come predisposed with the tendency and capability of being inclusive. Therefore, the teaching interventions may have had a greater impact because this disposition provided the greatest room for growth.

Candidates prior knowledge and understanding of dispositions would also be important to consider, since the percentage of change could have been linked to what candidates already understood prior to the course. It would have been interesting to track individual growth of each student to see if candidates who demonstrated a beginning understanding before they entered the course changed their answers, and to what degree. However, the main purpose of the study was to demonstrate interventions (teaching strategies) could have a positive impact on the knowledge and understanding of dispositions, like other skills in teacher preparation. The teaching intervention of two weeks in the semester clarified an understanding of dispositions for most of the candidates, but did not necessarily provide enough depth or experience that solidified this understanding for all candidates.

However, this was not the purpose, particularly since this was a beginning course for the early childhood license. What the course content did do was demonstrate that knowledge and understanding related to professional dispositions can change through the experiences candidates have during their training. This study demonstrated that dispositions can be taught, at least to the point of an increase in knowledge and understanding. Though the numbers in the study did not lend itself to *statistical significance* or a discussion related to statistical analysis, it was evident

from the study that knowledge and understanding of dispositions can and did increase to a degree with teaching methods and strategies related to dispositions. It also demonstrated that not all candidates learn concepts or acquire skills at the same rate. Therefore, sensitivity to individual learning needs is warranted in programs. It is the authors' beliefs that accountability for measuring dispositions cannot be the only responsibility of teacher preparation programs, they must also be responsible for fostering the dispositions needed to be an effective educator and build in experiences as case studies, role play or video analysis to help candidates grow in awareness, understanding and eventually, application.

Though this study did not focus on predisposed dispositions in each candidate, it was evident from some candidate's responses that they <u>did not</u> have the understanding or behavior tendency to act in an expected way related to the three dispositions. However, the study did demonstrate that learning experiences focused on dispositions can have an impact on these tendencies. What would be needed is a follow-up correlation study to track progress on individual candidate's knowledge and understanding on each disposition. There also could be a follow-up study done later in the program to see if course interventions related to dispositions had an impact on candidates' application of dispositions in their clinical experiences as student teachers. It would also be interesting to compare types of teaching strategies used to help candidates learn about dispositions, since pedagogy related to active engagement is what the others believe is also needed when fostering understanding and eventually application of these dispositions in real classrooms.

V. Conclusion.

The teaching profession has an expectation that teacher candidates and practicing teachers clarify and develop academic language for students in all grade levels and in all contents. Higher education faculty who prepare candidates for the field must address this academic language of the field of teacher education. They must also address the critical importance of fostering effective dispositions by choosing learning experiences that build and refine these dispositional skills through the four years preparation.

There is no doubt that candidates may come to teacher education preparation programs prepared with the necessary dispositions and are capable from the beginning of displaying them in the field with a natural ease that makes them look like they have been teaching for years. But others may not, or if they do, they may not understand the situations that warrant such display of professional dispositions. In either case, it is safe to assume that learning experiences that provide candidates with the opportunity to identify, reflect on and apply them will yield an increased knowledge and hopefully, skill in the field. An analysis and comparison of learning experiences linked to assessment results would also demonstrate pedagogically what types of experiences would yield better acquisition and refinement of dispositions and build a more effective robust preparation from awareness levels to application.

This study did not show, nor was it meant to show a correlation between what was learned and how candidates could or could not apply these dispositions. More longitudinal research would need to be done to demonstrate this correlation and follow candidates from beginning courses to their student teaching experience, not only as a group, but also individually. It would be interesting to see if candidates who did not score in the range desired would pick up additional knowledge and skills as they progressed in their course work and field/clinical experiences. It is the hope of the writers that all teacher preparation programs will see the

necessity of going beyond the need to assess dispositions to meet mandated accreditations and embrace the importance of fostering them during the obtainment of the degree. By choosing active experiences within courses that utilize a classroom experience as a case study, candidates will become aware of, gain understanding and skill and finally, be able to apply effective dispositions through the years of teaching.

Appendices

Appendix 1. Pre/Post Assessment: Knowledge, Understanding & Beliefs about Teacher Dispositions.

PART I

1. **Define**: What is a disposition?

2. Do you feel dispositions are important for effective teaching? Why or why not?

3. If you answered yes to the above question, what would be the dispositions needed to be an effective teacher?

PART II

Please answer the following questions by circling the answer that best fits your current understanding, belief, or behavior tendency at the present time.

1. You would enjoy joining a teacher candidate lunch book club to learn more about developing effective classroom guidance within early childhood classrooms.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. You find that you are open to small group experiences and enjoy the opportunity to share, dialogue and exchange ideas and experiences.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

3. You find it important to seek out others thoughts and ideas when working out a problem at work.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

4. You gravitate towards experiences that put you in a group situation and you find the experience rewarding most of the time.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

5. As a teacher, you feel it is your responsible to work as a team member within your grade level and between grade levels.

1	2	3	4	5

Strongly Disagree Disagree   Neutral   Agree   Strongly Agree

6. If a child with consistent behavioral problems was in my class, my first response would be to get him/or her out of the class, so that other children could get the attention they deserve.

    1   2   3   4   5

Strongly Disagree Disagree   Neutral   Agree   Strongly Agree

7. Children from different cultures, who have English as a second language (ESL), should meet the expectations of the class, without any special interventions, after all, they will need to meet the rigors of an English speaking culture soon enough.

    1   2   3   4   5

Strongly Disagree Disagree   Neutral   Agree   Strongly Agree

8. The principal approaches you in the hallway with a requested to put an autistic child in your classroom. She says however, that she wants you to feel free to say yes or no. You are uncomfortable and feel this child may interfere with the regular classroom so you politely decline, with understanding from the principal.

    1   2   3   4   5

Strongly Disagree Disagree   Neutral   Agree   Strongly Agree

9. You are working with an Asian second grade teacher who is known to be an excellent teacher, but tends to be more reserved, often staying by herself, and two additional teachers who are closer to your age and culture, but have less experienced. You have an issue with a second grade parent and want advice. You plan on going to talk to the two teachers who are closer to your age, since you can relate better to them, even though the Asian teacher has more experience and an excellent rapport with parents.

    1   2   3   4   5

Strongly Disagree Disagree   Neutral   Agree   Strongly Agree

10. When reflecting on your own desire to plan a classroom environment, you feel it is important to have a very strict schedule children can count on daily. Even though they may be engaged in an excellent project, for one day, you need to stop them and move on, since time and self-discipline are crucial for learning.

    1   2   3   4   5

Strongly Disagree Disagree   Neutral   Agree   Strongly Agree

11. Your friends ask you to go to a party that is bound to last all night and into the early morning. It is the second week of the school year and you refuse, knowing that kindergarten children will need all your best attention and energy tomorrow.

    1   2   3   4   5

Strongly Disagree Disagree   Neutral   Agree   Strongly Agree

12. A team teacher has been consistently abrupt with a child in your class, you feel it is important to talk directly to him/her before you seek the advise of your principal.

    1   2   3   4   5

Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

13. A parent who is quite unfriendly has a conversation over the phone with you last night. Your colleague knows that you were going to speak with her, and has spoken several times with you about how she is a "jerk." When she asks you how it went, you say that it was challenging, but you feel it might work out. She laughs and says come on, tell me the real story. You smile, but say nothing.

               1   2   3   4   5

Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

14. A colleague is gossiping about another teacher within the school to a group of teachers. You are part of this group and hang around them most of the time. You want to be with this group, but you excuse yourself and go back to your classroom to get some work done.

               1   2   3   4   5

Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

15. You see parents as an integral part of a child's learning and make every effort to communicate and build relationships with each parent.

               1   2   3   4   5

Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

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Post-Assessment –Additional Add-on Questions

PART III

Did you change any answers from pre to post assessment?   YES_____   NO_____

What might have brought about this change? For example, did the digital stories have an impact on your understanding of dispositions? Please be as specific as possible.

SCORING GUIDE-Dispositions

The College of Education has defined three specific dispositions that are needed to be an effective teacher. These include;

Collaborative: *Candidates who exhibit a collaborative nature* demonstrate an ability to work with others, accept responsibility as required, respect different thoughts and opinions, and contribute to efforts to examine and enact productive solutions. Candidates exhibit these behaviors towards colleagues, school personnel, clinical personnel, students, and mentors.

Inclusive: *Candidates who exhibit an inclusive nature* demonstrate respect, empathy, open-mindedness, flexibility in thought, and the ability to anticipate and understand diverse and/or conflicting views, ethnicities, exceptionalities, etc. Candidates exhibit these behaviors towards colleagues, school personnel, clinical personnel, students, and mentors.

Professional: *Candidates who exhibit a professional nature* demonstrate principled behaviors including ethical conduct, knowledge, respect, inclusiveness, confidence, appropriateness in the context of one's workplace; competence in translating knowledge into effective teaching/learning, counseling, and/or administrative practices and a propensity for both demonstrating and encouraging excellences in self and others. Candidates exhibit these behaviors towards colleagues, school personnel, clinical personnel, students, and mentors.

The likert style questions were aligned with these dispositions as follows:

Questions 1-5 Measure the disposition of collaboration. Those who would score 5 would have the least understanding, belief and/or tendency to be collaborative. The score of 25 would indicate a stronger tendency, belief and or understanding to be collaborative.

Questions 6-10 Measure the disposition of inclusiveness. Those who score 25 would have the least understanding, belief and/or tendency to be inclusive. The score of 5 would indicate a stronger tendency to be inclusive.

Questions 11-15 Measure the disposition of professionalism. Those who score a 5 would have the least understanding, belief and/or tendency to be inclusive. The score of 5 would indicate a stronger tendency to be inclusive.

A question was added to the post assessment to identify if teacher candidates perceived themselves as changing answers and if so, why?

Appendix 2. Examples of Open Responses.

It is possible that each response is represented by more than one candidate. These are examples and not the entire sample.

Pre-Assessment	Post- Assessment
1. Define: What is a disposition?	**1. Define: What is a disposition?**

Acceptable Total [45]	Acceptable Total [83]
-your attitude toward a particular thing. -the way you present yourself -your reactions to situations, how you handle yourself -N/A	-attitude, character, belief, moral, and ethical make-up of a person (ex. Working or collaboration w/ colleagues, professionalism) -the ability to collaborate, be professional, and inclusive to families, diversity; the way you present yourself - It is the beliefs you hold as a teacher; your willingness to work w/others collaboratively, to reflect on your own teaching, or even the discipline you believe in

Not Acceptable Total [54]	Not Acceptable Total [16]
-An essay explaining a situation whether it be teaching or another. -How you feel a project or experience or lesson went. What could be improved -Your learning methods, the way you approach things.	-The teacher's view -It is what a person/teacher's critical task is with a philosophy backing it -Is a situation that affects a teacher. What your thought or philosophy is

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2. Do you feel dispositions are important for effective teaching? Why or why not?

Acceptable	Total [44]

-They are important, because it is necessary for teachers to have stances that show that they care about students and what happens in their classrooms.
- Dispositions affect the classroom, the style of teaching, the environment, class atmosphere.
-Yes. I feel they are very important for teaching because they affect how you teach a subject, and how much enthusiasm you devote toward it.

Not Acceptable	Total [55]

-Yes, they help explain and interpret teaching.
-Yes, because you need to know your material and how it relates to your teaching.
-Yes, because it makes someone *unboring* if they are the teacher.

2. Do you feel dispositions are important for effective teaching? Why or why not?

Acceptable	Total [68]

- Yes, certain dispositions are important so that a teacher has strong beliefs and will teach as positively and effectively as possible.
-Yes, it has an effect on who you are as a teacher. It will affect how you teach.
-Yes. Teaching requires patience, thinking outside the box, respecting others, and open-mindedness.

Not Acceptable	Total [31]

-Yes, because I feel it is important to set goals for your classroom.
-Yes I do. Teachers need to constantly improve and work towards new goals. Working and learning from each other gives the teacher added practice and continued success.
-Yes, they are effective because they allow students and faculty to view you in a certain way.

3. If you answered yes to question 2, what would be the dispositions that would be needed to be an effective teacher?

Acceptable	Total [40]

-caring, understanding, responsible, trustworthy, good work ethic, organized, friendly, and open
-flexibility, content knowledge, creativity, enthusiasm, classroom management skills
-good communication, understanding between students, parents, coworkers

Not Acceptable	Total [59]

-understanding of everyone's disposition
-one that allows other peers to comment about topics in ECE
-having the right materials out on the desks
-having a lesson plan on your desk

3. If you answered yes to question 2, what would be the dispositions that would be needed to be an effective teacher?

Acceptable	Total [72]

-professionalism, inclusiveness, communicative/collaboration
-professionalism, timeliness, excitement, eager attitude, helpfulness
-know your biases, being able to collaborate with teachers, relating well to others and communicating effectively regardless of opinion or expectation

Not Acceptable	Total [27]

-following developmentally appropriate practices and complying with standards
-strong positive attitude while writing lessons as well as you teach them
-good attention skills, able to adapt to certain situations in which people believe in

Post Question Only: Did you recall changing any answers from pre to post assessment? N= 83% (answered yes)
Why do you feel you made these changes?
What classroom/course experiences might have brought about this change?
 I have a better understanding exactly of what a disposition is.
-I was all over before with my answers and now it was either a 1 or a 5 and only one neutral.
-The whole class helped with my answers including learning about child development and standards and what it means to be an effective teacher.
-I have gained a lot more knowledge on dispositions and the early childhood classroom through the activities and code of ethics we discussed.

-I have a better understanding of dispositions and ethics. The classroom activities and videos supported this.
-I feel more strongly about interaction with colleagues.   Group discussions and projects enhanced my understanding.
-After this course I feel much more knowledgeable about dispositions. The study of dispositions and acting out the scenarios helped in this understanding.
- My outlook of teacher and children in general has changed after watching the videos and having the field experiences.
-I learned a lot in this class with role-play and so forth, I understand more of how to become an effective teacher.
-I have a better understanding and stronger opinion than before.

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