Preservice Teachers' Perceptions of their Perspective Transformations: A Case Study

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Preservice Teachers’ Perceptions of their Perspective Transformations: A Case Study

by

Victoria G. Caruana

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy Department of Special Education College of Education University of South Florida

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# TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

CHAPTER 1: INTRODUCTION

Statement of the Problem
Rationale for the Study
Theoretical Framework
The Research Questions
Definition of Terms
Significance of Study
Limitations

CHAPTER 2: REVIEW OF RELATED LITERATURE

Dispositions
Teacher Identity
Preservice Teachers’ Attitudes toward Inclusion
    Attitudes and Contact with Individuals with Disabilities
    Attitudes and Non Special Education Majors
Transformative Learning Theory
Summary

CHAPTER 3: METHOD

Theoretical Propositions
Case Study Method
Rationale for Design
Context of the Study
Participant Selection for Survey
    Screening for Case Study
    Inclusion/exclusion Criteria
    Procedure
Participant Selection for Case Study
    Criteria for Selection
Data Collection and Analysis
Description of Measures
    The Learning Activities Survey (LAS)
    Modification of the LAS
        Collection
        Analysis
    Threats to Internal Validity
Reliability of Scores of LAS 57
Description of Sources of Evidence 57
  Documents 58
    Analysis 58
    Inter-coder Agreement 59
  Interviews 60
    Analysis 60
  Archival Records 60
    Analysis 61
Validity and Reliability 61
  Multiple Sources of Evidence 62
  Rival Explanations 62
  Key Informants 63
Pattern Matching to Theoretical Propositions 63
The Case Study Protocol 64
The Case Study Database 64
Maintaining a Chain of Evidence 65
Reporting the Case Study 66

CHAPTER 4: FINDINGS 68
Extent and Nature of Transformative Experiences 70
  RQ1 70
    Quantitative Findings 70
    Qualitative Findings 76
    Pattern Matching Summary of RQ1 78
  RQ2 80
    Quantitative Findings 81
    Qualitative Findings 83
    Pattern Matching Summary of RQ2 90
  RQ3 92
    Qualitative Findings 92
    Pattern Matching Summary of RQ3 96
  RQ4 97
    Quantitative Findings 98
    Qualitative Findings 99
    Pattern Matching Summary of RQ4 102
Summary of Pattern Matching 104
Re-storied Participant Narratives 105
  The Re-storying Process 105
  Role of the Researcher 107
  How the Narratives are Organized 108
Jessica’s Story Re-Storied 108
  Prominent Theoretical Propositions Evident in Jessica’s Story 111
Tom’s Story Re-Storied 112
  Prominent Theoretical Propositions Evident in Tom’s Story 114
Lynn’s Story Re-Storied 115
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td><strong>DISCUSSION</strong></td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Summary of Findings</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Significance of Theoretical Propositions</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>Transformative Learning</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>Dispositions</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>Impact of Learning Experiences</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td>Recommendations</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Implications</td>
<td>153</td>
</tr>
<tr>
<td></td>
<td>Teacher Education</td>
<td>153</td>
</tr>
<tr>
<td></td>
<td>Action Research</td>
<td>154</td>
</tr>
<tr>
<td></td>
<td>Case Study</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Efficacy</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Personal Reflection</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td><strong>REFERENCES</strong></td>
<td>159</td>
</tr>
<tr>
<td></td>
<td><strong>APPENDICES</strong></td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>Appendix A: Invitation to Participate in Study</td>
<td>176</td>
</tr>
<tr>
<td></td>
<td>Appendix B: The Learning Activities Survey</td>
<td>178</td>
</tr>
<tr>
<td></td>
<td>Appendix C: LAS Follow-Up Interviews</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>Appendix D: Informed Consent to Participate in Case Study</td>
<td>186</td>
</tr>
<tr>
<td></td>
<td>Appendix E: Narrative Prompts</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>Appendix F: Sample Rating Sheets for Pattern Matching</td>
<td>190</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1. Original Theoretical Propositions Developed for Case Study Analysis 40
Table 2. Additional Proposition Developed after First Level of Analysis 41
Table 3. Potential Pool of Participants for the LAS 48
Table 4. Sample for Case Study Participant Selection 49
Table 5. Relationship between the Research Questions and Sources of Case Study Evidence 50
Table 6. Correlation of Mezirow’s 10 Phases of Perspective Transformation 51
Table 7. Overall Validity and Reliability Tactics 61
Table 8. Pattern Matching Calculations for Transformative Learning Theoretical Propositions 64
Table 9. Participants Indicating Transformative Learning 71
Table 10. Gender of Participants Indicating Transformative Learning 72
Table 11. Ethnicity of Participants Indicating Transformative Learning 72
Table 12. Years of Age of Participants Indicating Transformative Learning 73
Table 13. Marital Status of Participants Indicating Transformative Learning 74
Table 14. Courses of Participants Indicating Transformative Learning 74
Table 15. Frequency of All Respondents in Quadrants Leading toward Transformative Learning 75
Table 16. Theoretical Proposition 1 Transformative Learning Indicators and Sample Quotations 78
Table 17. Frequencies of Evidence of Theoretical Proposition Transformative Learning

Table 18. Pattern Matching Calculations for Transformative Learning Theoretical Proposition

Table 19. Summary of Pattern Matching for Transformative Learning

Table 20. Disposition Data by Participant According to Initial Assessment of the Professional Commitments & Scholarly Dispositions Self-Assessment

Table 21. Theoretical Proposition Dispositions

Table 22. Theoretical Proposition 2 Dispositions with Sample Quotations

Table 23. Frequency of Indicators for Theoretical Proposition 2 Dispositions

Table 24. Frequency of Desired Dispositions Categorized as Perspective Transformation

Table 25. Frequency of Desired Dispositions Categorized as Transformative Learning

Table 26. Frequencies of Evidence of Theoretical Proposition Dispositions

Table 27. Pattern Matching Calculations for Transformative Learning Dispositions

Table 28. Summary of Pattern Matching for Dispositions

Table 29. Theoretical Proposition 3 Perspective Transformation Indicators with Sample Quotations

Table 30. Frequency of Indicators for Theoretical Proposition 3 Perspective Transformation

Table 31. Frequencies of Evidence of Theoretical Proposition Perspective Transformation

Table 32. Pattern Matching Calculations for Perspective Transformation

Table 33. Summary of Pattern Matching for Perspective Transformation

Table 34. Class Activities Indicated as Contributing to Transformative Learning
Table 35. Learning Activities Indicator with Sample Quotation

Table 36. Learning Experiences Identified by the LAS and Case Study Activities

Table 37. Frequencies of Evidence of Impact of Learning Experiences (LE)

Table 38. Pattern Matching Calculations for Impact of Learning Experiences

Table 39. Summary of Pattern Matching for Impact of Learning Experiences

Table 40. Summary of Pattern Matching Results by Participants

Table 41. Organizing the Plot Elements into the Problem-Solution Narrative Structure

Table 42. Prominent Theoretical Propositions Evident in Jessica’s Story

Table 43. Prominent Theoretical Propositions Evident in Tom’s Story

Table 44. Prominent Theoretical Propositions Evident in Lynn’s Story

Table 45. Prominent Theoretical Propositions Evident in Stephanie’s Story

Table 46. Prominent Theoretical Propositions Evident in Lisa’s Story

Table 47. Prominent Theoretical Propositions Evident in Kelly’s Story

Table A1. Transformative Learning Theory (how transformative learning Theory is evident in the data)

Table A2. Dispositions (how dispositions toward students with disabilities are evident in the data)

Table A3. Perspective Transformation toward Inclusion (how this perspective transformation is evident in the data)

Table A4. Preservice Teacher Identity Formation (how the formation and Transformation of a professional identity is evident in the data)

Table A5. Impact of Learning Experiences (how the impact of learning experiences is evident in the data)
LIST OF FIGURES

Figure 1. Conceptual model of the mediation of learning experiences 5
Figure 2. Visual model of embedded correlational design 48
Figure 3. Case study sources of evidence 58
Figure 4. The multiple sources of evidence used for triangulation in this case study 62
Figure 5. Chain of evidence provided for this case study 66
Figure 6. Conceptual model of the influence of learning experiences 68
Figure 7. Respondent experiences among transformative learning quadrants 76
Figure 8. Process of qualitative content analysis used in this study 77
Figure 9. Theoretical alignment of propositions to dispositions 87
Figure 10. Common learning experiences indicated by case study participants 102
Figure 11. Respondent experiences among transformative learning quadrants 141
Figure 12. Conceptual model of the mediation of learning experiences 149
ABSTRACT

Utilizing a case study approach, this study explored the perspectives of preservice teachers as they relate to working with students with disabilities in inclusive classroom settings. Preservice teachers’ perceptions about the extent, if any, their learning experiences during teacher preparation contributed to their perspectives was examined through a sequential exploratory design that employed both quantitative and qualitative data. The findings of this case study of six (6) elementary and secondary preservice teachers indicated that the experiences they had during their final student teaching (internship) were the most meaningful triggers of their perspective transformations. The findings further indicated that four (4) of the six (6) preservice teachers who identified they had a positive perspective toward including students with disabilities in their classrooms experienced a change in the directionality of that perspective to a less positive perspective following their final student teaching experience (internship). The use of the case study method, with its reliance on theoretical propositions and multiple sources of evidence, offered an effective way to better understand the perceived change in perspectives of these preservice teachers. The use of the Learning Activities Survey (LAS) to first ascertain whether or not preservice teachers perceived they had a perspective transformation offered a strong starting point to begin this investigation. When combined with additional qualitative data in the form of semi-structured interviews and document analysis, the structure of Yin’s case study approach provided strong evidence supporting the nature and extent of preservice teachers’ perspective
transformations toward including students with disabilities. Implications of this study include recommendations for designing meaningful learning experiences for preservice teachers, a call for action research within teacher education, and purposeful provision of support and relationship building that goes beyond the acquisition of knowledge and skills and facilitates transformative learning.
CHAPTER 1:
INTRODUCTION

“Becoming a teacher means (1) transforming an identity, (2) adapting personal understandings and ideals to institutional realities, and (3) deciding how to express one’s self in classroom activity” (Rodgers & Scott, 2008, p. 732).

Teacher candidates are always in a state of becoming (Danielewicz, 2001). At least that’s the hope. Teacher preparation has traditionally been just that – preparation to become a professional teacher. The knowledge, skills, and dispositions outlined for teacher candidates reflect this belief that they are pre-professional; they are, by definition, in a state of becoming. The experiences included during teacher preparation support this posture; the hope is that they affect the desired changes in teacher candidates over time.

In order to receive approval and accreditation of their programs, teacher educators are expected to show evidence that they both assess and develop candidates’ knowledge, skills, and dispositions to teach during their teacher preparation programs. The National Council for Accreditation of Teacher Education (NCATE) requires, as a part of the program approval process, evidence of the assessment and development of teacher candidates’ dispositions deeming them just as important as knowledge and skills (Wayda
& Lund, 2005). The NCATE definition of dispositions reflects the emphasis on dispositions as equally important and their connection to student learning outcomes.

Professional attitudes, values, and beliefs demonstrated through both verbal and non-verbal behaviors as educators interact with students, families, colleagues, and communities. These positive behaviors support student learning and development. NCATE expects institutions to assess professional dispositions based on observable behaviors in educational settings. (NCATE, 2006, para. 13-14)

With an eye toward accountability and continuous improvement, NCATE standards require that professional education programs prepare candidates who can apply their knowledge, skills, and professional dispositions in a manner that facilitates student learning (NCATE, 2006). Institutions that have met the standards for assessing dispositions must now find ways to provide evidence that they are developing desirable dispositions in their teacher candidates. It is time to move beyond the defining and assessing of preservice teacher dispositions, and find ways to continuously evaluate and respond to the needs of the profession instead (Orr, 2009; Bain, Lancaster, Zundans, & Parkes, 2009). In light of evidence that many beginning teachers lack the dispositions toward inclusion, the need to determine whether or not the learning experiences designed for teacher preparation foster these perspectives and dispositions is vital (Silverman, 2007).

**Statement of the Problem**

After reviewing the related literature surrounding teacher dispositions, a number of issues help clarify the problem of how to develop desirable dispositions in teacher
candidates. Although researchers still struggle with how to define dispositions and develop appropriate instruments to assess them (Rheams, & Bain, 2005; Taylor & Sobel, 2001; Campbell, Gilmore, & Cuskelly, 2003), studies that focused on defining dispositions to teach provide little direction for teacher educators invested in developing desirable dispositions (Forlin & Sin, 2010; Loreman et al., 2007). The empirical literature on teacher candidate dispositions focuses almost exclusively on the development and administration of assessment instruments (Beverly, Santos, & Kyger, 2006; Cook, Cameron & Tankersley, 2007; Subban & Sharma, 2006; Avramidis & Norwich, 2002). Since there are a variety of ways in which dispositions are assessed (e.g., surveys, interviews, observations), and few institutions of higher education (IHE’s) provide evidence of how they use these assessments (NCATE, 2006), less is known about how teacher educators actually use the dispositional data they collect.

With the move toward inclusion of students with disabilities in the general education setting, dispositions that promote critical awareness, decision-making, and self-authoring need to be developed in preservice teachers in order to move beyond the traditional acquisition of knowledge and skills (Glisczinski, 2007). Studies that focus on the dispositions of preservice teachers toward students with disabilities indicate that a combination of coursework and field experiences strongly correlates to a positive change in attitude or disposition (Brantley, Barron, Hicks, & McIntyre, 2006-2007; Cook, 2002; McHatton & McCray, 2007; Pugach, 2005). This recommended combination of coursework and field experiences is provided to general education majors at the site of this study. Particular courses are designed with a perspective transformation of general education majors toward inclusion in mind. However, the learning experiences, whether
textual, experiential or relational, have not been unpacked in order to determine what kinds of activities actually contribute to this transformation. At this time a general education preservice teacher’s perspective toward inclusion is therefore a legitimate area for dispositional growth. This study seeks to fill a gap in the empirical literature on developing dispositions in this context.

The problem is whether teacher candidates perceive that the learning experiences designed for them during teacher preparation help develop dispositions? How teacher educators design learning experiences needs to begin with a very clear idea of what they want students to know and be able to do. However, with very little empirical groundwork to guide them and disagreement about how to define dispositions, teacher educators may be at a loss as to how to design and then redesign their programs to reflect continuous improvement in this area of teacher preparation (Hammerness, Darling-Hammond, Bransford, Berliner, Cochran-Smith, McDonald, & Zeichner, 2005). The discourse of dispositions can center on the experiences of teacher candidates as they chronicle their own growth situated in their own particular preparation contexts. A first step may be to understand whether and to what extent certain learning experiences are identified by teacher candidates as having transformative power.

**Rationale for the Study**

Since there is no one assessment of dispositions used during teacher preparation (NCATE, 2006), this study moves beyond assessing to a consideration of how dispositions are developed. This study offers educational researchers an entry point into the development of the teacher dispositions that foster perspective transformations of their preservice teachers.
NCATE standards require that professional education programs prepare candidates who can apply their knowledge, skills, and professional dispositions in a manner that facilitates student learning (NCATE, 2006). In order for teacher educators to foster the professional dispositions, they must first have a structure for that determination. In order to capture to what extent the learning experiences within a teacher preparation program foster dispositions, teacher educators must first isolate and then compare those experiences that contribute to the development of dispositions. The only facet of dispositional development that can be manipulated is the learning experiences designed during teacher preparation; learning experiences become a focal point of this study.

![Figure 1. Conceptual model of the mediation of learning experiences](image)

The strength of the rationale for this study relies on a strong body of research that indicates that learning experiences that support understanding and effective action (i.e., transformative learning) are different from those that primarily support the ability to remember facts or perform a prescribed set of skills (instrumental learning) and that they are more effective (Good & Brophy, 1997; Resnick, 1987; Hammerness, Darling-Hammond, Bransford, Berliner, Cochran-Smith, McDonald, & Zeichner, 2005). This study may enable teacher educators to move beyond the defining and assessing of dispositions and into designing learning experiences that support transformative learning.
Theoretical Framework

Transformative learning theory offers a framework through which we can detect the nature and extent of a desired perspective transformation. Transformative Learning theory is a popular adult learning theory through which faculty in higher education can understand, design, and even foster experiences that seriously challenge students to assess their perspectives by which they are subsequently changed (Mezirow, 1991; Quinnan, 1997). Since teacher educators design learning experiences for teacher candidates in a way that seeks to transform their knowledge, skills and dispositions to that of professional teachers, this theory offers a compelling lens through which this process can be viewed.

Mezirow (2000) outlined 10 phases that may be present through the transformative process:

- Phase 1: A disorienting dilemma (as a result of an experience)
- Phase 2: Self-examination with feelings of fear, anger, guilt or shame
- Phase 3: A critical assessment of assumptions
- Phase 4: Recognition that one’s discontent and the process of transformation are shared
- Phase 5: Exploration of options for new roles, relationships and actions
- Phase 6: Planning a course of action
- Phase 7: Acquiring knowledge and skills for implementing one’s plans
- Phase 8: Provisional trying on of new roles
- Phase 9: Building competences and self-confidence in new roles and relationships
• Phase 10: A reintegration into one’s life on the basis of conditions dictated by one’s new perspective. (Mezirow, 2000, p.22)

For the purposes of this study, both the items on the survey instrument and the semi-structured interview protocol were used to collect data about participant’s perception of having a transformative experience align to Mezirow’s 10 phases. This approach replicates King’s (2009) process in developing the Learning Activities Survey (LAS), which is the survey employed for this study. A complete correlation of perspective transformation phase to items on the LAS is presented in Chapter Three: Method.

Part of the rationale for applying transformative learning theory to the problem of developing dispositions in preservice teachers toward inclusion is that at the heart of the problem is a struggle to develop teachers who are able to make a critical assessment of their own assumptions and incorporate this transformation into their professional practice (Hammerness, Darling-Hammond, Bransford, Berliner, Cochran-Smith, McDonald, & Zeichner, 2005). It is not just a problem of getting teachers to think differently, but to put what they learn into practice (enaction). Transforming meaning perspectives is one way in which learning and the enactment of new actions can occur (Mezirow et al., 2009).

Transformative learning is often seen as a means to an end for those whose purposes are to help individuals begin to think differently. It is used in various settings and for various agendas (Taylor, 2009). For example, helping mid career changers to think like teachers (Cranton, 1996); helping medical students develop empathy and understanding of patients who receive palliative care (MacLeod, Parkin, Pullon, & Robertson, 2000); and to assess in general if preservice teachers experience a perspective transformation during their preparation at an institute of higher education (Glisczinski, 2007).
Transformative learning is a heuristic endeavor and appropriate for the context of this problem.

The Research Questions

The overall purpose of this study was to determine to what extent the learning experiences designed for teacher candidates during their preparation were perceived by preservice teachers as contributing to their perspective transformations and thereby their professional dispositions. In an effort to contextualize the development of dispositions, this study focused to the perspective transformations of general education preservice teachers toward students with disabilities in inclusive settings. Since NCATE expects that each program will develop those dispositions which are central to its mission and conceptual framework, it would be both practical and illustrative to study one special education program’s attempt to develop dispositions in general education preservice teachers. The complexity of this problem requires a more sophisticated inquiry and one that is theory-driven; therefore, case study was used to answer the research questions.

The research questions that guide this study include:

1. With regard to inclusion of students with disabilities, which if any types of perspective transformations, as measured by the Learning Activities Survey (LAS), do elementary and secondary preservice teachers experience during their preparation?

2. To what extent, if any, are the perceived dispositions of preservice teachers affected by their teacher preparation experiences?
3. To what extent, if any, do preservice teachers perceive they’ve had a perspective transformation toward inclusion of students with disabilities during their preparation?

4. What learning experiences, if any, do preservice teachers identify as contributing to a transformative learning during their preparation?

This study provides readers with a clear understanding of preservice teachers’ perceptions of whether and to what extent they have experienced a perspective transformation during their preparation program. During their final internships and after completing required coursework and pre-internship field experiences, students completed a survey and then based on their scores were invited to participate in follow-up interviews and a review of documents as part of a case study.

**Definition of Terms**

*Teacher preparation* – a university-based, traditional 4-year undergraduate teacher education program.

*Professional dispositions* – within the context of teacher education, those sentiments, attitudes, and concerns that underlie the professional teacher behaviors we assess during teacher preparation (Forlin & Sin, 2010).

*Perspectives* - Perspectives include both the beliefs teachers have about their work (goals, purposes, conceptions of children, curriculum) and "the ways in which they [give] meaning to these beliefs by their behavior in the classroom" (Tabachnick & Zeichner, 1984, p. 28).

*Perspective transformations* – the process by which adult learners examine new information, beliefs, and values against their old ones. This process often involves a
thoughtful analysis of an existing perception of one's experience, and the construction of a new, more inclusive, explanation of that perception (Mezirow & Associates, 1990). This is an on-going process that proceeds at different rates and in different ways depending upon the individual, their circumstances and activities (Cranton, 1994; Mezirow, 1991).

Transformative learning - Transformative learning is learning that transforms problematic frames of reference—sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets)—to make them more inclusive, discriminating, open, reflective, and emotionally able to change (Mezirow, 1991, 2000).

Learning experiences – for the purposes of this study, I am referring to those experiences during teacher preparation embedded in coursework and fieldwork that are designed or enacted by teachers.

Inclusive education - I have adopted the following definition for the context of this study based on the work of Ryndak, Jackson, Lewis & Billingsley (2000): Three components are a part of this definition: (1) placement of students in natural typical settings, (2) all students together for instruction and learning, and (3) supports and modifications within general education to meet appropriate learner outcomes.

Instrumental learning – Habermas (1984) described instrumental learning as that which is necessary to equip students with information and skills; mastering tasks; solving problems; and “learning how to manipulate environments and people toward specific ends” (Glisczniski, 2007).

NCATE – NCATE is the education profession’s mechanism to help establish high quality teacher preparation. Through the process of professional accreditation of schools,
colleges and departments of education, NCATE works to make a difference in the quality of teaching and teacher preparation today, tomorrow, and for the next century. NCATE’s performance-based system of accreditation fosters competent classroom teachers and other educators who work to improve the education of all P-12 students. NCATE believes every student deserves a caring, competent, and highly qualified teacher (http://ncate.org/public/aboutNCATE.asp).

**Significance of the Study**

Teacher educators desire to facilitate “the most powerful learning - the learning that most instructors really want to see students achieve as a result of their experiences with classes/curricula” (Moore, 1994, p. 60). This study may provide teacher educators with suggestions about whether the learning experiences they’ve designed effect “significant qualitative changes in the learner” (p. 60) (i.e., dispositional development). Since there is currently little empirical support for the development of dispositions, this study will fill a gap in the literature and move the field forward beyond defining and assessing of dispositions.

This study will also inform teacher educators who prepare teacher candidates to work in inclusive education with insight into what types of learning experiences tend to foster a change in perspective toward teaching students with disabilities as perceived by preservice teachers. Use of the Learning Activities Survey (King, 1997) provides insight into students’ perceptions as they critically assess their own perspectives as learners. Use of dispositional data to corroborate whether students experienced a perspective transformation may offer additional evidence of change. Together these assessments can
determine what types of experiences or interventions might help preservice teachers develop the perspectives they need to succeed in inclusive environments.

This study has the potential to influence how teacher educators design learning experiences for their teacher candidates. In doing so, they have the opportunity to meet the goal of graduating teachers who have successfully developed their own voice and can take a critical perspective of their own teaching. With these goals in mind teacher educators can better prepare preservice teachers to negotiate the school system in a way that is productive for them and their students.

Finally, insight into the relationships between dispositions, learning experiences, and perspective transformations contribute to the literature on transformative learning. Although teacher educators know little about dispositional development among preservice teachers, this research builds upon the dispositions and inclusion literature and perspective transformation theory and research. Within the context of educational research, this study offer teacher educators a way to evaluate their teacher preparation practices that is transformational and not solely instrumental. This in part represents a shift in how we conceptualize, deliver, monitor, evaluate, and oversee teacher preparation (NCATE, 2010).

**Limitations**

This study used a case study approach that is guided by theory (Yin, 2009). This case study sampling strategy has certain limitations to address. First, *misrepresentation* of the theory guiding the study or the experiences of the units embedded in the case study must be minimized. This concern may limit the generalizability of the study’s findings to the theory at hand (i.e., transformative learning). In order to compensate for this
limitation, every effort will be made to select participants who will provide a critical case in testing a well-formulated theory. A critical case can be used to “determine whether a theory’s propositions are correct or whether some alternative set of explanations might be more relevant” (Yin, 2009, p. 47). The single case embedded design of this study using critical cases can confirm, challenge, or extend the theory. This consideration of rival explanations by using a critical case addresses the concern of this limitation.

Second, access needed to collect the case study evidence was maximized. Since convergence of evidence is necessary in a mixed methods study, any perceived limitations to access of participants and their data (i.e., interviews, documents, artifacts) must be reduced or eliminated. This limitation has been addressed by securing the cooperation and assistance of the department chairs and supervisors of the internship experiences from both the elementary and secondary education departments.
CHAPTER TWO:

REVIEW OF RELATED LITERATURE

The overall purpose is to determine how the learning experiences designed for teacher candidates during their preparation foster desired professional dispositions toward inclusive education. In order to better understand the nature and extent to which experiences may foster this change, it’s important to situate this phenomenon in the larger discourses of dispositions, teacher identity, inclusion, transformative learning theory, and the selected methodology.

Preservice teachers’ transformative experiences are influenced by a variety of factors. The following review of related literature in the field presents findings most influential in preservice teachers’ transformative learning during courses designed to effect such a transformation and informs this study. It is organized according to dispositions, teacher identity, preservice teachers’ attitudes toward students with disabilities and inclusive settings, transformative learning theory, and case study.

Dispositions

The term *dispositions* emerged specifically in teacher education research when Lillian Katz & James Raths argued that there was more to an effective teacher than knowledge and skills. They described what went beyond pedagogy as a class of outcomes called professional dispositions in a paper presented at the annual meeting of the American Educational Research Association in Chicago (1985).
A number of studies examine the dispositions of teachers and teacher candidates towards students and/or parents who are culturally and/or linguistically diverse (Mtshali-Dlamini, 2007). Others focused their research agendas on models of instruction and teachers’ attitudes and efficacy (Taylor & Sobel, 2001). The goal for many of these studies was to identify teacher beliefs and dispositions that may work against ensuring the success of students from diverse backgrounds as well as investigate ways in which teacher educators can nurture desirable dispositions in student teachers who may otherwise only behave favorably towards students with backgrounds similar to their own (Major, 2003).

Teachers’ ability to promote positive student outcomes for children with special needs in inclusive settings is impacted by their dispositions. A number of studies have already established the link of educators’ acceptance of children with disabilities to their attitudes towards inclusion and their ability to promote success in inclusive settings (Brownlee & Carrington, 2000; Forlin, Douglas, & Hattie, 1996; Scruggs & Mastropieri, 1996; Ward, Center, & Bochner, 1994). However, the variety of inclusion models that permeate our educational systems makes it difficult to make program to program comparisons.

Early studies conducted in anticipation of the move from mainstreaming to inclusion in response to the educational reform movement in 2000 uncovered great resistance of general educators. The reasons cited for the resistance were that educators believed they did not possess the instructional skills and educational backgrounds to teach students with disabilities (Monahan, Marino, & Miller, 1996). Spotty or inadequate professional development does not offer teachers an opportunity to develop desirable
dispositions towards either students with disabilities or the inclusion model, so it cannot be the primary intervention. Developing positive dispositions in pre-service teachers during their teacher preparation may be viewed as ‘ground zero’ as far as inclusion and the students served within that model are concerned.

Studies that focused on the development of positive dispositions or attitudes towards either inclusionary practices or students with disabilities include one that reports the effects of training and teacher attitudes (Sharma, Forlin, & Loreman, 2008); how learning cultural otherness can help teachers develop empathetic dispositions towards diverse students (Suarez, 2003); how combining formal instruction with structured fieldwork experiences might create more positive attitudes towards disability and inclusion (Campbell, Gilmore, & Cuskelly, 2003); whether exposure to co-teaching at the pre-service level provides for the positive development of both general and special educators in inclusive settings (McHatton & Daniel, 2008).

Studies that focused on describing teachers’ attitudes or dispositions in an effort to understand the accompanying outcomes in inclusive settings include ways teachers’ beliefs impact their classroom behavior toward students whose backgrounds are different than their own (Taylor & Sobel, 2001); a description of pre-service teacher attitudes towards students with intellectual disabilities (Rice, 2009); an investigation into pre- and post-training comparisons impact that might be made on pre-service teachers’ perceptions about inclusion (Forlin, Loreman, Sharma, & Earle, 2009); an empirical study aimed at understanding teachers’ attitudes toward and their concerns about inclusive education settings (Subban & Sharma, 2005); a study that attempted to discover whether there is a
relationship between pre-service and in-service teachers’ experiences with students with disabilities and their attitudes towards inclusion (Burke & Sutherland, 2004).

Finally studies that turned the spotlight on how attitudes and dispositions might be measured in teachers towards students with disabilities and inclusion include the development of and rationale for a new tool to measure teacher sentiments and attitudes towards inclusion (Loreman, Earle, Sharma, & Forlin, 2007); the use of previously developed instruments such as the Regular Education Initiative Teacher Survey (REITS) as a means to measure attitudes of teachers towards their efficacy in inclusive settings or the Attitudes Towards Disabled Persons (ATDP) scale (Cook, Semmel, & Gerber, 1999; Alghazo, Dodeen, & Algaryouti, 2003); the use of researcher-created surveys to measure teacher attitudes towards inclusion (VanReusen, Shoho, & Barker, 2001; Alghazo, Dodeen, & Algaryouti, 2003; Hammond & Ingalls, 2003). Approximately 60 percent of the afore-mentioned instruments used to assess teacher attitudes or dispositions were researcher-created and all were self-report surveys.

Although there are still many researchers focused on defining and identifying dispositions as constructed by beliefs, attitudes, perceptions and expectations, others have moved beyond conceptualization into the development of dispositions in pre-service teachers. However, without first providing a strong conceptual framework about dispositions, these studies may not offer teacher educators a valid source of information with regard to specific ways to infuse professional dispositions into their own programming.

During an inspection of the studies included in this review of related literature, additional concerns about the confusion of terms used to describe dispositions were
raised. For example, in a study conducted by Beverly, Santos, & Kyger (2006), made the common connection of dispositions to behavior. They boldly stated that “professional dispositions for educators should, therefore, focus on behaviors related to the broad goals of effective classroom teaching and professional interactions” (p. 26). The resulting systematic investigation was that of demonstrated teacher behaviors or skills in order measure using a behavior checklist.

Some of the studies reviewed sought to develop teacher dispositions by providing an intervention or interruption during their pre-service program. An international study conducted by Lifshitz, Glaubman & Issawi (2004) operated on a premise previously established that “emotional and behavioural changes towards persons with a disability could be achieved only when information about disabilities (the cognitive component of attitudes) was provided, together with relating to practical experience (the behavioural component)” (p. 184). Their chosen intervention was two courses of 28 hours each meant to address three attitude components of teachers. Their results found that the course intervention focused on attitudes improved teachers’ willingness to include students with mild or high incidence disabilities, although it did not impact their willingness for students with moderate/severe or low incidence disabilities.

In an effort to provide experiences to pre-service teachers’ during their preparation that may impact their dispositions towards students with disabilities in inclusive settings, McHatton & Daniel (2008) provided shared coursework and field experiences to both general education and special education students to model collaboration. The goal was to prompt a paradigm shift that hopefully produces “teachers who are capable, competent, and confident in their ability to provide instruction in a
This study again builds on the idea that improved dispositions impacts improved teaching. In a similar approach Campbell, Gilmore & Cuskelly (2003) paired formalized instruction and fieldwork in order to “favorably” modify teachers’ attitudes towards disability in inclusive settings. However, they only focused on improving the attitudes of teachers towards students with Down syndrome and acknowledged the limitation of not addressing attitudes towards students from the full range of learning and behavioral disabilities.

Of the studies identified for this particular review of the literature, only a handful considered either an epistemological or theoretical frame within which teacher dispositions could be viewed with regard to students with disabilities in inclusive settings. McHatton & Daniel (2008) suggested that a paradigm shift must occur for some teachers to collaborate in ways that meet the needs of students in inclusive settings. Some researchers did apply a particular theory to guide their inquiry and posit explanation. Cook, Cameron & Tankersley (2007) guided their inquiry using a theoretical model of instructional tolerance that imagines that “given finite instructional resources and significant variance in student learning characteristics, it is not possible for teachers to concurrently provide optimal instruction to all students” (p. 231). Although these researchers developed an instrument to measure tolerance based on this theory, they did not reference the theory in their implications, recommendations, limitations or conclusions.

Another study by Subban & Sharma (2005) built its entire conceptual framework around Ajzen’s theory of planned behavior which they explain is an extension of the theory of reasoned action. Their application of this theory is meant to suggest that since
attitudes may be shaped by past experiences and knowledge, it is “important to ascertain the factors shaping the attitudes of mainstream teachers as they attempt to include students with disabilities” (p. 2). This is a common assumption made by a number of the studies included in this review; however, very few of them referenced an underlying theory of that assumption. In order to adequately acknowledge or shatter assumptions, it is important to discuss upon what foundation those assumptions are built. The researcher’s assumptions are as much a part of the inquiry as the teachers’ whose dispositions we seek to understand and sometimes change.

For example, one study used the language of a theory without referencing the theory itself in its application towards students with disabilities in inclusive settings. Taylor & Sobel (2001) in their effort to inspect the “discontinuity” between students’ and teachers’ diversity, both cultural dissonance and biased expectations were cited as factors. However, there was no attempt to situate either in a theoretical frame.

In summary, the studies referenced for this review appear to continue where Avramidis & Norwich (2002) left off in their synthesis of the literature on teachers’ attitudes towards inclusion. With the shift from mainstreaming to inclusion now complete as far as researchers were concerned, this review of the literature review found more studies focused on a combination of determining and developing pre-service and in-service teachers’ attitudes or dispositions towards students in inclusive settings and not just the settings themselves as was the case in the 2002 review. The rationale for and success of the inclusion model is not the issue at the forefront; researchers are currently more concerned about the ability of teachers to positively impact the learning of the students within inclusive settings and what underlies that ability.
Teacher Identity

As we consider the need for a perspective transformation in preservice teachers, it is important to first understand the current state of research in the area of teacher identity. Beliefs, attitudes, perceptions and perspectives have all at one time resided within the conceptual frame of identity. Operationalizing identity, however, has not been an easy task. The current discourse positions teachers’ professional identity as something beyond beliefs and attitudes. They are not the same within educational research; they are, however, both facets of the transformative process. Instead of offering identity as a competitive notion within this current study, I propose it as a companion. The related literature I offer to support this notion provides coherence from conceptual, empirical, and previous reviews of identity literature. I will begin with a concept that embodies both the transformative nature and conceptual relevance of becoming a teacher.

Becoming a teacher is a transformative process that goes well beyond the transmission of knowledge and skills. The potential for growth or change in response to challenging aspects and daily dilemmas faced by teachers is based on the differing ways individuals form their professional identities. Walkington (2005) argued for teacher educators to mediate and mentor this process of professional identity formation, so that preservice teachers might be a participant in the inevitable ongoing changes they face with confidence and flexibility. The ability to reflect on beliefs and understandings in light of new experiences is crucial to the change process. The highly contextualized and personal journey of the preservice teacher can only be captured authentically through the eyes of the preservice teacher. Walkington (2005) stated that it is important for teacher
educators to “acknowledge these beliefs as part of the learning process” (p. 56) and not relegate them to the anecdotal.

With a finite number of credit hours within which we prepare students to become teachers, most of our emphasis has been on instilling the required knowledge and skills with almost disregard of the competing contextual factors that challenge preservice teachers’ sense of professional identity. Preservice teachers often struggle to make sense of the diversity of perspectives, expectations and roles that confront them (Samuel & Stephens, 2000). As a result a battle of identities ensues posing distinct dilemmas for the preservice teacher. Beijaard, Meijer, and Verloop (2004) outlined three dilemmas that confront the preservice teacher during the formation of their professional identity: (1) feeling like a student while being expected to act like a teacher, (2) wanting to care for students while being expected to be tough, and (3) feeling incompetent in her knowledge of chemistry while being expected to behave like an expert. In order to understand how preservice teachers navigate these choppy waters, we need to hear from them in their own words how they construct and live out their professional identities.

How do preservice teachers perceive their professional identities? One way researchers have investigated the personal perspective of preservice teachers is to use interviewing (Conderman & Johnston-Rodriguez, 2009; Cramer & Nevin, 2006; Hoppey, Yendol-Silva, & Pullen, 2004). The personal perspective is one that rises to the top of authenticity list. It is also the only perspective over which preservice teachers have any control. In a study of professional identity formation through a personal perspective, Beijaard, Verloop, and Vermunt (2000) gained insight into what factors influence teachers’ perceptions of their own professional identities. Their focus was on the
development, adjustment and change of identity that preservice teachers are able to effect in response to experiences they encounter during their preparation as “subject matter experts, pedagogical experts, and didactical experts” (p. 751). An awareness of the normative behaviors and expectations of teachers and teaching can act as challenges to the personal identity that is fighting for a place within the professional identity. This is where the personal perspective makes sense of experiences and either rejects or integrates these experiences into the structure of the professional identity. How we operationalize the definition of professional identity is crucial to our understanding of whether or not the experiences we design for preservice teachers foster or hinder this formation and then transformation.

Professional identity, more specifically identity, has been explored in psychology, sociology, cultural studies, anthropology, and history. As an emerging discourse within educational research, a discussion about the professional identity of teachers cannot adequately capture the phenomenon until we first explore identity formation within preservice teachers. Sfard and Prusak (2005) proposed an operational definition that claims to provide an “analytic tool for investigating learning” (p. 14) and which applies to the research questions of this current study. With a focus on the “first-person self-told identities” as having the most impact on our actions, Sfard and Prusak (2005, p. 21) proposed that identity-building is story-telling. The story-tellers are the preservice teachers in the present study. The way they identify their current selves and their possible selves (Hamman, Wang, & Gosselin, 2010) within the bounded contexts of teacher preparation experiences and personal experiences is the shape of their story. This structure offers researchers readily accessible texts to analyze for transformative learning.
Since a change in perspective toward students with disabilities in inclusive settings is the focus of this study, our discussion of the literature surrounding attitudes toward inclusion is offered next.

**Preservice Teachers’ Attitudes toward Inclusion**

In response to the inclusion principle under both No Child Left Behind (NCLB) and the Individuals with Disabilities Education Act (IDEA), students with a variety of exceptional needs are being educated alongside their non disabled peers in general education classrooms. It is no surprise that teachers express concern about their efficacy to work with children in this context. As we prepare teachers to work in inclusive settings, teacher educators need to examine the relationship between preparation and the inclusion of students with disabilities in general education classrooms.

Attitudes toward students with disabilities have been a frequent topic of study in educational research (Pugach, 2005). The most commonly used data collection tool has been the survey or questionnaire (Orcher, 2005). A variety of instruments have been developed over time to assess teachers’ attitudes toward students with disabilities (Forlin, Jobling, & Carroll, 2001; Sharma & Desai, 2002; Wilczenski, 1992, 1995). Participants have included preservice teachers, in-service teachers and non special education majors.

A number of studies have suggested a positive correlation between teachers’ attitudes toward inclusion with the number of courses taken during their preparation (Ellins & Porter, 2005; Dev, 2002). A positive trend in attitudes has also been linked to increased knowledge about exceptionality (Loreman, Sharma, Forlin, & Earle, 2005). These studies were all conducted outside of the United States (i.e., Australia, Canada, United Kingdom), which add greatly to the knowledge base about attitudes and inclusion.
Although these studies focus their investigations on the amount of coursework as independent variables, they are not the only variables of interest.

Preservice teacher preparation is the best time to identify and modify possible negative attitudes toward students with disabilities and their concerns about teaching in inclusive settings (Loreman et al., 2005). As far back as Hasting and Oakford (2003), which was prior to NCLB and IDEA (2004), the development of positive attitudes toward students with disabilities through teacher education courses has been a concern. How we attempt to identify and influence preservice teachers’ attitudes varies from study to study. There is representation of both quantitative and qualitative research traditions investigating this problem.

Eighteen studies were reviewed for this review of related literature on preservice teachers’ attitudes toward inclusion. Of those 18 studies, 15 used survey research as the primary methodology. The majority of surveys used were researcher-developed (Baker-Ericzen, Mueggenborg & Shea, 2009; Burton & Pace, 2009; Lambe, 2007; Teicher, 1997). Others used previously established surveys (Tait & Purdie, 2000; Shade & Stewart, 2001; Rice, 2009; Lifshitz, Glaubman, & Issawi, 2004; Campbell, Gilmore, & Cuskelley, 2003; Andrews & Clementson, 1997) or used the present study to establish validity and reliability of a new instrument (Sharma, Forlin, & Loreman, 2008; Smith, Frey, & Tollefson, 2003; Sparks, 1988). The almost exclusive use of survey research to investigate preservice teachers’ attitudes provides a foundation for this present study. However, they are not the only way researchers access previous teachers’ attitudes.

Qualitative methods have also been used to probe preservice teachers’ attitudes toward students with disabilities in collaborative or inclusive settings. McHatton and
Daniel (2008) analyzed weekly reflective journal entries of preservice teachers in addition to survey data for their investigation into the attitudes and concerns toward collaborative or inclusive teaching. The small sample size in this study ($N=29$) provided insight into one particular context within teacher preparation (i.e., a collaboratively taught course), but it also emphasized the need for general educators to gain a deeper understanding of disabilities. Reflective writing and open-ended responses within a survey are both ways to measure attitude. However, interviews (Smith, Frey, Tollefson, 2003; Sparks, 1988; Brownless & Carrington, 2000) have also been employed.

Semi-structured interviews were used in order to provide detailed data from a small group of participants. Subban and Sharma (2005) interviewed 10 teachers to determine their attitudes toward inclusion. As a descriptive device, these interviews indicated (using keyword analysis) that the teachers may hold positive attitudes toward including students with disabilities in their general education classrooms. However, an expressed difference between attitude and sense of efficacy was also indicated. Preservice teachers may hold a positive attitude toward inclusion, yet harbor a poor sense of efficacy to be able to work with students in this setting. In a review of four decades of attitudinal research, Scruggs and Mastropieri (1996) reported that 65% of general education teachers indicated support for inclusion; however, 38% of that 65% reported that their positive attitude was conditional (i.e., dependent upon having adequate material support, expertise and training $=$ efficacy).

A more recent review conducted by Avramidis and Norwich (2002) indicated that the majority of studies conducted on preservice teachers’ attitudes toward inclusion have been quantitative using surveys to collect data. Avramidis and Norwich (2002) called for
a deeper understanding of the complexities of inclusion and the transformation teachers’ need to experience if they are to meet the needs of students. As researchers consider whether their studies have practical significance, they must be evaluated by rigorous standards and relevant lines of inquiry. The field is in need of more studies that provide more practical significance in this area.

With the move toward evidence-based practices, I considered these studies in light of the quality indicators provided by Gersten, Fuchs, Compton, Coyne, Greenwood, and Innocenti (2005) and Cook, Tankersley, and Landrum (2009). Results of these studies are tempered by whether they showed evidence of these quality indicators. In order to be considered evidence-based in special education, quality indicators must be present in sufficient quantity as well as provide a minimum of five studies that involve a sample size of at least 20 participants from at least three different researchers conducted across at least three different geographical locations. Only one of the studies included here ranked high enough for quality indicators (Sharma, Forlin, & Loreman, 2008). This study had 603 participants from three different locations. Although the results of the studies reviewed offered some insight into how teacher educators attempt to change preservice teachers’ attitudes toward students with disabilities, the preponderance of evidence does not yet exist to evaluate effects from different iterations of design and delivery of interventions.

In an effort to situate this present study in a way that builds on previous research, the variable of preservice teachers’ attitudes toward inclusion will be built into the design as a contributing factor to transformative learning and not an end in itself. Within transformative learning, detected attitudes and attitude changes are a part of the habits of
mind that transform. Whitmyer (1997) expressed my rationale for assessing attitudes as a part of this study this way:

Transformative learning involves uncovering our habitual meaning schemes (specific attitudes and beliefs) and meaning perspectives (sets of meaning schemes) and the assumptions which underlie them and then questioning the validity of those assumptions. (p. 3)

**Attitudes and Contact with Individuals with Disabilities**

Attitudes toward inclusion in the literature are also associated with contact with individuals with disabilities (i.e., experience) and major (i.e., elementary, secondary, other). A number of studies that examined these relationships reported a positive correlation between contact with individuals with disabilities and attitude (Campbell, Gilmore, & Cuskelly, 2003; Forlin, Loreman, Sharma, & Earle, 2009; Teicher, 1997). These studies provided structured field experiences for students during the course designed to promote a change in attitude. However, the relationship between contact with individuals with disabilities and attitude is not confirmed by other studies (Burton & Pace, 2009; Smith, Frey, & Tollefson, 2003; Yellin, Yellin, Claypool, Mokhtari, Carr, Latiker, Risley, & Szabo, 2003). These studies also provided structured field experiences but found no significant increases in attitude scores of their participants.

A number of studies also surveyed their participants about prior contact with individuals with disabilities (Forlin, Loreman, Sharma, & Earle, 2009; Lambe, 2007; Brownlee & Carrington, 2000; Levins, Bornholt, & Lennon, 2005) as a part of a demographics questionnaire. However, only a few studies used this
information beyond the description of their sample as a variable of interest (Forlin et al., 2009; Levins et al., 2005). Brownlee and Carrington (2000), in their qualitative study about changing preservice teachers’ attitudes toward disability purposefully chose primary and early elementary majors who had little to no prior experience with individuals with disabilities. It appears that levels of prior experience or contact with individuals with disabilities exist in the population. To that end I plan to purposefully include participants in my study that are representative of having no, some or high prior contact with individuals with disabilities.

**Attitudes and Non Special Education Majors**

One final variable of interest in attitude change has been the type of teacher preparation program participants are engaged in (Cook, Cameron, & Tankersley, 2007; McHatton & Daniel, 2008; Taylor & Sobel, 2001). Using initially gathered demographic information as variables of interest, some studies used these variables to explain any variance found in attitude scores among participants. Although Cook, Cameron and Tankersley (2007) collected information about the preparation their non special education majors had with regard to inclusion, they did not include that data in their analysis. Grade level taught and college courses taken in inclusion or special education were a part of data collection but not data analysis. In the study I propose here I plan to include these variables in both data collection and analysis.

Taylor and Sobel (2001) collected data on a number of demographic factors associated with their sample in order to tease out suspected differences,
however, they did not have enough representation in their sample where comparison of these differences would be meaningful. They reported that their sample was homogeneous, when in fact it represented seven different majors. In an effort to look at these differences more closely in my study, I plan to use purposeful sampling that includes these differences.

Finally, McHatton and Daniel (2008) purposely compared the attitudes toward co-teaching and inclusion of special education and non special education majors. The non special education majors in their sample were English education majors. Using a combination of a survey instrument that also provided qualitative data in forms of open-ended responses; this study suggested that English education majors experienced a significant change in their attitudes as compared to special education majors. The reason for this difference was not explored within the context of this study, nor did it situate the phenomenon within a theoretical frame. The study I propose here intends to investigate these differences through the lens of transformative learning theory.

In an effort to provide a representative sample of non special education majors, I plan to include representation from elementary, secondary, and other (e.g., technology, speech pathology, etc.) majors to design a typical sample. My study was designed to explore additional methods by which preservice teachers’ attitudes toward disability and inclusive settings could be favorably modified through a course which combines knowledge and transformative learning experiences. Since a change in attitude is directly related in theory to the transformative experience, this construct helps establish credibility for this study.
Transformative Learning Theory

Preservice teachers’ perspectives about their professional identities are the form that may transform through the interaction of experiences and present epistemologies. How they make meaning of these experiences may influence their transformative capacity at any given time. Learning, a result of the interaction between experience and self, has transformative power. The theoretic history of transformative learning is attributed to the writings of adult learning researchers which include Mezirow (1991, 2009), Cranton (1994, 1996), King (1997, 2009) and Taylor (1998, 2000).

Transformative learning describes experiences that adult experiences that adult learners may have as they examine (1) previously unquestioned assumptions, (2) try out new strategies, (3) views and approaches, and (4) begin to ultimately transition to a significantly new place in their understanding of values, beliefs, assumptions, themselves and their world. (King, 2009, p. 4)

Higher education must be a place where preservice teachers are prepared to “think and act dynamically” (Glisczinski, 2007); they need to know how to act out their learning in their own lives. Without this ability, preservice teachers become mere teaching technicians following the prescription of a linear path that does not exist in the non linear postmodern world. For this reason I’ve chosen transformative learning theory to frame this study.

Transformative learning seeks to break the habits of mind we take for granted; a shattering of assumptions is a necessary first step to constructing an expanded awareness. Research in this area has moved from the theoretical domain
into an empirical discussion. Taylor (2000, 2007) has painstakingly combed the literature to understand transformative learning from an empirical perspective. In his first review of the literature he identified six themes that captured the purposes of empirical study: adult learning theory, transforming a frame of reference, triggering a perspective transformation, the journey of a transformation, the role of critical reflection and affective learning, and the practice of fostering transformative learning. One of the directions Taylor (2000) proposed new research might point itself in was the role of context in shaping the transformative experience.

Since transformative learning experiences are a part of teaching for change, the ways in which transformative learning is explored was of interest to me for this study. Taylor (2007) reported that the majority of studies were qualitative in design, although there is a trend toward the use of surveys and scales not evident in the last review. One problem Taylor (2007) reported that remained unchanged from the first to the next review of the literature was that researchers failed to critique previous empirical studies after reporting their findings which led to redundancy of research. In an effort not to repeat this mistake I highlight my critique of selected previous empirical studies.

The power of transformative learning lies not within the experience itself, but the proceeding action it can incite. Studies that explore that connection of a change in perspective and a change in action are of interest to the context of this present study. King (2000) explored the perspective transformations of adult English Secondary Language (ESL) learners through an action research study. Some participants expressed transformation or change beyond perspective change. Open-ended responses indicated a
change in behavior as well. “I am not afraid to go outside as I used to be” (p. 29) reported one participant. The use of action research is of particular interest since it is situated within a classroom experience. The link from a change in perspective to a lasting change in behavior would be better represented in a longitudinal study; King’s study sought to validate an instrument adapted for use with ESL participants.

Ciporen (2010) accessed data from participants before, during and up to one year after the program under scrutiny for transformative learning. In his study he examined if personally transformative learning experienced during a month-long executive education program transferred learning gained to their organizations and personal lives up to a year after the program. The strategy of both looking back and looking ahead offers a more holistic perspective of transformative learning (Taylor, 2009). This study also combined multiple data points: structured exit interviews (secondary data), demographic survey, two previously established surveys, and feedback reports from the participants. One frequent criticism of the empirical literature surrounding transformative learning is that it has been almost exclusively qualitative with only one data source (e.g., interviews). The Ciporen (2010) study adds a higher level of credibility to the study of transformative learning.

For preservice teachers poised to take responsibility for their own classroom full of students, a change in perspective must be accompanied by a change in action. A phenomenological study conducted with nursing students (McLeod, Parkin, Pullon, & Robertson, 2003) examined their perspective transformation after they spent time with dying patients and their families. The rationale for their study is strikingly similar to the concerns of teacher educators for their preservice teachers.
The way that medical students learn to care is influenced by their socialisation as they pass through undergraduate and postgraduate training. For doctors, this is apparent when identifying how they learn to care, in that they have difficulty adjusting to their own emotional responses as well as to a more detached stance than they experienced as lay people. This process is not only influenced by the culture of the medical profession but also by each school’s culture, methods of teaching and the peer groups to which each student belongs. (p. 51)

The combination of direct learning experiences and deep reflection provided for an emotional trigger that led to empathy. Such emotional triggers need to be further explored in educational research. An ethic of care (Noddings, 2005) presides over teaching not unlike how it presides over nursing. Meaningful experiences, that are personally engaging, need to be examined for their transformative power in teacher education.

Finally, a variety of media have been identified in a number of studies to foster transformation (Taylor, 2007). Two types of interest here are studies that use written texts and reflective journaling as vehicles for change. The use of writing when promoting transformative learning is significant. Used as an analytic tool, writing offers a concrete entry point to the abstract in the form of attitudes, beliefs and assumptions. This critical discourse is an integral part of communicative learning (Mezirow, 2003) which “involves critical reflection of assumptions that may occur either in group interaction or independently” (p. 61).
Carrington and Selva (2010) support the use of reflective practice with preservice teachers to help them “examine their own experiences, forming thoughts and ideas about them in relation to the material that they are studying” (p. 45), but insisted that reflective writing should be structured and practiced in order for it to effective in the transformative process. Other researchers have used reflective writing and journaling (King, 2000, 2004), but they did not provide structure nor practice in this type of discourse. When used as a snapshot of a phenomenon at one point in time, aspects of transformative learning can be better articulated with more authenticity if the reflective practices are grounded both in the theory and a structured approach.

At this point in the conversation researchers entrenched in transformative learning are moving toward making meaning of the triggers identified during or after a transformative experience and how they affect practice (Taylor, 2007). This study was designed to build on the conceptual while advancing the practical applications of transformative learning for teacher educators charged with designing meaningful and perspective changing experiences for preservice teachers. Having now established the related literature about the constructs under investigation, I turn your attention to the literature on the methodology employed in this study.

**Summary**

Although a number of the studies presented have explored preservice teachers’ changes in attitudes, perceptions, and sense of efficacy toward students with disabilities in inclusive settings, few consider the process of the change itself. Transformative
learning theory takes a straightforward look at the process of change to see if we, as teacher educators can have a hand in fostering the necessary perspective changes. Teacher education, as a discipline within higher education, is an appropriate context to examine transformative learning, although it has received the least attention in the empirical literature. King (1997), Taylor (2009) and Glisczinski (2007) have all explored transformative learning within the context of teacher education, however, each have expressed the need for researchers employing transformative learning theory to consider the contribution of the teacher educators themselves in the perspective change of preservice teachers. The study was developed to take a closer look at how the experience teacher educators design contribute perspective transformations of preservice teachers toward students with disabilities in inclusive settings.
CHAPTER THREE:

METHOD

The overall purpose of this study was to determine to what extent, if any, the learning experiences designed for teacher candidates during their preparation impacted their professional dispositions. In an effort to contextualize the development of desired dispositions, the focus of this study was narrowed to the perspective transformations of preservice teachers toward inclusive education. The research questions that guided this study were:

1. With regard to inclusion of students with disabilities, which if any types of perspective transformations, as measured by the Learning Activities Survey (LAS), do elementary and secondary preservice teachers experience during their preparation?

2. To what extent, if any, are the perceived dispositions of preservice teachers affected by their teacher preparation experiences?

3. To what extent, if any, do preservice teachers perceive they’ve had a perspective transformation toward inclusion of students with disabilities during their preparation?

4. What learning experiences, if any, do preservice teachers identify as contributing to a transformative learning during their preparation?
This chapter focuses on the methods chosen to investigate the research questions. More specifically, this chapter presents the theoretical propositions underlying the study, the rationale for the chosen design, participant selection, and the data collection and analysis procedures that accompany this single case study design.

**Theoretical Propositions**

Since case study as a research strategy generalizes to theory as opposed to subjects in a population (Yin, 2009), theoretical propositions were developed on the basis of existing literature and knowledge of experts in the field. Each proposition refers to assumptions of the theories and concepts guiding the study. These propositions guided the data collection effort.

It should be noted that these propositions are intended to be idealized versions of evidence of the theory at work; however, complete congruence between the actual (empirical) and theorized is not expected. The propositions are meant to represent significant elements of the guiding theories and concepts (Hocutt & Alberg, 1995). They were developed prior to data collection surrounding the following theories and concepts:

- Transformative Learning Theory (how Mezirow’s 10 stages are evident in the data)
- Dispositions (how dispositions toward students with disabilities are evident in the data)
- Perspective Transformation (how a perspective transformation is evident in the data)
- Preservice Teacher Identity Formation (how the formation and transformation of a professional identity is evident in the data)
In order to use theoretical propositions effectively to guide this study, it is important to refine them throughout the analysis stage. As such, a final theoretical proposition was developed to represent the impact of learning experiences on perspective transformation. Four (4) indicators that conceptually connect to the impact of learning experiences from the original four (4) theoretical propositions were combined to create the following proposition.

- Impact of Learning Experiences (how the impact of learning experiences is evident in the data).

Overall, the theoretical propositions underlying this study are ones of transformation or change. This theoretical orientation guides the analysis and helps to organize the entire case study. The goal of analysis is generalization to theory (and not to population); therefore, the rationale for using the single case study design allowing for both the collection and analysis of a variety of sources of evidence guided by theory is valid. The theoretical propositions developed to guide subsequent data analysis appear in Table 1. After the first level of analysis was completed, the propositions were refined and an additional proposition was added in Table 2.
Table 1

*Original Theoretical Propositions Developed for Case Study Analysis*

<table>
<thead>
<tr>
<th>Proposition: Transformative Learning Theory (how Transformative Learning is evident in the data)</th>
<th>Assumption: If a preservice teacher experiences transformative learning, it often begins with a disorienting dilemma to which that preservice teacher will have to respond. Transformative Learning Theory (TL) proposes several stages that individuals progress through following a disorienting dilemma.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preservice teachers who experience transformative learning experience a disorienting dilemma which causes them to question the status quo.</td>
<td>1. Preservice teachers who experience transformative learning often engage in critical reflection of their experiences.</td>
</tr>
<tr>
<td>2. Preservice teachers who experience transformative learning often engage in rational dialogue about their experiences.</td>
<td>3. Preservice teachers who experience transformative learning often plan to or act differently in response to their experiences.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposition: Dispositions (how dispositions toward students with disabilities are evident in the data)</th>
<th>Assumption: Preservice teachers’ emotional and behavioral changes towards persons with a disability could be achieved when information about disabilities (the cognitive component of attitudes) is provided, together with relating to practical experience (the behavioral component).</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attitudes and dispositions of preservice teachers are often observable in the work they produce and in the way they interact with the experiences they encounter during their preparation.</td>
<td>2. Preservice teachers may engage in self-evaluation of their professional growth.</td>
</tr>
<tr>
<td>3. Preservice teachers may reflect critically on their own actions.</td>
<td>4. Preservice teachers may use past experiences to inform their decisions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposition: Perspective Transformation toward Inclusion (how this perspective transformation is evident in the data)</th>
<th>Assumption: Preservice teachers may experience a perspective transformation toward students with disabilities in inclusive settings during their preparation or as a result of learning experiences they encounter.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preservice teachers may reference an outside influence, such as a person, that triggered their change in perspective.</td>
<td>2. Preservice teachers may reference an activity, text, and/or experience from coursework that triggered their change in perspective.</td>
</tr>
<tr>
<td>3. Preservice teachers may reference a change in their life that influenced this change in perspective.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposition: Preservice Teacher Identity Formation (how the formation and transformation of a professional identity is evident in the data)</th>
<th>Assumption: Preservice teachers have an awareness of the normative behaviors and expectations of teachers and teaching. This is turn can act as challenges to the identity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preservice teachers reflect on beliefs and understandings in light of new experiences.</td>
<td>2. Preservice teachers engage in discourse about their current roles and selves.</td>
</tr>
<tr>
<td>3. Contextual factors that impact preservice teachers’ identity are observable in their responses to their preparation.</td>
<td>4. Preservice teachers encounter dilemmas during their preparation that contribute to their identity transformations.</td>
</tr>
<tr>
<td>5. Preservice teachers are aware of the normative behaviors of teaching during their preparation and react to them during identity formation.</td>
<td></td>
</tr>
</tbody>
</table>
Table 2

Additional Proposition Developed After First Level of Analysis

| Proposition: Impact of Learning Experiences (how the impact of learning experiences is evident in the data) |
| Assumption: Preservice teachers identify learning experiences within their current contexts that may impact their perspective transformations. |
| 1. Preservice teachers who experience transformative learning often engage in critical reflection of their experiences |
| 2. Preservice teachers may use past experiences to inform their decisions. |
| 3. Preservice teachers may reference an activity, text, and/or experience from coursework that triggered their change in perspective. |
| 4. Contextual factors that impact preservice teachers’ identity are observable in their responses to their preparation. |

Case Study Method

The complexity of the phenomenon under investigation along with the research questions posed in this study was served well by case study research. Yin (2009) proposed that case study methodology answers how and why questions that investigate complex phenomena. A case cannot be separated from its context; it exists because of its context. I wanted to know how preservice teachers’ perspectives toward students with disabilities changed and why it happened the way it did. Why did these outcomes occur, especially if different than expected? Phenomenon worth studying via case study should be unique and the answer to the posed questions critical to understanding (Hocutt & Fowler, 2009). Case study attends to a prior commitment to theory and since my study has a prior commitment to transformative learning theory, it was an appropriate choice.

As in all research traditions, there are different approaches to the same methodology. Although case study has its roots in sociology, its prevalence in educational research (Merriam, 1998) has increased in application and contextual sophistication since Wolcott’s classic A Man in the Principal’s Office (1973). As a way
to examine education processes, problems, and programs, case study is useful to gain in-depth understanding which in turn may affect and improve practice. This is at the heart of my study.

Although case study has been considered primarily a qualitative approach to research (Merriam, 1998; Bogdan & Biklin, 1998), other researchers agree that case study is neither purely qualitative nor qualitative, but can be a part of both (Patton, 2002; Stake, 1995; Yin, 2009). As a method of inquiry employed under a mixed methods tradition, case study offered me a way to deal with the complex processes and interactions inherent in my study.

Even though case study does not lay claim to the use of particular forms of data collection or analysis, it may be easy to get lost as a novice researcher in the permissible use of any and all methods at your disposal (Merriam, 1998). For this reason I chose to avail myself to the outlined case study method procedures of Yin (2009). I subscribed to Yin’s definition of case study.

A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly defined. (p. 18)

What are clearly defined are the boundaries of the case itself. According to Hocutt and Fowler (2009), a case is bounded system when it is studied within its context and is the focus of the inquiry. The boundary should be a clear one.

In an effort to conduct a case study that addresses the complexity of my research questions and provide a rigorous and trustworthy accounting of the
phenomenon under examination, I followed a systematic procedure to case study. Yin (2009) suggests the use of a structured case study protocol to provide a more credible and trustworthy study.

The choice of case study as a preferred method of inquiry for this study will add to the knowledge in the field since it takes the examination of the process of transformative learning to a higher level. The majority of studies about preservice teachers’ transformative experiences have used purely qualitative methods (e.g., interviewing, reflective journals, etc.) or survey research that depends on quantitative analysis (King, 2009). The complexity of transformative learning should be corroborated using multiple methods and analyses; therefore, case study, with its propensity to use multiple sources of evidence offered matching complexity.

The rationale for the use of case study is well established for this study. However, how might the product that is case study be judged as to its quality? Since process cannot be divorced from product in case study, they are “coequally critical” for judging the quality of the case study (Huberman & Miles, 2002, p. 206). In order for a case study to make a lasting contribution to the field, Yin (2009) outlined five general characteristics:

1. The case study must be significant – the case(s) are unusual and of general interest to the field; the underlying issues are theoretically and/or practically important.

2. The case study must be complete – although difficult to operationalize, this characteristic involves giving the boundaries of the study explicit
attention; a demonstration that the researcher went to great lengths to collect the relevant evidence; and that the study was deemed complete upon saturation and not due to a lack of time or resources.

3. The case study must consider alternative perspectives – anticipate alternative or rival perspectives on the phenomenon under investigation through the study; without such anticipation, the study may raise a critical reader’s suspicions as to its credibility.

4. The case study must display sufficient evidence – judiciously and effectively present the most relevant evidence so that readers can reach independent decisions about its merits.

5. The case study must be composed in an engaging manner – case study reports are engaging, enticing and even seductive to the reader; clarity of writing and attention to narrative structure are characteristics of an exemplary case study.

**Rationale for Design**

The single case design of this study represents a critical case in testing a well-formulated theory (transformative learning). It offered a specified, clear set of theoretical propositions and provides the circumstances, based on the relevant literature, within which these propositions are believed to be true. The collection of data from multiple sources of evidence indicated the degree of support for the propositions. Reliability and validity of this single case study design was achieved by using multiple sources of evidence. When the embedded units within a single case meet all of the conditions for testing the theory, it has the potential to “confirm, challenge, or extend the theory” (Yin,
2009, p. 47). This design may contribute to the knowledge of transformative learning in a way that redirects or refocuses future research in this field.

The case study design allowed for the collection and analysis of a variety of sources of evidence, which included both quantitative and qualitative data. As such the study was designed for the convergence of evidence providing for theory triangulation. The goal, as previously stated, is generalization to a theory.

**Context of the Study**

One of the responsibilities of teacher educators in the department of special education at the university where this study was conducted is to provide experiences to general education preservice teachers that provide for the development of knowledge, skills, and dispositions that support the teaching of students with disabilities in the general education classroom. Elementary majors are expected to incorporate two (2) courses into their program of study that are provided by the special education department. They are *EEX 4070 Integrating Exceptional Students* and *EEX 4742 Narrative Perspectives on Exceptionality*. In addition, a small number of general education preservice teachers engage in a *Collaborative Practicum* in which they are paired with a special education preservice teacher in an inclusive classroom setting during their second year in their program. Secondary education majors are not required to take either of these courses, although some choose to take the *EEX 4742 Narrative Perspectives on Exceptionality* as an exit requirement. Both elementary and secondary education majors will eventually teach students with disabilities in their classrooms.

These experiences were completed prior to the final internship. I was interested to discover whether or not and to what extent elementary and secondary preservice teachers,
after completion of their program of study, perceived they experienced a perspective transformation toward students with disabilities. If they had, what learning experiences did they perceive contributed to such a transformation?

All of the participants were engaged in their final internships during the course of this study. At that time my access to them was through the supervisors and coordinators of final internships at both the elementary and secondary programs. I secured the cooperation of these individuals as well as the permission and cooperation of the department chairs of both departments.

**Participant Selection for Survey**

**Screening for Case Study**

The target population was preservice teachers at a large, southeast, metropolitan university in elementary and secondary education teacher preparation programs who are in their last semester during their final student teaching or internship. This accounts for a pool of approximately 275 possible participants.

**Inclusion/exclusion Criteria**

Only those students who completed their required coursework prior to their final internship participated. Since this is a volunteer sample, those who agreed to participate were included. Exclusion criteria encompassed those that did not meet the inclusion criteria. In addition, special education majors were excluded from this sample.

**Procedure.**

1. I provided field supervisors in the elementary and secondary education programs the invitation to participate (Appendix A); they posted it on the Blackboard site of the final internship.
2. Field supervisors invited students to participate in the research study and provided the link to the Learning Activities Survey using SurveyMonkey on the Blackboard site (Appendix B).

3. I provided field supervisors with verbiage for a reminder to be posted as an Announcement on Blackboard which included the link to the survey.

4. Since I waived documentation of informed consent, completing the survey indicated consent.

5. From SurveyMonkey, I downloaded results into an Excel spreadsheet.

6. I cleaned the data (code or remove missing data, code responses).

7. I imported data into prepared SPSS data files.

8. I analyzed data to determine which participants have a PT1, PT2, or PT3 index. These participants became the pool from which the case study participants (Phase 2) were selected.

9. I retrieved the names of survey participants who indicated they were willing to participate in follow-up case study activities.

10. I contacted potential case study participants and invited them to complete the follow-up activities (Appendix C).

11. I conducted semi-structured interviews with case study participants (Appendix D).

12. I had participants complete a narrative describing their teacher preparation according to a provided narrative prompt (Appendix E).

13. I retrieved and reviewed documents from learning experiences identified by participants as contributing to a transformative experience with participant permission (teaching philosophy from EEX 4070).
14. I retrieved and reviewed dispositions data from the college of education’s data specialist, (i.e., all self-assessments) for each case study participant with participant permission.

Table 3

*Potential Pool of Participants for the LAS*

<table>
<thead>
<tr>
<th>Major</th>
<th>PT 1</th>
<th>PT 2</th>
<th>PT 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>xxxxxxx xxxxxx</td>
<td>xxxxxxx xxxxxx</td>
<td>xxxxxxx xxxxxx</td>
</tr>
<tr>
<td>Secondary</td>
<td>xxxxxxx xxxxxx</td>
<td>xxxxxxx xxxxxx</td>
<td>xxxxxxx xxxxxx</td>
</tr>
</tbody>
</table>

**Participant Selection for the Case Study**

Using maximum variation sampling, which is determined by the theory guiding this study, six (6) cases were selected for this embedded correlational design (Yin, 2009). They were selected from within the initial survey results.

*Figure 2. Visual Model of Embedded Correllational Design*

**Criteria for Selection**

In an effort to allow theory to guide every aspect of this study, theory-based or operational construct sampling (Gall et al., 2007) was used to gain understanding of the
naturalistic (Lincoln & Guba, 1985) manifestations of the theoretical constructs inherent in transformative learning theory. The idea was to select case study participants who would best answer the research questions (Yin, 2009).

Random samples were drawn separately from each of the six (6) pools. I drew 10% from each pool (Orcher, 2005). Finally, I invited the first number generated from each pool to participate in the case study. Since this is a volunteer sample, the random number generator selected enough alternate participants if those initially invited declined to participate or decide to discontinue the study after initially agreeing to participate.

Table 4

*Sample for Case Study Participant Selection*

<table>
<thead>
<tr>
<th>Major</th>
<th>PT 1</th>
<th>PT 2</th>
<th>PT3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Secondary</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Data Collection and Analysis*

The sources of evidence chosen for this single case study provided for convergence and data triangulation. The relationship between the research questions and the sources of evidence is depicted in Table 3. They were chosen to provide the best possible evidence to support the theoretical propositions of this study.
Table 5

Relationship between the Research Questions and Sources of Case Study Evidence

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Sources of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. With regard to inclusion of students with disabilities, which if any types of</td>
<td>Learning Activities Survey (LAS)</td>
</tr>
<tr>
<td>perspective transformations, as measured by the Learning Activities Survey (LAS),</td>
<td></td>
</tr>
<tr>
<td>do elementary and secondary preservice teachers experience during their preparation?</td>
<td></td>
</tr>
<tr>
<td>2. To what extent, if any, are the perceived dispositions of preservice teachers</td>
<td>Archival records (dispositions data); Semi-</td>
</tr>
<tr>
<td>affected by their teacher preparation experiences?</td>
<td>structured interviews; documents</td>
</tr>
<tr>
<td>3. To what extent, if any, do preservice teachers perceive they’ve had a</td>
<td>Learning Activities Survey (LAS); Semi-</td>
</tr>
<tr>
<td>perspective transformation toward inclusion of students with disabilities during</td>
<td>structured interviews; documents</td>
</tr>
<tr>
<td>their preparation?</td>
<td></td>
</tr>
<tr>
<td>4. What learning experiences, if any, do preservice teachers identify as</td>
<td>Semi-structured interviews; Archival records</td>
</tr>
<tr>
<td>contributing to a transformative learning during their preparation</td>
<td>(dispositions data); documents</td>
</tr>
</tbody>
</table>

Description of Measures

The Learning Activities Survey (LAS). I chose to employ the Learning Activities Survey (LAS) as a way to obtain data about the transformative learning experiences in the sample as well as to select my sample for the second, qualitative phase of this study. The LAS was developed to detect, identify, and categorize transformative experiences (King, 1997) in higher education contexts. The expressed purpose of the LAS (King, 1997) is to identify “whether adult learners have had a perspective transformation in relation to their educational experience; and if so, determining what learning activities have contributed to it” (King, 2009, p. 14). The instrument has four major parts: Part 1 identifies the stages of perspective transformation; Part 2 determines which learning
experiences may have contributed to the perspective transformation; Part 3 consists of a series of questions designed to determine in which of the learning activities participants have engaged; and Part 4 collects information on demographic characteristics of the respondents that are suggested from the literature on transformative learning theory.

The LAS, as originally developed by King, uses Mezirow’s ten phases of perspective transformation as a guideline for item development of the survey and follow-up interview questions. The correlation of perspective transformation phases to Items 2a-2l on the survey, and questions 2a-2l, 4a-4g, 8, 9, 10, and 11 on the interview protocol is as follows in Table 6.

Table 6

*Correlation of Mezirow’s 10 Phases of Perspective Transformation*

<table>
<thead>
<tr>
<th>TL Phase</th>
<th>Survey Item</th>
<th>Interview Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2a &amp; 2b</td>
<td>2a &amp; 2b</td>
</tr>
<tr>
<td>2</td>
<td>2c &amp; 2d</td>
<td>2c &amp; 2d</td>
</tr>
<tr>
<td>3</td>
<td>2g</td>
<td>2g; 4a, 4b, 4c, 4d, 4e, 4f, 4g</td>
</tr>
<tr>
<td>4</td>
<td>2e</td>
<td>2e; 9</td>
</tr>
<tr>
<td>5</td>
<td>2f</td>
<td>2f</td>
</tr>
<tr>
<td>6</td>
<td>2i</td>
<td>2i; 10</td>
</tr>
<tr>
<td>7</td>
<td>2j</td>
<td>2j; 8</td>
</tr>
<tr>
<td>8</td>
<td>2h</td>
<td>2h</td>
</tr>
<tr>
<td>9</td>
<td>2k</td>
<td>2k; 11</td>
</tr>
<tr>
<td>10</td>
<td>2l</td>
<td>2l</td>
</tr>
</tbody>
</table>

**Modification of the LAS.** I adapted the original instrument after three iterations using pilot studies with similar populations of preservice students during the Fall 2010 semester to determine if the changes made were appropriate. Modifying the instrument enabled me to use the LAS in the preservice teacher education setting. Under the tutelage of the developer (King) I changed the learning activities (Items 4 and 7) and demographic questions (Items 10-14) to be more appropriate for preservice teachers. Items 1, 2, 3, and
are those used to establish the PT-Index and were not changed so as not to affect the validity of the instrument.

I piloted a second iteration of the adapted survey with four (4) more preservice teachers. During this iteration I also conducted additional follow-up interviews based on the items on the LAS. The interviews took approximately 30 minutes to complete. Although the interview questions should have elicited rich, thick descriptions from the participants, they did not as expected. One was interviewed using a chat tool in *Elluminate* (an online chat environment in Blackboard), and one was interviewed face-to-face. I decided that I needed to develop and employ more probes during the interview. I made that change during the third iteration. I piloted a third iteration of the adapted survey and follow-up interview questions with three (3) more preservice teachers. Two of the three participants were interviewed face-to-face and responded with more depth on the follow-up interview questions. Since all of my participants are local, I’ve decided that face-to-face interviews will offer me more depth in participants’ responses to the interview questions.

The results of these pilots enabled me to refine and ensure that the wording of the items was more easily understood by the participants (King, 2009). I employed cognitive interviewing techniques to gain participant feedback on the adapted items. The final version of the LAS includes a total of 20 items. Modifications included separating items that included an “Other” choice, additional items that asked participants to “please describe” their answer to a previous question. I also included additional questions that will stratify the sample further for analysis (i.e., “Please check if you took any of the following: EEX 4070, EEX 4742, Collaborative Practicum, None of the above). Pilot
iteration 1 and 2 deployed the survey using the survey tool on Blackboard; however, it was cumbersome to download the data to analyze using this tool. The third iteration used SurveyMonkey© instead. The final deployment choice is to use SurveyMonkey© embedded on the Blackboard sites of the final internship in both elementary and secondary education.

An overall PT-Index (Perspective Transformation Index) is obtained from this instrument. The PT-Index is a single score derived from Items 1, 2, 3, and 5 of this instrument and indicates whether participants experienced a perspective transformation in his or her educational experience. PT3 indicates that a participant experienced a perspective transformation during his or her education; PT2 indicates they had a perspective transformation not associated with his or her education, and PT1 indicates that he or she did not have a perspective transformation.

I consulted Dr. King and she advised that I modify the PT index definitions to match the unique context of this study. As a result, the PT indices were defined as follows:

- PT1: preservice teacher indicates that he/she did not experience a perspective transformation toward students with disabilities during his/her teacher preparation.
- PT2: preservice teacher indicates that he/she did experience a perspective transformation toward students with disabilities during preparation as a result of something or someone outside of coursework or other teacher educator designed experiences (e.g., cooperating teacher, other school personnel, other individuals outside of university setting).
• PT3: preservice teacher indicates that he/she did experience a perspective transformation toward students with disabilities during preparation as a result of coursework or other teacher educator designed experiences.

Reliability of the Learning Activities Survey (LAS) was addressed by the developer in a unique manner due to the fact that the instrument is administered at different points in time and might elicit responses about different perspective transformation experiences. For this reason a hermeneutical perspective (Gall et al., 2003) using several evaluations to arrive at a final evaluation was employed to establish reliability. A hermeneutic perspective considers differences as parts to be interpreted “until they can be reconciled into a satisfactory overall interpretation that provides an understanding of the differences” (p. 217). Through this process, the reliability of the LAS was strengthened.

Collection. An informed consent form was part of the web-based LAS and administered using SurveyMonkey© and managed on the final internship course site on Blackboard for both elementary and secondary programs. A copy of the invitation to participate form appears in Appendix A. A waiver of documentation of informed consent was approved through the IRB; completion of the survey indicated participant consent. The instrument was administered during the Spring 2011 semester. I secured access to potential participants through the supervisors of final internships in both the elementary and secondary education departments. Students were invited to participate by their final internship supervisors using the invitation I provided to them. Once the initial invitation was made and posted on Blackboard, I provided a thank-you email with the link to the online survey and a code to enter for a chance to win a $50 Amazon.com gift card during
the recruitment presentation as an incentive for the supervisors to post on Blackboard as an announcement and an email. Supervisors followed up with a reminder email one week after the recruitment presentation. The link to the online survey and code to enter for a chance to win a $50 Amazon.com gift card was included again in this announcement and email.

**Analysis.** The results of the LAS were analyzed in two stages. First, results were categorized according to PT index. To recount, a PT3 indicates that a participant experienced a perspective transformation during his or her teacher preparation; PT2 indicates they had a perspective transformation due to something outside of the university setting, and PT1 indicates that he or she did not have a perspective transformation. Second, in order to gain a better understanding of what learning experiences were identified as contributing to a perspective transformation, descriptive statistics that include means, standard deviations, and frequencies were calculated for each PT index. In order to use these results as a screening tool to select participants for the subsequent case study, frequencies were calculated and reported for each of the six (6) subgroups (elementary PT3, elementary PT2, elementary PT1, secondary PT3, secondary PT2, and secondary PT1).

**Threats to Internal Validity.** According to Messick (1989, pp. 13-103), “validity is an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores or other modes of assessment.” Since the questions adapted and piloted in the LAS used to indicate a perspective transformation and identification of the learning experiences contributing to the indicated perspective transformation offer dichotomous
data, the results are quantitative and subject to threats to internal validity. The following threats have been identified and addressed.

- **Maturation** - improved perspective toward students with disabilities in inclusive settings is due to maturity over the course of their program of study. Consideration of a rival explanation as indicated by PT2 addresses this threat.

- **Experimental mortality** – in the event that selected participants (of preservice teachers) choose to drop out of the study. Secondary participants invited as a result of the initial random selection was employed to counteract this threat.

- **Validity** - Does the measure actually target the construct under investigation? Was the construct operationalized? Cognitive interviewing of selected questions was used during the pilot study to address this threat.

- **Primacy** – Smyth, Dillman, Christian, & Stern (2005) suggests that the check-all-that apply format may be more prone to a pattern of primacy where options are selected more often when they appear near the top of the list. In order to promote deeper processing of response options, a forced-choice format may be recommended where each response choice requires its own yes/no response. The coding guide for these check-all-that apply responses now incorporate the use of 1 or 0 to reflect a yes/no response to each option. This addresses the threat of primacy.

- **Social desirability bias** – Since this is a self-report survey administered through participants’ final internship supervisors, there is a chance that they will answer in ways they perceive are more desirable. However, in the three iterations of pilot studies using the survey, all three PT indices were found; therefore, some
participants indicated that they did not experience a perspective transformation during their teacher preparation program. In addition, this survey, although usually administered face-to-face will be administered electronically. Generally speaking, electronic or online surveys limit the effects of this bias. A computer, even compared to the best and most competent interviewer, provides a higher feeling of neutrality: it does not appear to be judging, it is not emotionally involved or capable to be involved (McBurney, 1994).

- Reliability - Are the scores obtained reliable? Do the items on the survey hang together? Piloting the adapted items of the LAS prior to this study addresses this threat.

**Reliability of Scores on the LAS.** Reliability refers to the consistency of the scores or results from an instrument and not the instrument itself. Psychological measures, those which attempt to tap underlying or latent states (constructs), can only represent a limited sample of behavior and are subject to errors of measurement (Crocker & Algina, 1986). Developers have a responsibility to demonstrate the reliability of scores obtained from their tests or surveys.

**Description of Sources of Evidence**

Although case study evidence can come from a variety of sources, Yin (2009) identified sources of evidence that are most commonly used in doing case studies. No single source has a complete advantage over another; the sources are instead complementary. For the purposes of this case study, three (3) sources of evidence were used. A description of each source of evidence accompanied by its collection and analysis procedures follows.
Figure 3. Case study sources of evidence

**Documents**

Documents from the learning experiences identified by participants from the Learning Activities Survey as contributing to a perspective transformation were reviewed with permission of the participants. They included a statement of teaching philosophy developed in the EEX 4070 course (Integrating Exceptional Students into the Regular Classroom). In addition, case study participants were asked to write their own narrative telling the story of their journey through their teacher preparation programs using a narrative prompt provided by the researcher.

**Analysis.** At least two (2) levels of analysis were applied to all text data in this study. The first level of analysis was a content analysis guided by pattern codes developed from the theoretical propositions guiding the study that provided for the extent of the evidence. The second level of analysis was a keyword analysis to extract the nature of the evidence.

In order to focus the analysis and account for internal validity, pattern matching of the empirical findings (results from qualitative analysis of documents) to the theoretical predictions (theoretical propositions) was used as a third and final level of analysis. A case-ordered matrix was used to display the findings of the pattern matching. Qualitative
data analysis software, Atlas.ti 6.1, was used to code and manage all text data and provide a trail for researchers who may wish to inspect or replicate my methods in the future.

**Inter-coder Agreement.** A doctoral student versed in content analysis was an additional analyst for the document and interview text data. Content analysis of written text is a necessarily subjective activity. Subjectivity does not, however, mean individual or random. For example, content analysis needs to follow the standard procedures for developing coding schemes that can be used reliably by multiple coders (e.g., Strauss, 1987; Strauss & Corbin, 1990). These processes bring a greater degree of objectivity to the analysis. Logs of decisions or difficult cases can help the researcher maintain consistency across samples. The purpose of having a second person code the data is to ensure that codes are applied in a principled manner.

Inter-coder agreement was achieved with a sample of the total data set; 20% of the transcripts were coded by two coders. Percent agreement was the index of choice for this study. Since there were only six (6) participants with a total of 18 sources of text data, Cohen’s Kappa was not an appropriate reliability index in this case.

The process included development of a code book which resulted in pattern codes developed directly from the theoretical propositions guiding this study. There were four (4) propositions with accompanying indicators for a total of 16 pattern codes. One coder was a doctoral student familiar with and trained in the theoretical propositions guiding this study; the other coder was the researcher. Training of the coding scheme took approximately one hour. The coders coded the selected transcripts independently, then met to discuss the codes they had assigned. Adjustments were made for comprehension
and consistent coding. The first coding session resulted in only .24 agreement. This resulted in a debriefing of disagreement and a retraining session. The same transcript was coded again and resulted in .84 agreement. The second transcript in the sample was coded and resulted in .90 agreement.

**Interviews**

I conducted semi-structured follow-up interviews that probed deeper into the responses obtained from the LAS. I recorded these interviews with a digital recorder and transcribed them. Each interview lasted approximately 30-45 minutes in duration. A copy of the follow-up interview protocols used for PT2 and PT3 and PT1 appear in Appendix C.

**Analysis.** Since the follow up interviews are meant to give the participants the opportunity to retrospectively capture past experiences and identify a dilemma or problem in their story, a problem-solution approach (Ollershaw & Creswell, 2002) to narrative analysis is appropriate. A case-ordered matrix and datum array was used to display the findings of the pattern matching.

**Archival Records**

For many case studies, archival records often taking the form of computer files and records are relevant. Survey data previously collected about the participants was used in conjunction with other sources of evidence. *The Professional & Scholarly Dispositions Self-Assessment* results collected on the participants during their teacher preparation was a relevant archival record for this case study. These self-reported results were reviewed with permission of the participants.
Analysis. Analysis of the dispositions data from administrations of the survey during the course of the participants’ teacher preparation program was compared to the expectations outlined by the theoretical propositions. Pattern matching was used to achieve convergence.

Validity and Reliability

Under the auspices of trustworthiness, credibility, confirmability, and data dependability, several tactics were used within this case study design, implementation, and analysis which provided evidence for validity and reliability. Case studies are a form of empirical social research and as such are subject to four tests of validity (Yin, 2009). Table 6 provides the overall strategy for securing validity and reliability in case study research. A brief description of each tactic, if not previously presented, follows.

Table 7

Overall Validity and Reliability Tactics

<table>
<thead>
<tr>
<th>Test</th>
<th>Tactic</th>
<th>When Occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct validity</td>
<td>• Use multiple sources of evidence&lt;br&gt;• Establish chain of evidence&lt;br&gt;• Key informants review draft case study report</td>
<td>Data collection</td>
</tr>
<tr>
<td>Internal validity</td>
<td>• Pattern matching&lt;br&gt;• Address rival explanations</td>
<td>Data analysis</td>
</tr>
<tr>
<td>External validity</td>
<td>• Use theory in single-case studies</td>
<td>Research design</td>
</tr>
<tr>
<td>Reliability</td>
<td>• Use case study protocol&lt;br&gt;• Develop case study database</td>
<td>Data collection</td>
</tr>
</tbody>
</table>
Multiple Sources of Evidence

To reiterate, using multiple sources of evidence (documents, interviews, archival records) is a major strength of conducting case studies and offers the opportunity to develop converging lines of inquiry and corroboration (Yin, 2009). Using multiple sources of evidence provides multiple measures of the same phenomenon for purposes of data triangulation.

![Diagram of multiple sources of evidence](image)

*Figure 4.* The multiple sources of evidence used for triangulation in this case study

Rival Explanations

If something other than teacher preparation accounts for the results of this study, those rival explanations must be considered at the onset of the case study. For example, prior levels of confidence or positive perspectives, ages/grades taught and content taught may all contribute to the results of this case study. These rival explanations were controlled for by using maximum variation sampling. I selected participants for the case study who indicated they had a perspective transformation as a result of the courses and participants who indicated they had a perspective transformation as a result of something outside of the coursework.
Key Informants

Member checks of the data by key informants were used to help establish construct validity showing that the data collected reflects the topic under study. Key informants were the case study participants. They had the opportunity to confirm whether the text data collected represented their perspectives. After the interviews were transcribed, they were sent via email and as a PDF to each participant who were asked to read through them for accuracy of wording and intent. If they had changes or additions to the transcript, they submitted them in an email back to the researcher.

Pattern Matching to Theoretical Propositions

Comparison of the empirical pattern with the theoretically predicted pattern using the theoretical propositions helped to determine whether, or the extent to which, the patterns coincide (Hocutt & Fowler, 2009). See the list of theoretical propositions in Table 1. I used an adapted rating sheet, similar to one used by Duchnowski, Kutash, & Oliveira (2004) to track the evidence the data provides for each indicator of each proposition. These ratings provided a score on the strength of the match to theoretical propositions. A sample rating sheet appears in Appendix F. These rating sheets helped to determine the strength of the support of the theoretical propositions. Percent agreement was used to determine strength. For example, frequencies were calculated for evidence for each theoretical proposition for each participant. The average and standard deviation was then calculated for each proposition. Strength of pattern matching was determined by the following:
Table 8

*Pattern Matching Calculations for Transformative Learning Theoretical Proposition*

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>+3</th>
</tr>
</thead>
<tbody>
<tr>
<td>(No support)</td>
<td>0</td>
<td>0 to -1 SD</td>
<td>-1 SD to AVG</td>
<td>AVG to +1 SD or above</td>
</tr>
<tr>
<td>(mild support)</td>
<td>0</td>
<td>0 to 24.13</td>
<td>24.14 to 34</td>
<td>35 to 43.87 or above</td>
</tr>
</tbody>
</table>

**The Case Study Protocol**

The creation of a case study protocol is recommended in order to establish dependability (Yin, 2009). The complete case study protocol was developed prior to data collection. The case study protocol included the following sections:

- An overview of the case study project – background information and related literature
- Field procedures – how to gain access to study site, IRB, sources of data, and procedural reminders
- Case study questions – the research questions and theoretical propositions
- A guide for the case study report/dissertation – outline for what to include in final report/dissertation

**The Case Study Database**

The case study database is recommended by Yin (2009) as a way to organize and document data collected for case studies. The database included the following elements:

- Case study notes - from interviews, document analysis, researcher journal, or my own observations. They were assembled and stored electronically using Microsoft
OneNote. They were organized according to the major activities of the study and usable by an outside party available for later access.

- Case study documents – any and all documents used to prepare for and conduct the case study. This included any documents collected from participants, preliminary research, and correspondence regarding the study. An annotated bibliography was created and stored for easy retrieval if later researchers desire to inspect or share the database.

- Tabular materials – any quantitative data collected were organized and stored for later inspection and retrieval. In this study, both survey results (Learning Activities Survey) and archival records (dispositions data) were stored in a computer file as part of the case study database.

- Narratives – it is recommended practice that case study researchers compose open-ended answers to the questions they first posed in the case study protocol at the end of the data collection stage prior to data analysis. The purpose of this narrative practice is to document how specific pieces of evidence connect to the different issues raised in the case study (Yin, 2009). This narrative is then used to compose the final case study report, or in this case, a dissertation.

**Maintaining a Chain of Evidence**

In order to increase the reliability of the information gained through the case study, it is important to maintain a chain of evidence. In this way, the reader of the case study will be able to follow the beginning of the evidence from the research questions to the case study conclusions (Yin, 2009). Figure 5 depicts the links in this chain of evidence.
In an effort to present how circumstances shape the perspectives of preservice teachers in a way that the reader can share, the overall findings of this case study are reported using individual narratives. Each individual case was re-storied from the data according to each PT index and included in chapter 4.

- Narratives about those who had a perspective transformation as a result of their learning experiences during teacher preparation
- Narratives about those who had a perspective transformation as a result of something outside of teacher preparation experiences
- Narratives about those who claim not to have had a perspective transformation

Re-storying is a process that reconstructs personal narratives with the discourse analysis applied to the text data collected in the study. They are mini stories that provide a way for us to “reflect on, share and experience together” (Craig, 2007) the perceptions of preservice teachers’ perspective transformations. Re-storying organized in this way
provides for cross-case analysis and discussion as well as validates the data sources (Clandinin & Connelly, 2000).
CHAPTER FOUR: FINDINGS

The overall purpose of this study was to determine to what extent, if any, the learning experiences designed for teacher candidates during their preparation impact their professional dispositions. In order to capture the extent to which the learning experiences within a teacher preparation program foster dispositions, teacher educators must first isolate and then compare those experiences that contribute to the development of dispositions. The only facet of dispositional development that can be manipulated is the learning experiences designed during teacher preparation; learning experiences became the focal point of this study. The following graphic organizer depicts the contribution learning experiences have in this study.

![Conceptual model of the influence of learning experiences](image)

*Figure 6. Conceptual model of the influence of learning experiences*

In an effort to contextualize the development of dispositions, I narrowed the focus of this study to the perspective transformations of preservice teachers toward students with disabilities in inclusive classroom settings. This study used both quantitative and
qualitative analysis in order to better understand the experiences of teacher candidates enrolled at one large, public university. Both Elementary and Secondary Education majors who completed their final internship experiences were invited to participate in this study.

After the study’s volunteers were surveyed about their learning experiences, six (6) randomly selected participants took part in a case study which included follow-up semi-structured interviews, the production of a written narrative of their experiences, an examination of a document they produced in a course about integrating exceptional students into the regular classroom (teaching philosophy), and review of the data collected about their dispositions throughout their teacher preparation. The surveys were quantitatively analyzed and the case study sources of evidence were qualitatively analyzed in order to gather triangulated data for the following research questions:

1. With regard to inclusion of students with disabilities, which if any types of perspective transformations, as measured by the Learning Activities Survey (LAS), do elementary and secondary preservice teachers experience during their preparation?

2. To what extent, if any, are the perceived dispositions of preservice teachers affected by their teacher preparation experiences?

3. To what extent, if any, do preservice teachers perceive they’ve had a perspective transformation toward inclusion of students with disabilities during their preparation?

4. What learning experiences, if any, do preservice teachers identify as contributing to a transformative learning during their preparation?
Throughout this chapter, quantitative and qualitative findings have been presented in a sequential manner.

**Extent and Nature of Transformative Experiences**

**RQ1**

*With regard to inclusion of students with disabilities, which if any types of perspective transformations, as measured by the Learning Activities Survey (LAS), do elementary and secondary teacher candidates experience during their preparation?*

**Quantitative Findings.** In order to answer research question one (1), data collected from the administration of the Learning Activities Survey (LAS) was analyzed. This quantitative data were supplemented by qualitative data collected from semi-structured interviews, participant narratives, and an analysis of participants’ teaching philosophies. Pattern matching was used to determine whether the data provided did or did not support the theoretical propositions guiding this study and to what extent.

As a reminder to the reader, a transformative learning experience is indicated by a PT2 and PT3 index. PT3 indicates that the participant believes they’ve had a transformative experience due to the learning experiences designed by teacher educators during their preparation. PT2 indicates that the participant believes they’ve had a transformative experience due to something outside of those learning experiences designed by teacher educators. This may include working with a cooperating teacher in a field experience or student teaching (e.g., practicum, internship), or past experiences that impact their learning. For the purposes of this analysis, PT2 and PT3 were combined since they both are indicators of a perspective transformation.
Table 9 illustrates that out of 59 teacher candidates surveyed, 25% (n=15) indicated experiencing transformative learning while enrolled in their teacher preparation programs. In addition, approximately 23% (n=5) of the Elementary teacher candidates (n=22) indicated experiencing transformative learning, while approximately 28% (n=10) of the Secondary teacher candidates (n=37) indicated experiencing transformative learning.

Table 9

*Participants Indicating Transformative Learning*

<table>
<thead>
<tr>
<th>Perspective transformation indices detected using the LAS</th>
<th>Frequency indicating transformative learning</th>
<th>% indicating transformative learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT3</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>PT2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>PT1</td>
<td>17</td>
<td>77</td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT3</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>PT2</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>PT1</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td>Overall PT3</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Overall PT2</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Overall PT1</td>
<td>44</td>
<td>76</td>
</tr>
</tbody>
</table>

*NOTE:* Elementary (n=22); Secondary (n=37)

Table 10 illustrates that more than twice as many women as men participated in this study. Approximately 30% of women and 8% of men experienced transformative learning.
Table 10

*Gender of Participants Indicating Transformative Learning*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency in sample</th>
<th>Frequency indicating transformative learning</th>
<th>% indicating transformative learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>47</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 11 illustrates that students of color constituted 15% of participants in this study. Approximately 11% of these participants indicated having a transformative experience. Among Native American, Hispanic, Black (non-Hispanic), Asian/Pacific Islander, Bi-racial, and Multi-racial teacher candidates, no group of respondents contained five or more members. For statistical analysis, these respondents were organized into a “Students of Color” category. White, non-Hispanic teacher candidates constituted 85% of respondents, and 28% of this group reported experiencing transformative learning. Due to the small number of students of color in this sample, this study did not attempt interpretation of these demographic findings.

Table 11

*Ethnicity of Participants Indicating Transformative Learning*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Frequency in sample</th>
<th>Frequency indicating transformative learning</th>
<th>% indicating transformative learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students of Color*</td>
<td>9</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>50</td>
<td>14</td>
<td>28</td>
</tr>
</tbody>
</table>

*n<5 Within Native American, Hispanic, Black (non-Hispanic), Asian/Pacific Islander, Bi-racial, and Multi-racial demographic categories. For statistical analysis, these participants were organized into a “Students of Color” category.*
Table 12 reports transformative learning within age categories in teacher candidates. It illustrates that students above the age of 25 constituted 25% of this sample, and 7% indicated having a transformative experience. Since there was only a small number of respondents who were 25 years of age or older, this study did not attempt interpretation of these demographic findings. Among 25 to 29, 30 – 39, 40 – 49, 50 – 59, and 60 or over teacher candidates, no group of respondents contained five or more members. For statistical analysis, these participants were organized into an “Above 25” category. Similarly, since there were less than five members of respondents who were 21 – 25 years of age, these participants were organized into the “Below 25” category. Table 4 illustrates that students below the age of 25 constituted 75% of this sample, and 32% reported having a transformative experience.

Table 12

<table>
<thead>
<tr>
<th>Years of Age</th>
<th>Frequency in sample</th>
<th>Frequency indicating transformative learning</th>
<th>% indicating transformative learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 25</td>
<td>15</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Below 25</td>
<td>44</td>
<td>14</td>
<td>32</td>
</tr>
</tbody>
</table>

Table 13 reports transformative learning experiences among single, married, partnered or divorced/separated teacher candidates. It illustrates that teacher candidates who were single constituted 68% of the sample and 28% indicated having a transformative experience. Due to the small number of respondents who were partnered or divorced/separated, this study did not attempt interpretation of these demographic findings.
Table 13

Marital Status of Participants Indicating Transformative Learning

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency in sample</th>
<th>Frequency indicating transformative learning</th>
<th>% indicating transformative learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>40</td>
<td>11</td>
<td>28</td>
</tr>
<tr>
<td>Married</td>
<td>13</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Partnered</td>
<td>3</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 14 illustrates that 95% of teacher candidates surveyed reported taking a course on integrating exceptional students in the regular classroom (EEX 4070), and of those, 25% indicated they had a transformative experience. Since there was only a small number of respondents (less than 5) who reported taking EEX 4742, were engaged in a collaborative practicum with special education students, or had none of these experiences, this study did not attempt interpretation of these demographic findings.

Table 14

Courses of Participants Indicating Transformative Learning

<table>
<thead>
<tr>
<th>Course</th>
<th>Frequency in sample</th>
<th>Frequency indicating transformative learning</th>
<th>% indicating transformative learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEX 4070</td>
<td>56</td>
<td>14</td>
<td>25</td>
</tr>
<tr>
<td>EEX 4742</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Collaborative Practicum</td>
<td>4</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>None</td>
<td>2</td>
<td>1</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 15 and Figure 7 suggest that while 25% of participants indicated that they had a transformative experience; specific stages of transformative learning were also taking place. The transformative learning quadrants contained in Table 7 and Figure 1...
proceeded from Glisczinski’s (2007) application of Herbers’ (1998) four-quadrant summary and Mezirow’s (2000) phases of perspective learning. Glisczinski’s application of these four quadrants to the responses of the LAS provided a framework for the findings of this study. These quadrants are (I) disorienting dilemma, (II) critical reflection, (III) rational dialogue, and (IV) action.

While nearly three quarters of all participants did not express that they experienced transformative learning according to the quantitative results of the LAS, through the follow-up interviews that accompany the LAS approximately 21% of participants identified experiencing disorienting dilemmas. Almost a third of all participants identified critical reflection about their current assumptions. Approximately one quarter of all participants reported engaging in rational dialogue during their teacher preparation. Twenty percent of all participants indicated that they planned to take or took action as a result of the preceding process of a disorienting dilemma, critical reflection and rational dialogue.

Table 15

*Frequency of All Respondents in Quadrants Leading toward Transformative Learning*

<table>
<thead>
<tr>
<th>Transformative learning quadrant</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: Disorienting Dilemma</td>
<td>51</td>
<td>21</td>
</tr>
<tr>
<td>II: Critical Reflection</td>
<td>69</td>
<td>29</td>
</tr>
<tr>
<td>III: Rational Dialogue</td>
<td>61</td>
<td>25</td>
</tr>
<tr>
<td>IV: Action</td>
<td>49</td>
<td>20</td>
</tr>
</tbody>
</table>
Qualitative Findings. Quantitative analysis revealed one quarter of all participants, representing all demographic characteristics involved in the study, experienced transformative learning during the teacher preparation programs. Of the 59 survey respondents, six (6) were randomly selected according to Perspective Transformation (PT) index to participate in follow up case study activities. Qualitative analyses of multiple sources of evidence (Yin, 2009) revealed data to support the theoretical propositions used to organize this inquiry. Quasi-statistical analysis using classical content analysis is displayed using case-ordered descriptive meta-matrices that capture the strength of the association to the theoretical propositions via pattern matching.

Qualitative content analysis attempts to overcome shortcomings of classical quantitative content analysis by applying a systematic, theory-guided approach to text analysis using a category system. The process used in this study is depicted in Figure 8.

Figure 7. Respondent experiences among transformative learning quadrants
this process preserves the advantage of quantitative content analysis, but also applies a more qualitative text interpretation (Kohlbacher, 2005).

![Diagram of qualitative content analysis process]

**Figure 8.** Process of qualitative content analysis used in this study

The theoretical proposition (1) about transformative learning produced four (4) indicators from which pattern codes were devised. This content analysis identified quotations from each participant that met the criteria of each pattern code. A sample of this analysis appears below.
Table 16

*Theoretical Proposition 1 Transformative Learning Indicators and Sample Quotations*

<table>
<thead>
<tr>
<th>Transformative Learning Indicator</th>
<th>Sample Quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers who experience transformative learning experience a disorienting dilemma which causes them to question the status quo.</td>
<td>She [the cooperating teacher] basically through the lines told me there’s nothing I can really do; I’ve given up on my students. I want them to pass. If they’re going to ask me for something extra it’s going to make them pass, I’ll do it for them (SEC PT1).</td>
</tr>
<tr>
<td>Preservice teachers who experience transformative learning often engage in critical reflection of their experiences.</td>
<td>I just felt like I needed to see progress and I needed that kind of reassurance that I was making a difference and I wasn’t seeing that (SEC PT2).</td>
</tr>
<tr>
<td>Preservice teachers who experience transformative learning often engage in rational dialogue about their experiences.</td>
<td>About disability is obviously I’m going to have to make accommodations for you more in depth - this person has this, what works best for them, what I need to do for them. How am I going to get them engaged in my classroom and not shutting down and not doing work or not? (SEC PT3)</td>
</tr>
<tr>
<td>Preservice teachers who experience transformative learning often plan to or act differently in response to their experiences.</td>
<td>I think it changed my belief to be willing to do whatever it takes to help gain the same education as their peers (ELE PT3).</td>
</tr>
</tbody>
</table>

At this point the data analyzed to answer research question one (1) about the extent to which transformative learning were perceived by case study participants in the sources of evidence was organized according to theoretical propositions to prepare for pattern matching.

**Pattern Matching Summary of RQ1.** Pattern matching offers a summary of the quantitative and qualitative findings. There are four (4) indicators under theoretical proposition 1 (transformative learning) which address the evidence to answer research

---

78
question 1. The frequency of evidence of this proposition was calculated from all sources of evidence for each participant. The following frequencies were calculated.

Table 17

*Frequencies of Evidence of Theoretical Proposition Transformative Learning (TL)*

<table>
<thead>
<tr>
<th>Participant</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica (ELE PT1)</td>
<td>10 (17%)</td>
</tr>
<tr>
<td>Tom (SEC PT1)</td>
<td>16 (28%)</td>
</tr>
<tr>
<td>Lynn (ELE PT2)</td>
<td>32 (32%)</td>
</tr>
<tr>
<td>Stephanie (SEC PT2)</td>
<td>44 (46%)</td>
</tr>
<tr>
<td>Kelly (ELE PT3)</td>
<td>39 (35%)</td>
</tr>
<tr>
<td>Lisa (SEC PT3)</td>
<td>41 (34%)</td>
</tr>
<tr>
<td>Total</td>
<td>182</td>
</tr>
<tr>
<td>Average</td>
<td>34 (38%)</td>
</tr>
<tr>
<td>SD</td>
<td>9.87</td>
</tr>
<tr>
<td>Range</td>
<td>10-44</td>
</tr>
</tbody>
</table>

The goal of pattern matching is to determine to what extent the data support the theoretical propositions guiding this study. The strength of this support is documented using a set of rating sheets for each proposition (see Appendix F). For research question one (1), which addressed the theoretical proposition of transformative learning, the strength of support was defined by the following:

Table 18

*Pattern Matching Calculations for Transformative Learning Theoretical Proposition*

<table>
<thead>
<tr>
<th></th>
<th>0 (No support)</th>
<th>+1 (mild support)</th>
<th>+2 (moderate support)</th>
<th>+3 (strong support)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0 to -1 SD</td>
<td>-1 SD to AVG</td>
<td>AVG to +1 SD or above</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0 to 24.13</td>
<td>24.14 to 34</td>
<td>35 to 43.87 or above</td>
<td></td>
</tr>
</tbody>
</table>

Based on the ratings calculated for pattern matching, the following case-ordered results were determined.
Table 19

Summary of Pattern Matching for Transformative Learning

<table>
<thead>
<tr>
<th>Participant</th>
<th>Frequency/Rating</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica (ELE PT1)</td>
<td>10/+1</td>
<td>Mild</td>
</tr>
<tr>
<td>Tom (SEC PT1)</td>
<td>16/+1</td>
<td>Mild</td>
</tr>
<tr>
<td>Lynn (ELE PT2)</td>
<td>32/+2</td>
<td>Moderate</td>
</tr>
<tr>
<td>Stephanie (SEC PT2)</td>
<td>44/+3</td>
<td>Strong</td>
</tr>
<tr>
<td>Kelly (ELE PT3)</td>
<td>39/+3</td>
<td>Strong</td>
</tr>
<tr>
<td>Lisa (SEC PT3)</td>
<td>41/+3</td>
<td>Strong</td>
</tr>
</tbody>
</table>

It appears that, in general, those participants who reported having experienced a perspective transformation (PT2 and PT3) showed stronger evidence to support the theoretical proposition for transformative learning than those who did not report experiencing a perspective transformation (PT1). However, there do not appear to be any significant patterns of support between elementary and secondary majors for transformative learning in this evidence.

**RQ2**

To what extent, if any, are the perceived dispositions of preservice teachers affected by their teacher preparation experiences?

In order to answer research question two (2), data collected from the *Professional Commitments & Scholarly Dispositions Self-Assessment* administered by the college of education to preservice teachers during their preparation was used. This quantitative data were supplemented by qualitative data collected from semi-structured interviews, participant narratives, and an analysis of participants’ teaching philosophies. Pattern matching was used to determine the extent to which the data provided support for the theoretical propositions guiding this study.
Quantitative Data. The Professional Commitments & Scholarly Dispositions Self-Assessment was designed to be administered to preservice teachers at three (3) points during their preparation: upon entering their program, midway, and at the end of their final student teaching experience (final internship). The fidelity of administration of the dispositions self-assessment could not be determined since data from all of the six (6) case study participants were not available. Four (4) of the six (6) participants took the dispositions self-assessment. Only one (1) of those four (4) completed the assessment at all three (3) points during their teacher preparation. Therefore, cleaning of the data resulted in the inclusion of the results of the initial administration of the Professional Commitments & Scholarly Dispositions Self-Assessment. Of the six (6) case study participants, only those who were categorized as PT2 and PT3 had completed the initial assessment. Their results appear in Table 20. Fourteen of the thirty-two dispositions assessed by this self-assessment were aligned to the theoretical propositions guiding this study and are included in these findings. Due to the small number of respondents who completed this self-assessment, this study did not attempt interpretation of these findings; only frequency and summary data are reported.
Table 20
Disposition Data by Participant According to Initial Assessment of the Professional Commitments & Scholarly Dispositions Self-Assessment

<table>
<thead>
<tr>
<th>Case</th>
<th>D9</th>
<th>D10</th>
<th>D11</th>
<th>D12</th>
<th>D13</th>
<th>D14</th>
<th>D15</th>
<th>D16</th>
<th>TL Score</th>
<th>D18</th>
<th>D20</th>
<th>D21</th>
<th>D28</th>
<th>D30</th>
<th>D31</th>
<th>PT Score</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE PT2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>26</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>39</td>
</tr>
<tr>
<td>SEC PT2</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>37</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>26</td>
<td>63</td>
</tr>
<tr>
<td>ELE PT3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>30</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>27</td>
<td>57</td>
</tr>
<tr>
<td>SEC PT3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>12</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>28</td>
<td>40</td>
</tr>
</tbody>
</table>
Qualitative Findings. The theoretical proposition (2) about dispositions produced four (4) indicators from which pattern codes were devised.

Table 21

Theoretical Proposition Dispositions

<table>
<thead>
<tr>
<th>Proposition 2: Dispositions (how dispositions toward students with disabilities are evident in the data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumption: Preservice teachers’ emotional and behavioral changes towards persons with a disability could be achieved when information about disabilities (the cognitive component of attitudes) is provided, together with relating to practical experience (the behavioral component).</td>
</tr>
<tr>
<td>Indicators:</td>
</tr>
<tr>
<td>1. Attitudes and dispositions of preservice teachers are often observable in the work they produce and in the way they interact with the experiences they encounter during their preparation.</td>
</tr>
<tr>
<td>2. Preservice teachers may engage in self-evaluation of their professional growth.</td>
</tr>
<tr>
<td>3. Preservice teachers may reflect critically on their own actions.</td>
</tr>
<tr>
<td>4. Preservice teachers may use past experiences to inform their decisions.</td>
</tr>
</tbody>
</table>

The next level of analysis used the pattern codes developed directly from the indicators of the theoretical proposition about dispositions provided evidence of those indicators. This content analysis identified quotations from each participant that met the criteria of each pattern code. A sample of this analysis appears below.
Table 22

*Theoretical Proposition 2 Dispositions Indicators with Sample Quotations*

<table>
<thead>
<tr>
<th>Dispositions Indicator</th>
<th>Sample Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes and dispositions of preservice teachers are often observable in the work they produce and in the way they interact with the experiences they encounter during their preparation.</td>
<td>But I really just wanted to, I didn’t want them to have that D, I wanted to get their grade up. So I think there’s that desire in me to really see students succeed and learn and even with students with disabilities (SEC PT2).</td>
</tr>
<tr>
<td>Preservice teachers may engage in self-evaluation of their professional growth.</td>
<td>This took a lot of nerve for me because I do not like confrontation and I was nervous on how it reflects in my internship. The conversation remained on a professional level but the content created a lot of tension between me and the special education teacher for the reminder of my internship but it made me feel good for standing up not only for my beliefs but for the student, in terms of being his voice (ELE PT3).</td>
</tr>
<tr>
<td>Preservice teachers may reflect critically on their own actions.</td>
<td>It’s just more in depth. And like here it’s just surface but when you’re doing it yourself and if you truly and really care about the students then obviously of course you’re going to want to make sure that they have everything they need (SEC PT3).</td>
</tr>
<tr>
<td>Preservice teachers may use past experiences to inform their decisions.</td>
<td>Worked at the Y in real life with kids K through 5 who had autism and Asperger’s and had tantrums then if their parents didn’t come at 4 o’clock to pick them up (SEC PT3).</td>
</tr>
</tbody>
</table>

Table 23 presents the frequency of the indicators in the sources of evidence.

When both the elementary and secondary data were combined under PT index, it appears that those who did not perceive they had experienced a perspective transformation had less evidence of proposition 2 (dispositions) than either the PT2 or PT3. Out of 544 total coded responses, almost 20% confirmed the presence of proposition 2 (dispositions).
Table 23

*Frequency of Indicators for Theoretical Proposition 2 Dispositions*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>ELE PT1</th>
<th>SEC PT1</th>
<th>ELE PT2</th>
<th>SEC PT2</th>
<th>ELE PT3</th>
<th>SEC PT3</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes and dispositions of preservice teachers are often observable in</td>
<td>10</td>
<td>5</td>
<td>12</td>
<td>8</td>
<td>9</td>
<td>4</td>
<td>48</td>
<td>8</td>
</tr>
<tr>
<td>the work they produce and in the way they interact with the experiences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>they encounter during their preparation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preservice teachers may engage in self-evaluation of their professional</td>
<td>4</td>
<td>2</td>
<td>9</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>growth.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preservice teachers may reflect critically on their own actions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>23</td>
<td>4</td>
</tr>
<tr>
<td>Preservice teachers may use past experiences to inform their decisions.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>15</td>
<td>9</td>
<td>24</td>
<td>15</td>
<td>18</td>
<td>25</td>
<td>106</td>
<td>18</td>
</tr>
</tbody>
</table>

Preservice teachers may reflect critically on their own actions.
I conducted another level of content analysis after aligning the indicators on the Professional Commitments & Scholarly Dispositions Self-Assessment to the transformative learning and perspective transformation toward students with disabilities theoretical propositions. In order to determine whether and to what extent preservice teachers’ dispositions were related to their perspective transformations, evidence of both transformative learning and perspective transformation was sought in the data during this level of analysis. Pattern codes were developed based on the following structure:

- Transformative Learning
  - Work to improve my skills as a professional
  - Set professional goals
  - Learn about innovations in my field.
  - Engage in self-evaluation of my professional growth
  - Reflect critically on my actions
  - Use past experiences to inform my decisions
  - Engage in self-evaluation and critique of my performance
  - Monitor the effects of my decisions

- Perspective Transformation toward Students with Disabilities
  - Use a variety of strategies to support learning for all students
  - Encourage the exploration of diverse points of view
  - Work actively to challenge stereotypes
  - Create an environment that supports students
  - Protect the rights of students
  - Encourage students to reach their full potential
The data from the semi-structured interviews, participant-authored narratives, and participant-authored teaching philosophies documented that preservice teachers who participated in this case study did, in fact, illuminate their dispositions toward students with disabilities. A closer inspection of the data provides insight into which PT indices offer more evidence of desirable dispositions. Both within case and cross case analysis of data gleaned the dispositional stance of participants by examining the data by PT index and major. Using a deductive analysis in conjunction with a document review, all data were reviewed, meaningful units were identified, units of data were coded, and then the data were organized according to theoretical propositions to prepare for pattern matching.

Data supporting that the desirable dispositions of the College of Education were evident in the sources of evidence collected from the case study participants were first defined within the theoretical framework guiding this study. Convergence of dispositional data collected from the semi-structured interviews, participant-authored narratives, and participant-authored teaching philosophies provided additional evidence of the theoretical propositions. Saturation of the theoretical propositions was reached during this level of analysis. Figure 9 illustrates the conceptual framework that aligns the theoretical propositions with an emphasis on dispositions.

Figure 9. Theoretical alignment of propositions to dispositions
Data of the existence of desirable dispositions, based on pattern codes derived from the dispositions defined by the *Professional Commitments & Scholarly Dispositions Self-Assessment*, offer further collaborative evidence. Table 24 shows the extent to which desirable dispositions support the perspective transformation theoretical proposition. According to PT index, those who perceived that they did not experience a perspective transformation (PT1) only showed 13% of the desired dispositions in their interviews, narratives and teaching philosophies. For those who perceived they had a perspective transformation due to something other than the learning experiences designed for them during teacher preparation (PT2), they showed approximately 31% of the desired dispositions in the qualitative sources of evidence. Finally, those who perceived that they had a perspective transformation due to the learning experiences designed for them during teacher preparation (PT3) showed approximately 56% of the desired dispositions.

When participant data by elementary and secondary level are compared, elementary majors showed approximately 56% of the desired dispositions and secondary majors showed approximately 44% of the desired dispositions. Due to the small number of case study participants, this study did not attempt interpretation of these findings; only frequency and summary data are reported.
Table 24

*Frequency of Desired Dispositions Categorized as Perspective Transformation*

<table>
<thead>
<tr>
<th>Perspective Transformation Dispositions Indicator</th>
<th>ELE PT1</th>
<th>SEC PT1</th>
<th>ELE PT2</th>
<th>SEC PT2</th>
<th>ELE PT3</th>
<th>SEC PT3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create an environment that supports students</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Encourage students to reach their full potential</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Encourage the exploration of diverse points of view</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Protect the rights of students</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Use a variety of strategies to support learning for all students</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Work actively to challenge stereotypes</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>7</td>
<td>2</td>
<td>11</td>
<td>11</td>
<td>22</td>
<td>18</td>
</tr>
</tbody>
</table>

*NOTE:* Based on a total of 71 occurrences in the sources of evidence.

Table 25 shows the extent to which desirable dispositions support the transformative learning theoretical proposition. According to PT index, those who perceived that they did not experience a perspective transformation (PT1) only showed 15% of the desired dispositions in their interviews, narratives and teaching philosophies. For those who perceived they had a perspective transformation due to something other than the learning experiences designed for them during teacher preparation (PT2), they showed approximately 33% of the desired dispositions in the qualitative sources of evidence. Finally, those who perceived that they had a perspective transformation due to the learning experiences designed for them during teacher preparation (PT3) showed approximately 52% of the desired dispositions.

When participant data by elementary and secondary level are compared, elementary majors showed approximately 45% of the desired dispositions and secondary majors showed approximately 54% of the desired dispositions. Due to the small number
of case study participants, this study did not attempt interpretation of these findings; only frequency and summary data are reported.

Table 25

*Frequency of Desired Dispositions Categorized as Transformative Learning*

<table>
<thead>
<tr>
<th>Transformative Learning Dispositions Indicator</th>
<th>ELE PT1</th>
<th>SEC PT1</th>
<th>ELE PT2</th>
<th>SEC PT2</th>
<th>ELE PT3</th>
<th>SEC PT3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage in self-evaluation and critique of my performance</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Engage in self-evaluation of my professional growth</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Learn about innovations in my field</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Monitor the effects of my decisions</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Reflect critically on my actions</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Set professional goals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Use past experiences to inform my decisions</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Work to improve my skills as a professional</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>8</strong></td>
<td><strong>6</strong></td>
<td><strong>19</strong></td>
<td><strong>12</strong></td>
<td><strong>16</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

*NOTE:* Based on a total of 94 occurrences in the sources of evidence

At this point the data analyzed to answer research question 2 about the extent to which desirable dispositions are espoused by case study participants in the sources of evidence were organized according to theoretical propositions to prepare for pattern matching.

**Pattern Matching Summary of RQ2.** Pattern matching offers a summary of the quantitative and qualitative findings. There are four (4) indicators under theoretical proposition 2 (dispositions) which address the evidence to answer research question two (2). The frequency of evidence of this proposition was calculated from all sources of evidence for each participant. The following frequencies were calculated.
Table 26

*Frequencies of Evidence of Theoretical Proposition Dispositions*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Dispositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica (ELE PT1)</td>
<td>15 (25%)</td>
</tr>
<tr>
<td>Tom (SEC PT1)</td>
<td>9 (16%)</td>
</tr>
<tr>
<td>Lynn (ELE PT2)</td>
<td>24 (24%)</td>
</tr>
<tr>
<td>Stephanie (SEC PT2)</td>
<td>15 (16%)</td>
</tr>
<tr>
<td>Kelly (ELE PT3)</td>
<td>18 (16%)</td>
</tr>
<tr>
<td>Lisa (SEC PT3)</td>
<td>25 (21%)</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
</tr>
<tr>
<td>Average</td>
<td>17.6 (19%)</td>
</tr>
<tr>
<td>SD</td>
<td>6.05</td>
</tr>
<tr>
<td>Range</td>
<td>9-25</td>
</tr>
</tbody>
</table>

The goal of pattern matching is to determine to what extent the data support the theoretical propositions guiding this study. The strength of this support is documented using a set of rating sheets for each proposition (see Appendix F). For research question two (2) which addressed the theoretical proposition of dispositions, the strength of support was calculated by the following:

Table 27

*Pattern Matching Calculations for Transformative Learning Dispositions*

<table>
<thead>
<tr>
<th>0 (No support)</th>
<th>+1 (mild support)</th>
<th>+2 (moderate support)</th>
<th>+3 (strong support)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0 to -1 SD</td>
<td>-1 SD to AVG</td>
<td>AVG to +1 SD or above</td>
</tr>
<tr>
<td>0</td>
<td>0 to 11.55</td>
<td>11.56 to 17.6</td>
<td>17.7 to 23.65 or above</td>
</tr>
</tbody>
</table>

Based on the ratings calculated for pattern matching, the following case-ordered results were determined.
Table 28

**Summary of Pattern Matching for Dispositions**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Frequency/Rating</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica (ELE PT1)</td>
<td>15/+2</td>
<td>Moderate</td>
</tr>
<tr>
<td>Tom (SEC PT1)</td>
<td>9/+1</td>
<td>Mild</td>
</tr>
<tr>
<td>Lynn (ELE PT2)</td>
<td>24/+3</td>
<td>Strong</td>
</tr>
<tr>
<td>Stephanie (SEC PT2)</td>
<td>15/+2</td>
<td>Moderate</td>
</tr>
<tr>
<td>Kelly (ELE PT3)</td>
<td>18/+3</td>
<td>Strong</td>
</tr>
<tr>
<td>Lisa (SEC PT3)</td>
<td>25/+3</td>
<td>Strong</td>
</tr>
</tbody>
</table>

It appears that participants from all three PT indices (i.e., PT1, PT2, PT3) show support for the dispositions theoretical proposition. However, there are no significant differences between PT index or major. The only participant that did not show at least moderate support for the theoretical proposition was SEC PT1.

**RQ3**

*To what extent, if any, do preservice teachers perceive they’ve had a perspective transformation toward inclusion of students with disabilities during their preparation?*

In order to answer research question three (3), data collected from semi-structured interviews, participant narratives, and an analysis of participants’ teaching philosophies were used. Pattern matching was used to determine to what extent the data provided supported the theoretical propositions guiding this study.

**Qualitative Findings.** Initially an analysis of data from case study participants who indicated they had a perspective transformation (PT2 or PT3) were the focus of content analysis. However, I discovered that even those participants who indicated that they did not experience a perspective transformation (PT1) on the quantitative results of the LAS did in fact have evidence of a perspective transformation in the data sources of their
follow-up interviews, narratives, and teaching philosophies. Table 29 presents the indicators of a perspective transformation and sample quotations from each PT index.

Table 29

<table>
<thead>
<tr>
<th>Perspective Transformation Indicator</th>
<th>Sample Quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers may reference an outside influence, such as a person, that triggered their change in perspective.</td>
<td>But then I started my internship, my final internship with a boy who has autism in my class. And it was virtually impossible to teach him the same material that I was teaching all my other students. And I would have to come up with separate lessons for him after I got the whole, the rest of the class working on things that I would have to sit and do one on one instruction with him on something completely different. And I felt that it wasn’t fair to him to have to sit and read a book while I taught the whole group and then he could do his own lesson with me and then he was still by himself. He was in the classroom but he was still by himself. And I didn’t feel that he was being included. So I think that it’s a very difficult, if not impossible task for teachers to meet the needs of students with disabilities in their classroom as well as all the other unique students (ELE PT2).</td>
</tr>
<tr>
<td>Preservice teachers may reference an activity, text, and/or experience from coursework that triggered their change in perspective.</td>
<td>At [the university], you take several classes on diversity and including all students into your curriculum. I have been lectured at over and over about keeping my students safe and making them feel comfortable in my classroom. We are taught about accepting all students in your classroom but you do not realize all of the obstacles and challenges that may be thrown at you along the way (SEC PT3).</td>
</tr>
<tr>
<td>Preservice teachers may reference a change in their life that influenced this change in perspective.</td>
<td>And then added stresses of just being married, life, money, things like that, you know, it was difficult anyway. So it would end up being more of my reflections on the classroom and then my life together and everything together (ELE PT2).</td>
</tr>
</tbody>
</table>
The theoretical proposition (3) about perspective transformation produced three (3) indicators from which pattern codes were devised. The frequency of their occurrence in the multiple sources of evidence appears in the case-ordered matrix below. Note how the only occurrences of indicator three (3), personal life change, were only found in case study participants who indicated that they had a perspective transformation due to something outside of their university-controlled teacher preparation.
Table 30
*Frequency of Indicators for Theoretical Proposition 3 Perspective Transformation*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>ELE PT1</th>
<th>SEC PT1</th>
<th>ELE PT2</th>
<th>SEC PT2</th>
<th>ELE PT3</th>
<th>SEC PT3</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers may reference an outside influence, such as a person,</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>that triggered their change in perspective.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preservice teachers may reference an activity, text, and/or experience</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>from coursework that triggered their change in perspective.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preservice teachers may reference a change in their life that influenced</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>.5</td>
</tr>
<tr>
<td>this change in perspective.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>10</td>
<td>7</td>
<td>11</td>
<td>8</td>
<td>7</td>
<td>9</td>
<td>52</td>
<td>9</td>
</tr>
</tbody>
</table>
At this point the data analyzed to answer research question 3 about the extent to which case study participants perceived they had a perspective transformation toward students with disabilities in the sources of evidence were organized according to theoretical propositions to prepare for pattern matching.

**Pattern Matching Summary of RQ3.** Pattern matching offers a summary of the findings. There are four (4) indicators under theoretical proposition 3 (perspective transformation) which address the evidence to answer research question three (3). The frequency of evidence of this proposition was calculated from all sources of evidence for each participant. The following frequencies were calculated.

Table 31

*Frequencies of Evidence of Theoretical Proposition Perspective Transformation (PT)*

<table>
<thead>
<tr>
<th>Participant</th>
<th>PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica (ELE PT1)</td>
<td>10 (17%)</td>
</tr>
<tr>
<td>Tom (SEC PT1)</td>
<td>7 (12%)</td>
</tr>
<tr>
<td>Lynn (ELE PT2)</td>
<td>11 (11%)</td>
</tr>
<tr>
<td>Stephanie (SEC PT2)</td>
<td>8 (8%)</td>
</tr>
<tr>
<td>Kelly (ELE PT3)</td>
<td>7 (6%)</td>
</tr>
<tr>
<td>Lisa (SEC PT3)</td>
<td>9 (7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52</strong></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>8.6 (9%)</strong></td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td><strong>1.6</strong></td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td><strong>7-11</strong></td>
</tr>
</tbody>
</table>

The strength of this support is documented using a set of rating sheets for each proposition (see Appendix F). For research question three (3) which addressed the theoretical proposition of perspective transformation, the strength of support was calculated by the following:
Table 32

*Pattern Matching Calculations for Perspective Transformation*

<table>
<thead>
<tr>
<th></th>
<th>0 (No support)</th>
<th>+1 (Mild Support)</th>
<th>+2 (Moderate Support)</th>
<th>+3 (Strong Support)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0 to -1 SD</td>
<td>-1 SD to AVG</td>
<td>AVG to +1 SD above</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0 to 7</td>
<td>7 to 8.6</td>
<td>8.6 to 10.2 or above</td>
<td></td>
</tr>
</tbody>
</table>

Based on the ratings calculated for pattern matching, the following case-ordered results were determined.

Table 33

*Summary of Pattern Matching for Perspective Transformation*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Frequency/Rating</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica (ELE PT1)</td>
<td>10/+3</td>
<td>Strong</td>
</tr>
<tr>
<td>Tom (SEC PT1)</td>
<td>7/+1</td>
<td>Mild</td>
</tr>
<tr>
<td>Lynn (ELE PT2)</td>
<td>11/+3</td>
<td>Strong</td>
</tr>
<tr>
<td>Stephanie (SEC PT2)</td>
<td>8/+2</td>
<td>Moderate</td>
</tr>
<tr>
<td>Kelly (ELE PT3)</td>
<td>7/+1</td>
<td>Mild</td>
</tr>
<tr>
<td>Lisa (SEC PT3)</td>
<td>9/+3</td>
<td>Strong</td>
</tr>
</tbody>
</table>

Based on the pattern ratings, it appears that all participants, regardless of PT index, showed support for the theoretical proposition of perspective transformation. However, an examination of cases according to PT index, as well as according to major, show no significant patterns.

**RQ4**

*What learning experiences, if any, do preservice teachers identify as contributing to a transformative learning during their preparation?*

In order to answer research question four (4), data collected from the administration of the Learning Activities Survey (LAS) were used as evidence. This quantitative data were supplemented by qualitative data collected from semi-structured
interviews, participant narratives, and an analysis of participants’ teaching philosophies. Pattern matching was used to determine to what extent the data provided supported the theoretical propositions guiding this study. Among 59 survey participants enrolled in a teacher preparation program, 25% (n=15) reported experiencing transformational learning. The following analysis of the learning experiences or activities identified by preservice teachers as contributing to their transformative learning focuses solely on the reported experiences of those 15 preservice teachers who indicated experiencing transformative learning.

**Quantitative Findings.** Table 34 identifies which class activities during teacher preparation influenced the change indicated by participants (n=15).

Table 34

*Class Activities Indicated as Contributing to Transformative Learning*

<table>
<thead>
<tr>
<th>Class activity that influenced change</th>
<th>Frequency indicating perspective transformation (PT2 or PT3)</th>
<th>% indicating perspective transformation (PT2 or PT3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readings in a textbook</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Chapter questions in a book</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Supplemental readings or materials</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Class/group projects</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>Verbally discussing your concerns</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Writing about your concerns</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Journal entries</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Class activity/exercise</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>Deep, concentrated thought</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Personal reflection</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>Non-traditional structure of a course</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Field experience</td>
<td>7</td>
<td>47</td>
</tr>
<tr>
<td>Auto-ethnography or personal learning experience paper/project</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Self-assessment in a class</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Nearly half of those who experienced transformative learning reported that their field experiences or student teaching contributed to their perspective transformation. If we rank these activities by their contribution, the following were indicated most frequently by those who experienced transformative learning: (1) 40% indicated personal reflection, (2) 27% indicated class activities/exercises, (3) 27% indicated class/group projects, and (4) 20% indicated deep, concentrated thought.

These five (5) activities account for 58% of the 15 activities surveyed as reported by participants. These activities in particular were stronger triggers of transformation than other activities and offered participants an opportunity to work through their transformative process during teacher preparation. In addition, two (2) of the activities designed for preservice teachers during their teacher preparation were not indicated by participants as contributing to their transformative learning experiences: Auto-ethnography or personal learning paper/project and self-assessment in a class. This is of interest since 33% of participants who indicated experiencing a perspective transformation indicated that auto-ethnography or personal learning paper/project was a part of their teacher preparation; 73% of participants who indicated experiencing a perspective transformation indicated that they engaged in self-assessment in a class during their teacher preparation.

**Qualitative Findings.** Data collected from semi-structured interviews, participant narratives, and an analysis of participants’ teaching philosophies were also used to determine the influence the learning activities designed during teacher preparation contributed to participants’ transformative learning. Pattern matching was used to determine to what extent the data provided supported the theoretical propositions guiding
this study. Pattern codes were developed from each indicator of the perspective transformation theoretical proposition. Table 35 presents a sampling of coded quotations matched to the theoretical proposition indicator that addressed the influence of coursework activities, texts, and/or experiences that may have triggered a change in perspective.

Table 35

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Sample Quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers may reference an activity, text, and/or experience from coursework that triggered their change in perspective.</td>
<td>At [the university], you take several classes on diversity and including all students into your curriculum. I have been lectured at over and over about keeping my students safe and making them feel comfortable in my classroom. We are taught about accepting all students in your classroom but you do not realize all of the obstacles and challenges that may be thrown at you along the way (SEC PT3). Originally I was taking classes with part of a special Ed cohort and so we got a lot of special Ed perspective and I really liked it I actually consider getting a minor in special ed. But I thought that inclusion sounded awesome to me and that I felt that kids with disabilities should be able to be included in general education classrooms, there’s no reason why they should be ostracized, you know, in their own wing somewhere and I thought that would be an excellent idea (ELE PT2). At that point it was a good start. Although I did feel some of the assignments in the class itself were a little bit repetitive. You know, like this is the prompt, analyze it. And I felt like I was repeating myself with that. I did like the -- I don’t remember the exact name the professor gave it, but we had to go shadow the ESE students for a day. I did like that a lot I have to say (SEC PT1).</td>
</tr>
</tbody>
</table>
I conducted a second level of content analysis (keyword) to determine which types of learning activities were referenced by participants in their interviews, narratives, and teaching philosophies. Although the data were collected from six (6) participants, the activities they referenced supported the ones collected using the LAS.

Table 36

*Learning Experiences Identified by the LAS and Case Study Activities*

<table>
<thead>
<tr>
<th>Learning Activities Identified Using the LAS</th>
<th>Learning Activities Identified by Case Study Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readings in a textbook</td>
<td>Seminars during Internship</td>
</tr>
<tr>
<td>Chapter questions in a book</td>
<td>Interactive notebooks</td>
</tr>
<tr>
<td>Supplemental readings or materials</td>
<td>Reflections</td>
</tr>
<tr>
<td>Class/group projects</td>
<td>Lectures</td>
</tr>
<tr>
<td>Verbally discussing your concerns</td>
<td>Websites</td>
</tr>
<tr>
<td>Writing about your concerns</td>
<td>Group projects</td>
</tr>
<tr>
<td>Journal entries</td>
<td>Guest speakers</td>
</tr>
<tr>
<td>Class activity/exercise</td>
<td>Shadowing an ESE student</td>
</tr>
<tr>
<td>Deep, concentrated thought</td>
<td>Videos</td>
</tr>
<tr>
<td>Personal reflection</td>
<td>Human development course</td>
</tr>
<tr>
<td>Non-traditional structure of a course</td>
<td>Co-teaching experience with special education cohort</td>
</tr>
<tr>
<td>Field experience</td>
<td>Discussion boards</td>
</tr>
</tbody>
</table>

Based on the data collected using both the LAS and the case study activities for those who experienced a perspective transformation (PT2 or PT3), the common
experiences fall into three (3) distinct categories: class-wide activities, group activities, and personal learning activities (see Figure 10).

**Figure 10.** Common learning experiences indicated by case study participants

At this point the data analyzed to answer research question 4 about impact of the learning experiences indicated by case study participants in the sources of evidence as contributing to transformative learning were organized according to theoretical propositions to prepare for pattern matching.

**Pattern Matching Summary of RQ4.** Pattern matching offers a summary of the quantitative and qualitative findings. Since there was no one theoretical proposition about learning experiences developed, indicators from all four of the theoretical propositions were used for pattern matching during the refining process. A new proposition – impact of learning experiences (LE) was therefore developed. The following indicators and their companion propositions are listed below.
• Preservice teachers who experience transformative learning often engage in critical reflection of their experiences. (TL)

• Preservice teachers may use past experiences to inform their decisions. (D)

• Preservice teachers may reference an activity, text, and/or experience from coursework that triggered their change in perspective. (PT)

• Contextual factors that impact preservice teachers’ identity are observable in their responses to their preparation. (I)

The frequency of evidence of this proposition was calculated from all sources of evidence for each participant. The following frequencies were calculated.

Table 37

_Frequencies of Evidence of Impact of Learning Experiences (LE)_

<table>
<thead>
<tr>
<th>Participant</th>
<th>LE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica (ELE PT1)</td>
<td>12 (9%)</td>
</tr>
<tr>
<td>Tom (SEC PT1)</td>
<td>14 (11%)</td>
</tr>
<tr>
<td>Lynn (ELE PT2)</td>
<td>22 (17%)</td>
</tr>
<tr>
<td>Stephanie (SEC PT2)</td>
<td>23 (18%)</td>
</tr>
<tr>
<td>Kelly (ELE PT3)</td>
<td>19 (15%)</td>
</tr>
<tr>
<td>Lisa (SEC PT3)</td>
<td>41 (31%)</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
</tr>
<tr>
<td>Average</td>
<td>21.8 (17%)</td>
</tr>
<tr>
<td>SD</td>
<td>10.34</td>
</tr>
<tr>
<td>Range</td>
<td>12-41</td>
</tr>
</tbody>
</table>

The strength of this support is documented using a set of rating sheets for each proposition (see Appendix F). For research question four (4) which addressed the impact of learning experiences, the strength of support was calculated by the following:
Table 38

*Pattern Matching Calculations for Impact of Learning Experiences*

<table>
<thead>
<tr>
<th></th>
<th>0 (No support)</th>
<th>+1 (Mild Support)</th>
<th>+2 (Moderate Support)</th>
<th>+3 (Strong Support)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0 to -1 SD</td>
<td>-1 SD to AVG</td>
<td>AVG to +1 SD or above</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0 to 11.47</td>
<td>11.47 to 21.8</td>
<td>21.8 to 32.14 or above</td>
<td></td>
</tr>
</tbody>
</table>

Based on the ratings calculated for pattern matching, the following case-ordered results were determined.

Table 39

*Summary of Pattern Matching for Impact of Learning Experiences*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Frequency/Rating</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica (ELE PT1)</td>
<td>12/+2</td>
<td>Moderate</td>
</tr>
<tr>
<td>Tom (SEC PT1)</td>
<td>14/+2</td>
<td>Moderate</td>
</tr>
<tr>
<td>Lynn (ELE PT2)</td>
<td>22/+3</td>
<td>Strong</td>
</tr>
<tr>
<td>Stephanie (SEC PT2)</td>
<td>23/+3</td>
<td>Strong</td>
</tr>
<tr>
<td>Kelly (ELE PT3)</td>
<td>19/+2</td>
<td>Moderate</td>
</tr>
<tr>
<td>Lisa (SEC PT3)</td>
<td>41/+3</td>
<td>Strong</td>
</tr>
</tbody>
</table>

It appears that all participants showed evidence that supported the proposition of the impact of learning experiences. Although there were no significant patterns to this evidence across PT index or major, those who indicated that they had a perspective transformation (PT2 and PT3) showed stronger support for the impact of learning experiences on their transformation than those who did not (PT1).

**Summary of Pattern Matching**

The following case-ordered matrix shows the overall results of pattern matching by each participant. Although there is variation among individual cases, the overall
pattern displayed indicates that there is moderate support for all of the theoretical propositions used to guide this study.

Table 40

**Summary of Pattern Matching Results by Participant**

<table>
<thead>
<tr>
<th>Participant</th>
<th>TL (ELE PT1)</th>
<th>TL (SEC PT1)</th>
<th>TL (ELE PT2)</th>
<th>TL (SEC PT2)</th>
<th>TL (ELE PT3)</th>
<th>TL (SEC PT3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica</td>
<td>+1</td>
<td>Mild</td>
<td>Moderate</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td>Tom</td>
<td>+1</td>
<td>Mild</td>
<td>Moderate</td>
<td>Mild</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Lynn</td>
<td>+2</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
</tr>
<tr>
<td>Stephanie</td>
<td>+3</td>
<td>+2</td>
<td>+2</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
</tr>
<tr>
<td>Kelly</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td>Lisa</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
<td>+3</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>14</td>
<td>13</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>(2.2)</td>
<td>(2.3)</td>
<td>(2.3)</td>
<td>(2.5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Re-storied Participant Narratives**

The final level of analysis of the qualitative data gained from interview transcripts, participant narratives, and teaching philosophies was conducted using re-storying as a narrative analytic approach. The process and findings appear in the final section of this chapter.

**The Re-storying Process**

The process of re-storying as an analytic approach has its roots in narrative research. Clandinin and Connelly (2000) describe this process as reading the transcripts, analyzing the story to understand the lived experiences and then retelling the story. There are different approaches to the process of re-storying. I employed a problem-solution...
approach (Ollerenshaw & Creswell, 2002) which includes first selecting narratives relevant to the research questions from previously collected qualitative data from interviews and/or participant-created narratives. Then the following steps were used in the re-storying process:

- Read and reread through the transcripts to get a sense of the data
- Select relevant text to analyze for elements of plot structure.
- Color-code for plot structures. Table 41 describes the plot structures:
  - Characters
  - Setting
  - Problem
  - Actions
  - Resolution

Table 41

*Organizing the Plot Elements into the Problem-Solution Narrative Structure*

<table>
<thead>
<tr>
<th>Rough transcription</th>
<th>Characters</th>
<th>Setting</th>
<th>Problem</th>
<th>Actions</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code plot structure elements</td>
<td>Individual’s archetype, personality, behaviors, style, and patterns</td>
<td>Context, environment, conditions, place, time, locale, year, and era</td>
<td>Question to be answered or phenomena to be described or explained</td>
<td>Movements through the story illustrating character’s thinking, feelings, intentions, actions, and reactions about failed and successful attempts</td>
<td>Answers the question and explains what caused the turning point or character to change</td>
</tr>
</tbody>
</table>

*Source*: Adapted from Ollerenshaw & Creswell (2002).
Graphically organize the color-coded transcripts into events or attempts, such as the setting, problem, physical actions, reactions, thinking, and intentions, and emotionally driven goals of the characters and resolution.

Sequence the events. Rework the sequence until it makes sense.

**Role of the Researcher**

Within the re-storying process, and as the researcher collecting and analyzing the data in question to create a new story that highlights the attempts of the participants to deal with a disorienting dilemma about how to work with students with disabilities in a general education setting, I have intimate knowledge of both that setting, the problem and the characters involved in the story. My own professional teaching experiences working as a co-teacher in an inclusive classroom setting make me sensitive to the attitudes and actions often taken by general education teachers toward students with disabilities. I selected the narratives to re-story that I believed were relevant to the research questions. Although I have personal experience as a teacher in the setting the participants found themselves in, I was not their supervising professor or one of their instructors at the university, so I did not have a prior relationship with any of the participants. The characters they describe, the schools they taught in, and the rest of their contexts did not intersect with my own except to say that we were a part of the same university. As a doctoral candidate in the department of special education, I was unfamiliar with the particular inner workings of either the department of childhood education and literacy studies or the department of secondary education. This offered me the opportunity to view their stories with an outside-looking-in narrative perspective (Newton, 1995). My
role in this process is to make my own interpretation of the story rather than a negotiated interpretation.

**How the Narratives are Organized**

Each participant’s re-storied narrative is a result of the above described process. They are organized by PT index (i.e., PT1, PT2, PT3). Each story is reorganized to highlight events that occurred; each focuses on the attempts made by participants to solve a problem. Each story can be told orally or written for readers. At the end of each story an additional level of analysis produced prominent theoretical propositions evident in the story.

**Jessica’s Story Re-storied**

<table>
<thead>
<tr>
<th>Participant:</th>
<th>Jessica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at time of interview:</td>
<td>21-24</td>
</tr>
<tr>
<td>Marital Status:</td>
<td>Single</td>
</tr>
<tr>
<td>Major:</td>
<td>Elementary</td>
</tr>
<tr>
<td>PT Index:</td>
<td>1</td>
</tr>
<tr>
<td>Materials used for re-storying:</td>
<td>(1) 45 minute interview; personal narrative; teaching philosophy</td>
</tr>
<tr>
<td>Place of interview:</td>
<td>researcher’s office</td>
</tr>
</tbody>
</table>

Jessica began her story by telling me that even though she had just graduated and obtained her teaching license, she would not be pursuing a teaching position for the upcoming school year. Jessica is leaving for Africa on a mission trip that will last for a full calendar year. Although she will be teaching English during this trip, it is not exactly what she prepared for. Jessica made it clear throughout our time together that she believed all children should have equal opportunity to learn and that her role was to
ensure that their needs were met while in her care. Her initial perspective about working with students with disabilities in her traditional elementary classroom was to teach every child “like normal” and have the same expectations. At Spring Hills Elementary, she had one encounter that challenged that belief.

During her final internship Jessica worked in a fourth grade classroom with one cooperating teacher. By the time Jessica was able to take over the classroom as her own it was time for the state standardized testing session. Her cooperating teacher would not allow her to teach math because of this as she felt an intern shouldn’t be trusted to teach that content area leading up to the high stakes testing. Since this particular fourth grade team alternated teaching by having the students switch classes for reading and math, Jessica found herself at a loss. Her cooperating teacher was the math teacher and so Jessica was never allowed to teach the whole group on her own.

This problem only made the next one impossible to deal with. There was a child in Jessica’s class who was deaf and had an interpreter with her throughout the school day. Celia was a normally outgoing child who felt quite comfortable participating in whole group activities. She would often raise her hand to respond or to ask a question. Since this particular elementary school had a large DHH population, having a student with either hearing aids or an interpreter or who signed to communicate was not unusual. But it was Jessica’s first experience working with a student who could not communicate the way she was used to. She had a lot to learn.

Jessica noticed that when Celia was confused, she would raise her hand for her teacher’s attention. The teacher would then go right to Celia and ask her to tell her what she needed. Celia had just gotten a cochlear implant and was still getting used to hearing
her own voice. She was embarrassed and did not like how she sounded. She continued to rely on her interpreter to communicate her needs. The teacher really wanted her to speak, so she told Jessica to work with Celia one-on-one in the back of the room instead of trying to answer her questions in front of the whole class.

But Celia was not comfortable in a one-on-one interaction with Jessica. She still would not speak. Jessica felt like Celia was missing much of the instruction doing it this way. Not only did Celia feel uncomfortable with her own voice, she was now isolated at the back of the room. Celia also left the classroom to take tests and work on reading in the DHH resource room, so there was always a portion of the school day that she was not even present. It is difficult to build a trusting relationship with a student who is not there.

“I made sure I always spoke directly to her [Celia],” Jessica explained. “I made eye contact. I remembered to write on the board differently for her; I made sure I didn’t ignore her.”

But Celia would have none of it. She wasn’t belligerent, just shy. And since Jessica’s cooperating teacher would not allow her to actually teach math, Celia had to try to catch the instruction from the back of the room while Jessica tried to reinforce it in their one-on-one. This was not working.

Jessica counseled with a friend who was a special education major. She was assured that she was doing everything right within her power to help Celia. Jessica felt her hands were tied and she felt impotent to help Celia. This was not how she imagined working with a student with a disability. Her initial perspective to treat her “normal” and to have the same expectations just didn’t match with reality. She decided to accept that she couldn’t make a difference here. She accepted defeat. Her time at Spring Hills ended
and she moved on to graduation. Jessica wondered during her interview what she could have done differently. She wondered if she had been allowed to teach math if she could have had more control and found a way to meet Celia’s needs.

**Prominent Theoretical Propositions Evident in Jessica’s Story**

Jessica’s story contains evidence of several theoretical propositions. Even though on the LAS Jessica did not report having a perspective transformation toward students with disabilities, her story shows that a shift did indeed occur. The following indicators of both transformative learning and perspective transformation are most prominent in Jessica’s story.

Table 42

*Prominent Theoretical Propositions Evident in Jessica’s Story*

<table>
<thead>
<tr>
<th>Proposition Indicator</th>
<th>Summary of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers who experience transformative learning experience a disorienting</td>
<td>Jessica found herself unable to work one-on-one with a deaf student when she felt</td>
</tr>
<tr>
<td>dilemma which causes them to question the status quo (TL).</td>
<td>previously fully prepared to do so.</td>
</tr>
<tr>
<td>Preservice teachers may reference an outside influence, such as a person, that</td>
<td>Jessica’s interaction with her cooperating teacher showed her that her original</td>
</tr>
<tr>
<td>triggered their change in perspective (PT).</td>
<td>perspective did not match her reality.</td>
</tr>
</tbody>
</table>

Although Jessica did not indicate that she had a perspective transformation, her story shows that she did. The trigger, as described in her own story, was her cooperating teacher. This would reclassify her as a PT2 as a result.
Tom’s Story Re-Storied

<table>
<thead>
<tr>
<th>Participant:</th>
<th>Tom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at time of interview:</td>
<td>21-24</td>
</tr>
<tr>
<td>Marital Status:</td>
<td>Married</td>
</tr>
<tr>
<td>Major:</td>
<td>Secondary</td>
</tr>
<tr>
<td>PT Index:</td>
<td>1</td>
</tr>
<tr>
<td>Materials used for re-storying:</td>
<td>(1) 45 minute interview; personal narrative; teaching philosophy</td>
</tr>
<tr>
<td>Place of interview:</td>
<td>via SKYPE</td>
</tr>
</tbody>
</table>

Tom is a 22 year old married young man, just finished his final internship at a high school. A secondary English education major, Tom had really hoped to work in advanced English classrooms when he had a teaching job of his own. Initially he was glad that during his final internship assignment he had one period that had advanced students in it. At the onset of our interview, Tom described for me his perspective about working with students with disabilities. He sees himself as open-minded and accepting of everyone. “I mean, people are people,” he said. “So I feel that regardless of race, gender, color, religion, background, what you look like, how you’re born, whatever that may be, you’re a student and you need to be taught.”

This conviction was tested when Tom met Jon.

Tom’s cooperating teacher laid it all out for him his first day in her classroom. She pointed out which students in the classes were labeled with one disability or another. She reminded Tom not to worry too much about those students.
“I really just give them more time to do the assignments and most of the time they would actually come to us instead of us coming to them and say look I need more time,” his cooperating teacher explained to him. The onus was on the student to seek the help they need; not the teacher’s responsibility to know what that is.

Tom tried to apply what he’d learned in his coursework in this context. “I looked on the student information system to see if this student or that one had a disability trying to understand what was going on with them. I was looking it up for both myself and my cooperating teacher’s sake.” Although Tom prided himself on being “man enough to ask for help” if he needed it, he admitted to not wanting to seek out the ESE specialist to get answers. But the online student information system was difficult to navigate and he didn’t find what he was looking for.

Tom’s first period class was an advanced English class. These students were bright and they knew it. His cooperating teacher chose the path of least resistance and if her lesson fell flat, the students would criticize and ask her to change it somehow – and she obliged them. She’d given up on her students. If they needed something to pass, she’d do whatever they asked. This made Tom very uncomfortable. He was not willing to bend over backwards for his students and basically be at their beck and call. After all, he was the teacher, wasn’t he? The problem was that these students saw Tom as an “immigrant, an alien, an intruder.”

In this first period class was one student, Jon, who had been labeled as ADHD. He was also a gifted learner. He did very well in class. He was on task, on target and “not a problem at all.” Tom was surprised at how self-motivated he was. Jon needed a little more time to complete assignments and projects, but whenever he asked for that time, he
got it. This surprised Tom as he expected that a student with ADHD would be difficult to keep on task. “He did better than any of the normal kids,” Tom said.

One day Jon was absent. Then the next day, and the next. Tom saw him on one of those days wandering the halls with “some girl.” Jon stopped turning in work and became belligerent when he was in class. His grades plummeted and Tom couldn’t believe that he’d give up his success to spend time with a girl. Tom went to his cooperating teacher for advice. She shrugged her shoulders and said “There’s nothing we can do if he doesn’t want help.”

*How do we know he doesn’t want help?* Tom wondered.

Tom decided to confront Jon the next time he saw him skipping class. He went out looking for him. He really didn’t have a plan. He just wanted to hear what Jon had to say for himself.

Jon had nothing to say. He mimicked the cooperating teacher’s shrugged shoulders and walked away from Tom. “He threw it all away!” Tom said. There was nothing he could do about it. If Jon didn’t ask for help, Tom had no choice but to watch him walk away. Tom said that he could “not for the life of me figure out what to do.” So he ended up doing nothing at all.

**Prominent Theoretical Propositions Evident in Tom’s Story**

Tom’s story contains evidence of two theoretical propositions. Even though on the LAS Tom did not report having a perspective transformation toward students with disabilities, his story shows that a shift did occur. The following indicators of both transformative learning and perspective transformation are most prominent in Tom’s story.
**Table 43**

*Prominent Theoretical Propositions Evident in Tom’s Story*

<table>
<thead>
<tr>
<th>Proposition Indicator</th>
<th>Summary of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers who experience transformative learning experience a disorienting</td>
<td>Tom believed that if you’re a student, no matter who you are, you need to be taught. His perspective was an active one; he would find a way to meet the needs of any participant.</td>
</tr>
<tr>
<td>dilemma which causes them to question the status quo (TL).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One student challenged that perspective. Tom’s interaction with this student and following the lead of his cooperating teacher changed his perspective into a passive one where it was the student’s responsibility to ask for the help he needed.</td>
</tr>
<tr>
<td>Preservice teachers may reference an outside influence, such as a person, that</td>
<td></td>
</tr>
<tr>
<td>triggered their change in perspective (PT).</td>
<td></td>
</tr>
</tbody>
</table>

Although Tom did not indicate that he had a perspective transformation, his story shows that he did. The trigger, as described in his own story, was both interaction with one student with disabilities and his cooperating teacher. This would reclassify him as a PT2 as a result.

**Lynn’s Story Re-Storied**

<table>
<thead>
<tr>
<th>Participant:</th>
<th>Lynn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at time of interview:</td>
<td>21-24</td>
</tr>
<tr>
<td>Marital Status:</td>
<td>Married</td>
</tr>
<tr>
<td>Major:</td>
<td>Elementary</td>
</tr>
<tr>
<td>PT Index:</td>
<td>2</td>
</tr>
<tr>
<td>Materials used for re-storying:</td>
<td>(1) 45 minute interview; personal narrative; teaching philosophy</td>
</tr>
<tr>
<td>Place of interview:</td>
<td>researcher’s office</td>
</tr>
</tbody>
</table>
Just a few months before we met for our interview, Lynn gave birth to her first child. At 22 and newly married, Lynn had a lot on her plate going into her final internship. Leaving her baby for the first time happened the day she began her internship; much sooner than she preferred. One of Lynn’s goals as a teacher was to always be supportive. “I love these kids already!” She said. “I just wanted to love on them and give them everything they needed.”

Lynn felt very fortunate in her final internship. She was in a third grade classroom with a cooperating teacher who had “immense” experience in special education. Lynn believed that together they could meet the needs of every child in their care. “We had three or four other students who had 504 plans for ADHD. But Jason was the only one who was autism,” she explained.

Lynn wasn’t concerned. After all, she had taken a course with the special education cohort and gained what she called a special education perspective. “But I thought that inclusion sounded awesome to me and that I felt that kids with disabilities should be able to be included in general education classrooms, there’s no reason why they should be ostracized, you know, in their own wing somewhere and I thought that would be an excellent idea,” she shared.

Jason “was very high functioning as far as his social skills were concerned; he was really funny and the kids loved him. You know, but very low performing as far as academically.” Based on her cooperating teacher’s advice, Lynn found herself having to come up with separate lessons for him after she got the rest of the class working on things. “I would have to sit and do one on one instruction with him on something completely different. And I felt that it wasn’t fair to him to have to sit and read a book
while I taught the whole group and then he could do his own lesson with me and then he was still by himself. He was in the classroom but he was still by himself. And I didn’t feel that he was being included,” she explained.

How was this inclusion? She wondered.

Once Lynn took over the class on her own, it became impossible in her mind to teach him the same material she was teaching the other students. “He needed that intense guided one on one practice for him to get the skills. And it’s difficult to provide him with all of your attention as well as all the other students.” This stage didn’t last long because her cooperating teacher could not seem to completely relinquish control to her. Lynn was demoted to helper status and pulled small groups of struggling students to the side to work with them during the day. Jason was one of those students.

Lynn deferred to her cooperating teacher’s actions and attitudes since she has so much special education experience. She did not attempt to counsel with the ESE specialist in their team and she did not look for other solutions on her own to work with Jason. She accepted the situation as it stood.

“I wish that I had more experience that would, you know, help me know what to do,” she confided. “So I think that it’s a very difficult, if not an impossible task, for teachers to meet the needs of students with disabilities in their classroom as well as all the other unique students.” Lynn didn’t know how to work with Jason; nor did she ever find out how.

Prominent Theoretical Propositions Evident in Lynn’s Story

Lynn’s story contains evidence of two theoretical propositions. On the LAS Lynn reported having a perspective transformation toward students with disabilities; her story
shows that shift occur. The following indicators of both transformative learning and perspective transformation are most prominent in Lynn’s story.

Table 44

*Prominent Theoretical Propositions Evident in Lynn’s Story*

<table>
<thead>
<tr>
<th>Proposition Indicator</th>
<th>Summary of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers who experience transformative learning experience a disorienting dilemma which causes them to question the status quo (TL).</td>
<td>Lynn believed that based on her prior learning and the fact that she was paired with a cooperating teacher with extensive special education experience, she would be able to work with any student with disabilities and thought inclusion was the best setting. But the time and resources it took for her to work with just one student made her question that belief.</td>
</tr>
<tr>
<td>Preservice teachers may reference an outside influence, such as a person, that triggered their change in perspective (PT).</td>
<td>Lynn’s interaction with both Jason and her cooperating teacher triggered a change in her thinking about inclusion. She no longer believed it was the best setting.</td>
</tr>
</tbody>
</table>

Lynn originally indicated that she did have a perspective transformation due to someone or something outside of the learning experiences designed by her professors. Her story supports that PT2 index as the most prominent theoretical propositions evident in her story reflected both transformative learning and perspective transformation with an outside trigger.
During our time together Stephanie told me that she is “easily swayed” in that every new thing she learned, she not only accepted, but embraced as doctrine.

Unfortunately this created chronic dissonance for her during her final internship. Every new experience challenged her thinking and changed her mind about what she thought she believed. Stephanie describes herself as “always conflicted.”

When she worked at the Y after-care program, she worked with many students with disabilities. It was during that time when she realized, without a doubt, that she could not and would not work with students with severe disabilities as a classroom teacher. It was hard enough to keep them “balanced” during play, let alone in a classroom academic environment. It just didn’t seem possible to her. She believed that there is a place for ESE resource rooms and self-contained classrooms. Not every student should be in a general education classroom. It just isn’t right for everyone.

But then throughout her teacher preparation she learned many strategies to work with an atypical learner and felt empowered by her instructors who showed her that what
she was learning would work for *most* students. There would always be those few who required more and they would not be in a regular classroom. When she began her final internship, she realized quickly that was not truly the case.

Adam was in Stephanie’s FUSE class for Social Studies. A FUSE class is an inclusion classroom that is made up of approximately one third students with varying disabilities. “Most of the time you couldn’t tell who had a disability unless you looked at the codes next to their names on the class roll,” Stephanie explained. “I couldn’t tell, except for Adam.”

Adam was low functioning on the Autism spectrum. He had emotional outbursts and did not relate well to his peers or his teachers. Adam basically shut down in Social Studies. He did not turn in any work and did not seem to care if he failed the class. “I don’t like seeing kids doing poorly when it’s in their control to do better. He just wouldn’t tell me what he needed. I couldn’t help him because I didn’t know what he needed,” Stephanie could not understand why Adam was so defiant. She believed that this was probably not the place for Adam. Maybe he belonged in a self-contained classroom instead.

“There’s such a push for them to be in the least restrictive environment, but I don’t know, it’s sometimes so challenging for them,” Stephanie confessed to being conflicted. “I came into this believing everyone can learn; they can change. But I’m not seeing that at all.”

Stephanie’s cooperating teacher had her hands full in that class. She didn’t seem to know what to do for Adam either. *Should they ask someone?* Stephanie wondered.
Should we ask for help? This question remained just a thought in Stephanie’s mind; she never acted on it.

Then during one of her senior seminars a guest speaker shared with the group about what it was like to work with children with autism on a full time basis. Stephanie was at first both skeptical and cynical. “After all,” she explained. “I worked with kids like that at the Y and I had one in my internship. I admit that I didn’t think this guy would have anything new to tell me.” But Stephanie was wrong.

“He [the guest speaker] was very grounded and showed both sides of that and he wasn’t like super duper - I don’t want to say artificial but, you know, he wasn’t like oh, this is so wonderful, every day is just great. I think that helps give it a more true perspective,” she said. “He gave me hope.” This man seemed to know his students inside and out. Stephanie realized that he anticipated their needs; he didn’t wait for them to come to him. Hmm.

At this time Stephanie started to reflect more about what was really going on in her classroom. Her way of doing things was very methodical and structured. She remembered how she first reacted to how her cooperating teacher worked with the students. She realized that learning can happen even when you are a little more laid back and nurturing. “I realized that all those things that seemed negative before, were really signs that students were comfortable in this place. They felt secure and cared for, and for a young adolescent going through enormous changes, feeling secure and cared for is a big deal!”

Adam didn’t feel secure and cared for. That much was obvious now. “All of this gave me hope and I knew I needed to find a balance somehow. I just didn’t know how.”
Stephanie didn’t have time to act on this new perspective. Her internship ended and she no longer had a chance to try to work with Adam.

**Prominent Theoretical Propositions Evident in Stephanie’s Story**

Stephanie’s story contains evidence of two theoretical propositions. On the LAS Stephanie did report having a perspective transformation toward students with disabilities; her story shows that shift occur. The following indicators of both transformative learning and perspective transformation are most prominent in Stephanie’s story.

Table 45

<table>
<thead>
<tr>
<th>Proposition Indicator</th>
<th>Summary of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers who experience transformative learning experience a disorienting</td>
<td>Stephanie’s preparation led her to believe that the strategies she learned would work for most students and that inclusion was the best place for most students; however, working with Adam, she discovered that reality did not match what she had learned.</td>
</tr>
<tr>
<td>dilemma which causes them to question the status quo (TL).</td>
<td></td>
</tr>
<tr>
<td>Preservice teachers may reference an outside influence, such as a person, that</td>
<td>Stephanie’s interaction with both Adam, a student with autism, and her cooperating teacher, caused a shift in her perspective. She decided inclusion wasn’t best for everyone and that her own teaching style needed to be more flexible.</td>
</tr>
<tr>
<td>triggered their change in perspective (PT).</td>
<td></td>
</tr>
</tbody>
</table>

Stephanie originally indicated that she did have a perspective transformation due to someone or something outside of the learning experiences designed by her professors. Her story supports that PT2 index as the most prominent theoretical propositions evident in her story reflected both transformative learning and perspective transformation with an outside trigger. Stephanie’s outside triggers came in the form of people – her cooperating teacher and a student with autism in her classroom.
Lisa’s Story Re-Storied

<table>
<thead>
<tr>
<th>Participant:</th>
<th>Lisa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at time of interview:</td>
<td>21-24</td>
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<tr>
<td>Marital Status:</td>
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<td>Major:</td>
<td>Secondary</td>
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<tr>
<td>PT Index:</td>
<td>3</td>
</tr>
<tr>
<td>Materials used for re-storying:</td>
<td>(1) 45 minute interview; personal narrative; teaching philosophy</td>
</tr>
<tr>
<td>Place of interview:</td>
<td>researcher’s office</td>
</tr>
</tbody>
</table>

Lisa’s big question during our time together was “If they don’t tell you, how do you know what they [students with disabilities] need?” When Lisa began her final internship in a high school, she had one class in particular that was more difficult than the others. “Fifth period. Most of the students did not want to be in the class. Most of them had attendance and tardy issues. Several of them had not passed the FCAT as a junior in high school. The class was a rough class, but I was making progress with them daily,” she explained.

Seeing herself make progress with students was Lisa’s barometer for success. She needed to see the progress happening. She needed proof that what she was doing was working. She also needed to see the needs of the students. If it wasn’t obvious to her, then it didn’t exist. She knew that in this particular class there were two students with disabilities. One was “obvious” in her opinion. The other was less obvious but caused her the most concern.
Sam always participated in class. In fact, he acted as if he knew what was going on. But he didn’t turn in any work and he didn’t take the required notes in class. Lisa noticed this trend when she was spot checking their note-taking one day. When asked about his lack of note taking, Sam replied, “My other teachers print my notes for me.” Lynn was surprised at this, but now that she knew, she decided to do whatever Sam needed. But she reminded him, “Okay, anytime you need something from me, and it’s like that, please let me know because I don’t have a problem in doing it.”

This really bothered Lisa. How did she not know that this student needed his notes printed out for him? Why didn’t anyone tell her? What was his disability? And what were the right strategies she should try to meet his needs? This self-evaluation was interrupted by yet another Sam incident.

“Why aren’t you doing your bell work?” Lisa asked Sam.

“Because I can’t see the board,” Sam said.

Frustrated that Sam could not articulate what it was that he needed, Lisa suggested that he move his seat closer to the board from now on. “Just tell me when you need something,” she reminded. Sam moved closer to the board, but still did not do his bell work.

“These students are so much more needy than I thought they would be,” Lisa’s frustration showed clearly during the interview. “Why don’t they tell you if they have a processing problem or something? I knew something was wrong, but no one told me.” Lisa realized toward the end of her internship that her cooperating teacher did know which of her students had a disability and what their needs were. She just didn’t share that information with Lisa. Lisa excused this omission.
“But it never occurred to me that he might have needed something and he never asked. And coming in with the transition as being the intern she [cooperating teacher] might have had documents on that, but I may have never gotten those documents. And so, I mean, it’s not her fault either because Sam’s a pretty overall a good kid; no behavior problems. You wouldn’t think that he might have a disability. And I believe he had ADHD. If it was something else, but nothing like, nothing severe that you could visibly see.”

Without an IEP, without being able to see his disability, Lisa had so many questions and no answers about how to help Sam. She knew her role was to make a difference; she just didn’t know how. Lisa believed there was a stigma in high school if you have a disability. She thought that was probably why Sam never sought out the help he needed. “And that’s another thing like if they don’t say, how do you know? How as a teacher do you know? You can ask a million times, do you understand me, do you get this, and then when it comes time, they don’t, they don’t understand, they just don’t want to ask.”

In the end, nothing changed. Sam still didn’t ask for help, he didn’t do his bell work, and Lisa never found out exactly what that little star next to his name on the roll meant. “And I felt like I let him down because I’m the teacher and how do I not know? But I really didn’t know, and he never came to me.”
Prominent Theoretical Propositions Evident in Lisa’s Story

Lisa’s story contains evidence of three indicators of two different theoretical propositions. On the LAS Lisa did report having a perspective transformation toward students with disabilities; her story shows that shift occur. The following indicators of both transformative learning and perspective transformation are most prominent in Lisa’s story.

Table 46

Prominent Theoretical Propositions Evident in Lisa’s Story

<table>
<thead>
<tr>
<th>Proposition Indicator</th>
<th>Summary of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers who experience transformative learning experience a disorienting</td>
<td>Lisa believed that she would be able to see student’s disability and see that student make progress to gauge her success as a teacher. During her internship, she couldn’t tell who had a disability. No one told her. She didn’t see progress. She questioned her ability and her role.</td>
</tr>
<tr>
<td>dilemma which causes them to question the status quo (TL).</td>
<td></td>
</tr>
<tr>
<td>Preservice teachers who experience transformative learning often engage in critical</td>
<td>Lisa constantly asked herself why students didn’t come to her; why no one told her what they needed; how could she know if no one told her?</td>
</tr>
<tr>
<td>reflection of their experiences (TL).</td>
<td></td>
</tr>
<tr>
<td>Preservice teachers may reference an outside influence, such as a person, that</td>
<td>Lisa’s interaction with Sam triggered a change in her perspective. She now realized that she needed to be more active to find out what was needed.</td>
</tr>
<tr>
<td>triggered their change in perspective (PT).</td>
<td></td>
</tr>
</tbody>
</table>

Although on the LAS, Lisa originally indicated that she did have a perspective transformation due to the learning experiences designed by her professors during teacher preparation, her story shows evidence of something or someone outside of her formal preparation that triggered her transformation. Her story supports that PT2 index as the most prominent theoretical propositions evident in her story reflected both transformative learning and perspective transformation with an outside trigger. Lisa’s outside triggers...
came in the form of people—a student with an unidentified disability in her classroom.

This evidence reclassifies her as a PT2.

**Kelly’s Story Re-Storied**

<table>
<thead>
<tr>
<th>Participant:</th>
<th>Kelly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at time of interview:</td>
<td>21-24</td>
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<tr>
<td>Marital Status:</td>
<td>Single</td>
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<td>Major:</td>
<td>Elementary</td>
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<td>PT Index:</td>
<td>3</td>
</tr>
<tr>
<td>Materials used for re-storying:</td>
<td>(1) 45 minute interview; personal narrative; teaching philosophy</td>
</tr>
<tr>
<td>Place of interview:</td>
<td>via SKYPE</td>
</tr>
</tbody>
</table>

Kelly came into her final internship experience with high hopes of being able to meet the needs of any student she came into contact with. Her strong belief that you become an educator to make a difference in the lives of your students is what determines her steps, but is also what caused her to be disoriented when faced with a cooperating teacher who did not seem to share that belief. Kelly’s preparation experiences at the university included working alongside special education majors and she credits that experience as being especially meaningful to her. She saw what was possible. She learned to always be on the lookout for what might work. She discovered that she needed to be prepared to meet the needs of any student, not just some. It was her responsibility to know what her students needed and to find a way to get them what they needed—whatever it takes.

Kelly wasn’t sure what to make of her placement in a 5th grade inclusive classroom, but she concluded that it had to be for a reason. With more than 45 students,
two general education cooperating teachers and one special education teacher, there were a lot of bodies in that room. Believing in the adage that many hands make light work, Kelly felt confident that they were prepared to work with all of their students and no one would fall through the cracks. She conferenced regularly with the special education teacher about what strategies might work with this child or that one. Most of the students in their care fell under the label of ADHD and were “manageable.” Everything seemed to be going well. Until Ben.

Ben was a highly intelligent 5th grade boy who also had been labeled by the school system as EBD (emotional behavioral disorder). Ben could not or would not participate with the rest of the class on the same material or at the same pace. Often he was pulled out of the classroom for a variety of special services, but when he was there Kelly believes very little learning was going on. The “strategy” of choice for Ben was to pull him alone to the back of the classroom and work with him one-on-one. However, he often caused so many classroom disruptions and behavior problems that the teachers just “gave him breaks” just to keep him calm. Kelly knew that between the “breaks” and the times he was pulled from the classroom, Ben wasn’t learning anything. She wondered what his parents thought of this. Previously Kelly experienced a parent whose child was in that same class who insisted that the required accommodations were made for him, but that he was also participating in every classroom activity “like all the other kids.” The teachers bent over backwards to appease these parents. Ben’s parents were silent. Kelly knew that how they were addressing his needs were more for the teachers and less for him.
Ben became her helper. Her job, as it was described to her by one of her cooperating teachers, was to keep him busy and out of the way. She put him on the computer, had him run errands—anything to get him out of the regular class. And it made her uncomfortable.

“I didn’t know what Ben really needed,” she explained. “If I knew, then I could find out what I could do to really work with him—one on one. Whatever it took.”

Kelly’s discomfort finally bubbled over into conversations with her cooperating teachers. She confided in the special education teacher who seemed to have a handle on different strategies for different students. She sought her advice—and was shocked at what she found instead.

“There is really no hope for this child. He will be one of those students who will drop out of school,” she said matter-of-factly.

Kelly believed from the onset that her cooperating teachers were the ones from whom she would learn the most. More than anything she could learn in her coursework, the experiences she had with cooperating teachers would be the most illuminating, the most meaningful.

“The cooperating teacher is the one that help you decide how to use it [strategy] or whether it’s appropriate,” Kelly explained.

But Kelly, now completely disoriented, had a dilemma. How could she follow the strategies outlined for her by this cooperating teacher if she completely ignored the learning needs of this child? How could she continue what she considered poor teaching when she knew there were other things she could do to help? And how could she do this without jeopardizing her current position?
Kelly confronted the special education teacher.

“...I started talking about how you never know how well a student might do. I talked about the all the things I saw and how I believed he might be gifted. The conversation was not an easy one to have, but I found that I want to be the voice for the student during that time. This took a lot of nerve for me because I do not like confrontation, and I was nervous on how it reflects in my internship. The conversation remained on a professional level, but the content created a lot of tension between me and the special education teacher for the reminder of my internship; it made me feel good for standing up, not only for my beliefs, but for the student, in terms of being his voice.”

That was a turning point for Kelly. She acted on her convictions and tried on the role of “teacher.” As much as she hoped this difficult conversation might change the special education teacher’s perspective toward Ben; she rested in the knowledge that she had changed. Standing up for a child meant more than adhering to labels or the status quo. She had gained the confidence not only to find ways to meet Ben’s needs, but to stand up for her own convictions.

**Prominent Theoretical Propositions Evident in Kelly’s Story**

Kelly’s story contains evidence of three indicators of two different theoretical propositions. On the LAS Kelly did report having a perspective transformation toward students with disabilities; her story shows that shift occur. The following indicators of both transformative learning and perspective transformation are most prominent in Kelly’s story.
Table 47

Prominent Theoretical Propositions Evident in Kelly’s Story

<table>
<thead>
<tr>
<th>Proposition Indicator</th>
<th>Summary of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice teachers who experience transformative learning experience a disorienting dilemma which causes them to question the status quo (TL).</td>
<td>Kelly thought that when it comes to working with students with disabilities, her cooperating teacher would be the best guide to show her how to work with them. However, her cooperating teacher blatantly disregarded the needs of one student and told her there was no hope for this child.</td>
</tr>
<tr>
<td>Preservice teachers who experience transformative learning often plan to or act differently in response to their experiences (TL).</td>
<td>Kelly, after careful consideration, chose to stand up for the needs of this student and confronted the cooperating teacher. She acted on her convictions and advocated for the student.</td>
</tr>
<tr>
<td>Preservice teachers may reference an activity, text, and/or experience from coursework that triggered their change in perspective (PT).</td>
<td>Kelly referenced what she learned in her coursework working alongside special education majors as being especially meaningful to her decision-making.</td>
</tr>
</tbody>
</table>

On the LAS, Kelly originally indicated that she did have a perspective transformation due to the learning experiences designed by her professors during teacher preparation. Her story supports this original report. Her story shows the most prominent theoretical propositions evident in her story reflected both transformative learning and perspective transformation due to her formal teacher preparation experiences. Kelly’s triggers came in the form of her coursework and experiences working alongside special education majors.
CHAPTER FIVE:
DISCUSSION

Using a sequential mixed methods design, this study examined the perspective transformations of preservice teachers while enrolled in their teacher preparation programs. This chapter is organized to discuss a summary of the findings, the overall significance of the theoretical propositions guiding this study, and the resulting recommendations and implications for teacher education. In order to situate this discussion within the context of perceptions, it’s important to understand that the study of teacher candidates’ perspectives toward working with students with disabilities in inclusive classroom settings has been consistently explored over the years (Shade & Stewart, 2001). These findings contribute to the literature within both teacher education and transformative learning.

Summary of Findings

The purpose of this study was to determine to what extent, if any, the learning experiences designed for teacher candidates during their preparation were perceived by candidates as contributing to their perspective transformations and thereby their professional dispositions. The focus was narrowed to the perspective transformations of general education teacher candidates toward students with disabilities in inclusive classroom settings. The goal of this study was to answer the following research questions:
1. With regard to inclusion of students with disabilities, which, if any types of perspective transformations, as measured by the Learning Activities Survey (LAS), do elementary and secondary preservice teachers experience during their preparation?

2. To what extent, if any, are the perceived dispositions of preservice teachers affected by their teacher preparation experiences?

3. To what extent, if any, do preservice teachers perceive they’ve had a perspective transformation toward inclusion of students with disabilities during their preparation?

4. What learning experiences, if any, do preservice teachers identify as contributing to transformative learning during their preparation?

In addressing RQ1, as to whether and what types of perspective transformations elementary and secondary preservice teachers had about inclusion of students with disabilities during their preparation as measured by the LAS, the conducted research revealed that out of 59 teacher candidates surveyed, 25% indicated experiencing transformative learning during their teacher preparation. There were no significant differences between elementary and secondary majors. Although the LAS was used in previous studies to detect perspective transformations, few studies have focused on this particular population of preservice teachers. Glisczinski (2007) also studied the perspective transformations of preservice teachers during their preparation. He found that 35% reported having a transformative experience during their preparation (54 out of 153 surveyed). Other studies that used the LAS to detect perspective transformations offer a
wide range of results. In a study that focused on the learning experiences of Adult ESL students, King (2000) found that 68% had a perspective transformation.

Although it appears that only 25% of those surveyed using the LAS (Preservice Teacher format) had a perspective transformation, this percentage may not be accurate. Analysis of qualitative data gathered through follow-up interviews and participant narratives of the six (6) case study participants found that even those who indicated they did not have a perspective transformation on the LAS did in fact experience transformative learning. Since the two case study participants who were originally categorized as PT1 by the LAS were changed to PT2 during the case study phase of this study, a case can be made that had some of the 75% of those surveyed using the LAS that were categorized as PT1 might also change to PT2 when additional follow-up interviews and an analysis of personal narratives are performed. It should also be noted that the LAS was given prior to when preservice teachers officially had full teaching responsibility during their internships and the additional case study activities were completed following their internships.

In addressing RQ2, as to whether and to what extent the dispositions of preservice teachers were affected by their teacher preparation experiences, conclusions were drawn based on data collected and analyzed from the Professional Commitments & Scholarly Dispositions Self-Assessment used by the teacher preparation program as well as qualitative evidence drawn from interview transcripts and participant narratives. This mixed approach provided convergence supporting the theoretical propositions connected to this research question. When both the elementary and secondary preservice data were combined under PT index, it appears that those who did not perceive they had
experienced a perspective transformation had less evidence of change in dispositions than either the PT2 or PT3.

As previously stated in chapter four (4), those who perceived that they did not experience a perspective transformation only showed 13% of the desired dispositions as outlined by the teacher preparation program (via the Professional Commitments & Scholarly Dispositions Self-Assessment). Respectively, those categorized as PT2 showed approximately 31% of the desired dispositions and PT3 showed approximately 56% of the desired dispositions. When the quantitative and qualitative data are combined, the overall pattern of evidence indicates that all of the case study participants showed at least a mild change in dispositions during their preparation. However, it should be stated that the nature of this finding may not offer teacher educators enough evidence to determine whether their preparation programs support the development of desirable dispositions. There were no significant differences among participants and therefore it is difficult to determine if the degree of the dispositional change was practically significant.

Since the fidelity of the use of the Professional Commitments & Scholarly Dispositions Self-Assessment could not be determined, a rival explanation for these findings might be that the instrument used to detect dispositions was not sensitive enough within this context. Although the pattern codes used to analyze the qualitative evidence were developed from the dispositions cited in the self-assessment, this corroborative evidence only supports the limited set of dispositions as outlined in the self-assessment.

Preservice teachers’ perceptions of their own dispositions in this study fall into two categories: perceptions of self as identified and perceptions of others as able (Wasicsko, 2007). The dispositional evidence offered by this study, as it applies to working with
students with disabilities in inclusive classroom settings, provides insight into participants’ perceptions of their role and responsibilities in this context. On an individual basis teacher educators can determine the presence or absence of desired dispositions. Although the use of this particular assessment of dispositions was not intended for admission criteria, the intent to use it at three points during teacher preparation suggests the desire to use it for either gate-keeping purposes to move to another phase of teacher preparation or as a developmental tool. Use of this assessment in conjunction with personal narratives provides highly valid information that can be used for developmental purposes.

Other dispositional models used by researchers to assess teacher candidate dispositions have been limited to the ever-controversial admissions decision (Diez & Raths, 2007). Implementing a model that focuses on teacher candidates’ own perceptions of their dispositions enables them to make a more accurate self-reflection about their development throughout teacher preparation. Acknowledgement and evidence to support whether and to what extent they are developing the desired dispositions may help them to make good decisions about career fit. The self-assessing and self-selecting process works in tandem when teacher educators enter into discourse with preservice teachers about their dispositional development (Wasicsko, 2007).

In addressing RQ3, as to what extent preservice teachers had a perspective transformation toward students with disabilities in inclusive classroom settings, conclusions were drawn based on the findings from case study participants’ interview transcripts, personal narratives and teaching philosophies. Based on pattern matching, it appears that all participants, regardless of PT index, showed the extent to which they had
a perspective transformation. However, there were no significant patterns according to 
either major or PT index. For example, although Tom (SEC PT1) did not initially report 
having a perspective transformation according to the LAS, he did describe a perspective 
transformation during his interview. He was then re-classified as a PT2. Even as such 
Tom only showed “mild” support for the theoretical proposition of perspective 
transformation toward students with disabilities. In Tom’s case, his perspective 
transformation was considered negative qualitatively. Directionality was not statistically 
determined in this study, so future studies might focus on the directionality of the 
perspective transformations experienced by participants.

Four out of the six case study participants had a negative perspective transformation. 
That is, the directionality of their perspective transformation shifted from positive to less 
than positive following their final internship experiences. Although in answer to the 
research question we can say that each participant did, in fact, have a mild, moderate or 
strong perspective transformation toward students with disabilities, the findings also 
suggest that a deeper analysis into the directionality of that transformation may be more 
relevant to teacher educators in this context. Preservice teachers’ perceptions of this shift 
may indicate they felt less confident to work with students with disabilities or that they 
realized they were not as prepared to meet student needs as they first thought or that 
working in an inclusive setting was more complicated than they initially believed. Further 
research into understanding the nuances surrounding the directionality of a perspective 
transformation needs to occur.

In addressing RQ4, as to what kinds of learning experiences preservice teachers 
reference as contributing to their transformative experiences during preparation,
conclusions were drawn from data collected from the LAS and data collected from interview transcripts, personal narratives and participants’ teaching philosophies. Pattern matching suggests moderate to strong support for the impact of particular learning experiences during preparation as identified by participants. There were no significant patterns to this evidence across PT index or major, although, in general, those who indicated that they had a perspective transformation (PT2 and PT3) showed stronger support for the impact of learning experiences than those who did not (PT1).

The types of learning experiences referenced most often by participants as meaningful to them during their perspective transformations fell into three categories: class-wide activities, group activities, and personal learning activities. Experiences considered “meaningful” by participants had one theme in common; they were active and supported. For example Lisa (SEC PT3) offered insight into what learning experiences were meaningful to her.

I would have loved to have more experience like I didn’t teach by myself until Fall of 2010. I could do more if I had more experience, if I had more time. I mean even if it was to go into the school today and teach one lesson, you know, one class, it could have helped.

I think the only way to get better at what you are doing is to receive feedback. I’ve said this before, with the College of Education, they could have given me a textbook on anything, like all the theorists and everything you need to know at the beginning when I first got in, and I would have never had to buy another textbook throughout the semester.
And you hear this a lot from other people - I really just need more experience and that’s the thing - like being able to do it and then reflecting on it for me and getting feedback. (Lisa, PT3)

These findings support previous studies that considered the impact of learning experiences on perspective transformations (King, 2009). The data indicate that active learning activities such as class activities, group activities, and reflective writing and discussion prominently contribute to transformational learning. This is of interest since active learning has been traditionally used with adult learners as a highly valued practice (Bonwell & Eison, 1991). Seventy-five percent of the participants in this study were under 25 years of age with the majority 21 or under. In practice, teacher educators can evaluate the learning experiences they design during preparation to see if they employ active learning methods. Through action research teacher educators can determine which of these learning activities best facilitate a change in perspective for teacher candidates during their preparation.

In answering these questions it was the goal of the researcher to first determine if elementary and secondary preservice teachers experienced perspective transformations toward students with disabilities during their preparation. It was also her goal to contribute to the existing literature about developing desirable dispositions in preservice teachers, as well as that of transformative learning contexts. In addition, and of special interest, was the goal to assist teacher educators interested in designing learning experiences that may contribute to preservice teachers’ transformative learning.
Significance of Theoretical Propositions

Since previous studies have connected teacher dispositions and perspectives with their perceived efficacy to work with students with disabilities, an empirical focus on teacher candidate perceptions about their preparation experiences illuminates areas for improvement during teacher preparation. Preparing teacher candidates to teach students with disabilities in the general education classroom (i.e., inclusion) has become a challenging endeavor for teacher educators and, as such, any preparation experiences should be continually evaluated for their impact on candidate perspectives and dispositions.

The use of maximum variation theoretical sampling in this study provided information from participants who exhibit significant differences on important dimensions of diversity. Participants who were elementary and secondary education majors and who were categorized by the LAS as PT1, PT2, or PT3 offered these dimensions of diversity. The intent was to generalize to theory and the findings, as presented in chapter four, offer adequate evidence for that generalization. The cases presented represented the ways in which teacher candidates made meaning of their perspective transformations (i.e., dilemmas surrounding their interactions with students with disabilities in inclusive classroom settings).

Transformative Learning

Applying transformative learning theory to the problem of developing dispositions in teacher candidates toward inclusion taps into the heart of the problem of the struggle to develop teachers who are able to make a critical assessment of their own assumptions and incorporate this transformation into their professional practice.
The four quadrants used in this study to organize the presence and process of transformative learning offer a compelling structure of participants’ experiences.

Figure 11. Respondent experiences among transformative learning quadrants

Regardless of whether case study participants indicated they had a transformative experience on the LAS, qualitative evidence suggests that they all experienced a disorienting dilemma. For example, Tom, who was initially categorized as a PT1 by the LAS, appeared to go through a transformative process during his final internship. His experience was not unlike his case study peers who indicated at the onset that they did experience transformative learning (i.e., PT2 and PT3). Tom’s disorienting dilemma, as described in his own words during the interview, came as a result of realizing that his beliefs about his role and the student’s role in the learning process were not static, but
symbiotic. Tom believed that even students with disabilities “need to be taught” and when he met Jon, he discovered that although Jon needed to be taught, he didn’t want to be taught. This experience and the accompanying phases of transformative learning that Tom went through indicated a dispositional shift.

Tom’s disposition toward students with disabilities prior to his interaction with Jon during his final internship could be described as self-confident and positive. Unfortunately, after his interaction with Jon, Tom’s perspective had changed to one of apathy, almost defeatist.

The transformative process does not ensure a positive or desirable outcome. In fact, the process itself enables researchers to describe the experiences that learners may have had as they examined (1) previously unquestioned assumptions, (2) tried out new strategies, (3) views and approaches, and (4) began to finally shift to a new place in their understanding of what they believed or assumed about themselves and others in their world (King, 2009).

Although all of the case study participants experienced transformative learning, four (4) out of the six (6) changed from a positive, self-efficacious perspective to working with students with disabilities in inclusive settings to a more negative, less efficacious perspective. Jessica (ELE PT1) described this as “not matching her reality.” Each participant either acted or made a decision to act differently as a result of their experiences. The transformative process, with its successive phases, led to this natural next step of transitioning to a significantly new place in their understanding.

The full cycle of transformative learning results in a perspective transformation, and this is where teacher candidates were able to give voice to their own internal debates
about their values, beliefs and assumptions about teaching students with disabilities in inclusive classroom settings. For better and for worse, transformation had taken place and it was exciting to hear teacher candidates talk about it.

Kelly (ELE PT3) was conflicted over her beliefs about the role of influence her cooperating teacher had on how she, as the intern, should and could work with students with disabilities. Kelly had a specific turning point that demonstrated her transformation when she had a difficult conversation with her cooperating teacher about the needs of one student in particular. Kelly gained confidence in her role as teacher in this circumstance. Kelly’s reflection on the action she took revealed her new found confidence and comfort in her role as teacher.

The conversation remained on a professional level, but the content created a lot of tension between me and the special education teacher for the reminder of my internship, but it made me feel good for standing up not only for my beliefs but for the student, in terms of being his voice. I do not know if anything changed for this student or if the special education teacher got anything out of our conversation. I was proud to find the nerve to stand for something in a student that another teacher did not see. I can only hope that she realizes that it is important not to label someone; it’s like the old saying never judge a book by its cover. (Kelly, interview transcript)

The learning experiences and interactions referenced by participants seriously challenged teacher candidates to assess their perspectives and then found themselves subsequently changed by those experiences (Mezirow, 1991). Lynn (ELE PT2)
discovered at the end of her experience that she no longer believed inclusion was the best instructional setting for all students with disabilities. The dichotomous beliefs Lynn professed before and after the transformative experience illustrate this profound change.

- **Prior to Transformative Experience:** I thought that inclusion sounded awesome to me and that I felt that kids with disabilities should be able to be included in general education classrooms; there’s no reason why they should be ostracized, you know, in their own wing somewhere and I thought that would be an excellent idea.

- **Following Transformative Experience:** I think that it’s a very difficult, if not impossible task for teachers to meet the needs of students with disabilities in their classroom as well as all the other unique students. I want to say inclusion is wonderful in theory, it sounds perfect, but messy in its implication and difficult to really be effective for the students.

The findings of this study consistently show that these teacher candidates developed dispositions that promoted critical awareness, decision-making, and self-authoring as the theoretical lens of transformative learning magnifies (Gliscziski, 2007). Since teacher educators seek to design learning experiences for candidates that transform their knowledge, skills and dispositions to that of professional teachers, the emphasis on the conditions surrounding whether or not these teacher candidates had transformative experiences during their preparation is critical.

Although the perspective transformations of these candidates did not follow a pattern according to their program (i.e., elementary or secondary education major), they were evident nonetheless. Transformative learning was triggered in all six (6) participants
by interactions with students and/or cooperating teachers during their final internships. This common experience (or trigger) offers teacher educators insight into the extent to which those experiences they do not have direct control over impact teacher candidates. Developing, examining, and then re-developing course content and learning activities in light of the strength of these triggers can focus our teacher preparation efforts on learning that will be perceived as meaningful and impactful for teacher candidates. As candidates are always in a state of becoming (Rodgers & Scott, 2008), teacher candidates’ feedback about the perceptions of their own experiences can guide formative evaluation about their development.

Dispositions

The theoretical model guiding this study shares underlying assumptions with dispositional definitions promoted by Diez and Raths (2007) that are constructivist-developmental in their approach. These assumptions are aligned without difficulty to the transformative learning process.

- Meaning is constructed
- An emphasis on understanding how individuals make meaning from their experiences
- Development and learning occur as people interact with their environments
- Construction and reconstruction of meaning occurs through assimilation and accommodation and affective dissonance (Diez & Raths, 2007).

One of the questions plaguing teacher education has been Can teacher preparation effect a change in teacher candidate dispositions (Sharma, Forlin, & Loreman, 2008; McHatton & Daniel, 2008)? The findings in this study suggest that as a part of the transformative
learning process and in concert with the theoretical propositions put forth, preservice teachers’ dispositions may be impacted as a result of their teacher preparation experiences. Collaborative evidence from aligning the desired dispositions included on the *Professional Commitments & Scholarly Dispositions Self-Assessment* and the theoretical propositions of Transformative Learning and Perspective Transformation provide a case of dispositional change in teacher candidates.

The strength of the pattern matching reported in these six (6) teacher candidates ranges from mild to strong. Although those that were initially categorized as PT1 by the LAS exhibited a less evidence of the desired dispositions as outlined by the *Professional Commitments & Scholarly Dispositions Self-Assessment*, there was at least some evidence. This may be due in part to the fact that both of these participants shifted from a positive to a less positive disposition toward working with students with disabilities as a result of their transformative experience. This finding, in particular, is more illuminating than the dispositional evidence discovered for those who were categorized as either PT2 or PT3.

It is important to note that a number of the dispositions outlined in the *Professional Commitments and Scholarly Dispositions Self-Assessment* reflected actions that may be construed as efficacious. As such the pattern codes devised from these dispositions may indicate the presence or absence of a sense of self-efficacy in preservice teachers to work with students with disabilities in inclusive classroom setting. Future research may want to focus on investigating the self-efficacy perceived by preservice teachers in this context.
Attention has not been previously paid to those individuals who do not profess to having had a perspective transformation in the transformative learning literature. For those who are interested in dispositional development of teacher candidates, examination of the formative nature of dispositions must include those who do not progress as we expect. For example, Tom (SEC PT1) provided no evidence for seven (7) of the 14 dispositions desired by his teacher preparation program. The dispositions he did not show evidence following his transformative experience were:

- Encourage students to reach their full potential
- Encourage the exploration of diverse points of view
- Protect the rights of students
- Use a variety of strategies to support learning for all students
- Engage in self-evaluation of my professional growth
- Learn about innovations in my field
- Set professional goals

Each of these dispositions is highly valued by this particular teacher preparation program since they are listed on the self-assessment survey and inform the role and responsibilities of the teacher candidate. The fact that Tom did not show evidence for these particular dispositions may indicate that he has not embraced his role and responsibilities when it comes to working with students with disabilities in inclusive classroom settings. In order to offer a more complete interpretation of this dispositional evidence it would be prudent to sample this evidence at more points in time throughout the scope of teacher preparation.
Conversely, Lisa (SEC PT3) who had a profound transformative experience that resulted in a positive dispositional shift. Her original assessment of her role and responsibilities toward students with disabilities was that of a reactor to the needs of her students. Following her perspective transformation, she acted as that of a pursuer in search of the needs of her students. Lisa showed strong evidence of every dispositional indicator with the highest as follows:

- Use a variety of strategies to support learning for all students
- Engage in self-evaluation and critique of my performance
- Reflect critically on my actions
- Use past experiences to inform my decisions

Just as the Tom’s dispositional evidence suggests that he had not yet embraced his role and responsibilities toward working with students with disabilities, Lisa’s dispositional evidence suggests the she has embraced her role and responsibilities. Since the desirable dispositions identified by this particular university teacher preparation program are connected to actions, this suggests that those who show more evidence of them are more apt to act differently toward students as a result. The goal has always been to help teacher candidates and teachers to not just think differently, but to put what they learn into practice (enaction). Transformation of perspectives is one way in which learning and the enactment of new actions occurs (Mezirow et al., 2009).

The discussion of dispositions centers on the experiences of teacher candidates as they chronicle their own growth situated in their own particular preparation contexts. The voices of these six (6) participants clearly articulated whether and to what extent certain learning experiences had transformative power for them.
Impact of Learning Experiences

Previously, learning experiences within teacher preparation have not been unpacked to determine what types of activities contribute to candidates’ perspective transformations. This study has proposed that learning experiences (e.g., activities and interactions within and outside of coursework) mediate the perspective transformations experienced by teacher candidates during their preparation. Figure 1 reminds the reader of this relationship.

Learning experiences that support understanding and effective action (i.e., transformative learning) are more valuable to teacher educator and more meaningful to teacher candidates (Good & Brophy, 1995; Hammerness, Darling-Hammond, Bransford, Berliner, Cochran-Smith, McDonald, & Zeichner, 2005). Since the theoretical propositions guiding this study considered the impact of these learning experiences on teacher candidates’ perspective transformation, the findings outlined in chapter 4 offer both confirmation and insight into their influence.

Using both the responses on the LAS as well as the qualitative findings within the case study participants’ narratives and interview transcripts, learning experiences were identified and grouped as categories for analysis. These categories offered a way to better
conceptualize and generalize patterns in order to draw conclusions (King, 2009). The learning experiences identified came solely from those participants who reported having a perspective transformation. The categories used to group the learning experiences identified by participants included class-wide activities, group activities, and personal learning activities.

Although this study took place at the end of participants’ final student teaching experience (i.e., final internship), they had an opportunity to retrospectively reflect on what was a meaningful learning experience to them throughout the course of their teacher preparation. Not surprisingly all six case study participants identified field experiences as their most meaningful learning experience. The top five (5) most meaningful learning experiences identified include:

- Field experiences
- Personal reflection
- Class activities/exercises
- Class/group projects
- Deep, concentrated thought

Pattern matching revealed that those who indicated that they had a perspective transformation (PT2 and PT3) also reported that that these learning experiences were meaningful to them more frequently than those who did not indicate they had a perspective transformation (PT1). This is not surprising, however, the difference between the two groups was not significant and all participants showed at least moderate support for the impact of learning experiences on their transformative experience.
This theoretical proposition was supported by the expressed experiences of the participants. The conceptual model presented earlier in this chapter is also supported as a result. Participants referenced different learning experiences, but the scope of this study did not include whether the impact of these experiences was perceived by participants as positive or negative contributions to their perspective transformations. Future studies might focus solely on the nature of the learning experiences referenced by participants for their power to trigger perspective transformations.

The participants indicated that these experiences of perspective transformation were facilitated primarily by their field experiences and that a habit of reflection helped them to make meaning of those experiences. It is interesting to note that these learning experiences were not purposefully designed by teacher educators; they fell outside the direct control of the structured teacher preparation program. A case could be made that in the absence of overwhelming evidence to support learning experiences that teacher educators designed effected “qualitative changes in the learner” (Moore, 1994, p. 60) that these experiences are not considered as meaningful by teacher candidates. These results offer teacher educators insight into how they might evaluate their own teacher preparation practices. Implications for teacher education and action research follows at the end of this chapter.

**Recommendations**

The focus of this study was built partially on the recommendations made by a previous study of perspective transformations of preservice teachers (Glisczinski, 2007). Previous studies have not explored the experiences of participants who indicated they had not had a perspective transformation. This study did so. As such, it adds to the literature
on transformative learning. In addition, in response to the findings of previous studies (Glisczinski, 2007; Herbers, 1998; King, 2009) the use of a sequential mixed methods approach was employed instead of concurrent, strictly quantitative, or strictly qualitative. In addition, it is important to remind researchers not to rely on one instrument to collect data about the complex experiences of preservice teachers.

Recommendations for future research as a result of this present study include continued exploration into the use of active learning experiences for preservice teachers in traditional teacher preparation programs as possible triggers to perspective transformation. The tenets of active learning can be applied to traditional college age learners and should be explored for their transformative potential. In addition, the use of the Learning Activities Survey (LAS) with preservice teachers should be continued and refined to include the consideration of the timing of its use, the context in which it is used, and careful attention to those who self-identify that they did not have a transformative experience (PT1).

Second, with inclusion as the educational setting of choice for many students with disabilities, it is important to ascertain throughout teacher preparation whether and to what extent elementary and secondary teacher candidates have or are developing a positive perspective toward working with students with disabilities. A one point in time evaluation is not sufficient to determine the attitudes, abilities and efficacy of teacher candidates to work with students with disabilities. Although the data collection of this study acted somewhat as an exit interview, they were not adequate to reveal what happens during teacher preparation. Both current and retrospective accounts would be more meaningful to teacher educators. In addition, as we consider the preparation of
elementary and secondary preservice teachers to work with students with disabilities in inclusive settings, it would be prudent to look closely at the impact the teacher preparation experiences designed for them impact their perspectives. Does it mean they need additional coursework? Does it mean they need more time in the field with more effective cooperating teachers?

Finally, how and for what purposes dispositions are assessed during teacher preparation should be clearly aligned to the experiences designed for teacher candidates. Arbitrary assessment without fidelity offers little, if any, insight into the dispositional development of candidates. If desired dispositions are truly valued by the institution and the community in which beginning teachers will eventually serve, an exploration of the impact teacher preparation has on dispositions should become a priority of educational researchers and practitioners through action research.

**Implications**

This research confirms that perspective transformation provides an appropriate theoretical lens through which to view the preservice teacher’s experience during teacher preparation. It is evident that teacher candidates’ experience perspective transformations as they interact with cooperating teachers and students with disabilities. The participants also indicated that their transformative experiences were facilitated by learning activities that were active and reflective. Three major implications for this research are presented here: implications for teacher education, action research, and support.

**Teacher Education**

Teacher educators are charged with preparing teacher candidates with the knowledge, skills, and dispositions expected of professional teachers. Today’s climate
also includes a mandate to prepare teachers who are able to work successfully with diverse student populations. Students with disabilities are most often served within general education classrooms (e.g., inclusive classrooms) and general educators hold the primary instructional responsibility for these students. It is imperative that teacher educators reflect on the extent and nature of preservice teachers’ perspectives toward working with students with disabilities and design learning experiences that may facilitate a positive transformation. As a result of this study, teacher educators can be better equipped to identify those dispositions and perspectives they desire for their teacher candidates and are able to pinpoint which learning experiences use active learning and are therefore better facilitators of perspective transformation.

**Action Research**

Even though this study employed the use of case study as its approach, this approach is too cumbersome for the day-to-day practice of teacher educators seeking to understand the impact the learning experiences they design have on teacher candidates’ perspectives. Action research (McMillan, 1996), which investigates specific classroom problems, is a better choice for scholar/practitioners in this context. Specific use of the Learning Activities Survey (LAS) can be adapted for each teacher education program’s particular context and, as such, could be used effectively in action research. As the LAS was modified for this study and population, other institutions can modify the instrument to fit their goals and contexts. This would offer scholar/practitioners direct evidence about the needs of their programs and students.
Case Study

Although this particular case study method may be too cumbersome for the day to day use of teacher educators, it is appropriate and a recommended methodology for educational researchers. Yin’s case study method provides multiple sources of evidence that are contextually sensitive and build a more complete picture of what is happening during teacher preparation. In addition to the four sources of evidence used in this study, I would recommend adding observations of preservice teachers in the field. The more sources of evidence, the stronger the case.

Efficacy

The qualitative data collected and analyzed for this study revealed that the construct of efficacy amongst preservice teachers to work with students with disabilities was present. The knowledge about how to work with students and the confidence to work with students may or may not be related. Future studies may consider developing theoretical propositions surrounding efficacy and looking more closely at the connection of perspective transformation and efficacy in preservice teachers.

Support

Each case study participant in this study referenced support from someone as being crucial to their perspective transformation. Those identified most often included cooperating teachers, university professors, and other teacher candidates. Support came in the form of one-on-one interactions as well as written or oral feedback. The relationships built and sustained through teacher preparation support teacher candidates’ transformative learning. This suggests that a strong teacher preparation program supports teacher candidate development through trusting relationships. Implications for teacher
education include purposely providing this support and encouraging relationships through community building that go beyond the gaining of academic knowledge or skills. Building a community of practice within teacher preparation offers teacher candidates a environment that may facilitate transformative learning. In addition, it may be advisable to look more closely at the relationships between preservice teachers and their cooperating teachers since many of the participants in this study identified the influence of their cooperating teachers are being of paramount influence.

**Personal Reflection**

I think there were many lessons learned in this study. The quote at the beginning of this study describes the transformational experiences by study participants and myself. The transformation of an identity, adaptations of personal understandings and ideals to institutional realities, and deciding how to express one’s self in classroom activity were all tools used to frame the experiences of becoming a teacher. My own journey ran parallel to the participants in my study. Studying their experiences became transformative for me as well.

The formation and transformation of a professional identity became for me not an outcome to be measured, but a companion idea that provided coherence of the conceptual and empirical. Although identity formation began as one of the guiding theoretical propositions in this study, it became obvious as data were analyzed that it was the umbrella under which all the other propositions resided. I could not disentangle identity formation and transformation from the companion ideas of dispositions and perspective transformation. Instead I learned that identity formation and transformation is highly contextualized and a personal journey of every preservice teacher. It can only be captured
authentically through eyes of the teacher candidate and is a part of the learning process (Walkington, 2005).

My own identity as a scholar/practitioner went through its own transformative process. The participants’ expressions of their experiences surprised and often made me uncomfortable. I was disoriented. As I sifted through their interview transcripts and personal narratives I engaged in critical reflection of my experiences with them and ultimately decided that all was not lost. I reminded myself that they were still becoming and that if they had been open to transformative learning at this point in their development, there was a good chance they would be open to it again as they entered the field as a beginning teacher. This rational dialogue led me to act no longer as the gatekeeper or evaluator that I saw myself as initially, but as a storyteller who could shed light on the realities perceived by teacher candidates.

I also learned that my own personal understandings and ideals of institutional reality had driven many of the decisions made in this study. Specifically, I chose to collect data from the administrations of the Professional Commitments & Scholarly Dispositions Self-Assessment that the College of Education used to assess candidate dispositions. Although I knew that the administration of this instrument was “spotty” at best according to the assessment coordinators at the college, I had high hopes it would yield evidence to support the development of desirable dispositions in teacher candidates. I had to adapt my understanding of this practice to the institutional reality that this data cannot be relied on at this time for research purposes because it wasn’t implemented with fidelity.
The final lesson I learned centered on deciding how to express myself as a researcher in this activity (this study). I watched and listened as the participants I interviewed wrestled with how to express themselves during our time together and in the narrative I solicited from them. It was helpful that we did not know each other previously as the stories they were willing to tell would not be judged by me as a professor in their program. There was opportunity to build rapport, and engage in the interview behaviors of the roles incumbent upon us (i.e., interviewer and interviewee). The confines of this context allowed me to act as the researcher and not a peer or colleague. I learned that this format yielded the results I sought and that I was able to express my role as the researcher effectively.

The journey to becoming is just that, a journey. The participants in this case study were all on different points in their journey and as a teacher educator who seeks to facilitate that journey, I have learned that my role is to create experiences that may trigger their own transformative learning process, not dictate that their journey follows the same path as mine.
REFERENCES


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Research, 7(1), Art. 21, Retrieved from http://nbn-resolving.de/urn:nbn:de:0114-fqs0601211


Retrieved from http://www.dsq-sds.org


APPENDIX A

Invitation to Participate in Study – Learning Activities Survey
(Preservice Teachers Format)

TO: Undergraduate Students in Education Bachelor’s Program
FR: Victoria Caruana, M.Ed.
Department of Special Education

This Spring 2011, I am conducting a study in your program about how upper level college students learn. The program coordinators have allowed me to invite you to participate in this study. As an adult educator, I am interested in how adults learn new information and then understand it for themselves. Through this research, I hope to learn more about this process and how to help upper level college students enjoy success in their studies and how your learning experiences impacted your development as a preservice teacher.

Everyone who is a part of the study will be asked to answer a brief questionnaire concerning his or her experience in one of the courses chosen for this study. This should take about 15 minutes and will be conducted online. All responses will be confidential. At the end of the questionnaire, you will be asked whether you would be willing to participate in a brief follow-up interview. If so, you will be able to sign up. These interviews will assist me in correctly interpreting the survey results. The decision to
participate in this project will have no effect on your school performance or school records.

As an incentive to complete this survey, your name will be entered into a raffle to win a $50 Amazon.com gift card. In addition, if you are willing and invited to participate in the follow up interviews, you will receive a $20 Barnes & Noble gift card upon completion. Your name will then be entered into a raffle to win a NookColor® e-reader valued at $250.

I will be available to answer questions you may have about the study at (555) 555-5555. Our IRB/Office of Research can be contacted at (555) 555-5555 for questions concerning the rights of participants in the study. In addition, if you would like to know the results of this research you are also welcome to contact me.

Your consent to participate in this study is given when you take the survey online. Thank you for considering this research project.

You may access this survey at http://www.surveymonkey.com
APPENDIX B

The Learning Activities Survey (Preservice Teachers Format 2011)

Instructions: This survey helps us learn about the experiences of undergraduate students and their learning process. We believe that important things happen when people learn new things. Only with your help can we learn more about this. The survey only takes a short time to complete, and your responses will be confidential. Thank you for being part of this project; we greatly appreciate your cooperation.

1. During your teacher preparation, check off any statements that may apply.
   a. I had an experience that caused me to question the way I normally act.
   b. I had an experience that caused me to question my ideas about social roles (Examples of social roles include what a mother or father should do or how an adult child should act).
   c. As I questioned my ideas, I realized I still agree with my beliefs or role expectations.
   d. Or instead, as I questioned my ideas, I realized I still agree with my beliefs or role expectations.
   e. I realized that other people also questioned their beliefs.
   f. I thought about acting in a different way from my usual beliefs and roles.
   g. I felt uncomfortable with traditional social expectations.
   h. I tried out new roles so that I would become comfortable or confident in them.
   i. I tried to figure out a way to adopt these new ways of acting.
   j. I gathered the information I needed to adopt these new ways of acting.
   k. I began to think about the reactions and feedback from my new behavior.
   l. I took action and adopted these new ways of acting.
   m. I do not identify with any of the statements above.

2. Since you’ve been enrolled in your teacher preparation, do you believe you have experienced a time when you realized that your values, beliefs, opinions or expectations about teaching, students with disabilities, or inclusion had changed? If "yes," please continue the survey with question 3. If "no," please continue the survey with question 6.
   a. Yes
   b. No

4. Was it a person who influenced this change?
   a. Yes
   b. No
5. If "Yes," was it . . . (check all that apply)
   a. Another student's support
   b. Your classmates' support
   c. Your group's support (if group work)
   d. A challenge from your instructor
   e. Your instructor’s support
   f. Working with a cooperating teacher at a school
   g. Other
6. If "Other" please describe
7. Was it part of a class activity that influenced the change?
   a. Yes
   b. No
8. If "Yes," what was it? (check all that apply)
   a. Readings in a textbook
   b. Chapter questions in a book
   c. Supplemental reading or materials
   d. Class/group projects
   e. Verbally discussing your concerns
   f. Writing about your concerns
   g. Journal entries
   h. Self-assessment in the class
   i. Class activity/exercise
   j. Deep, concentrated thought
   k. Personal reflection
   l. Autoethnography or personal learning experience paper/project
   m. Non-traditional structure of the course
   n. Field experience
   o. Other
9. If "Other" please describe
10. Was it a significant change in your life that influenced the change?
    a. Yes
    b. No
11. If "Yes," what was it? (Check all that apply)
    a. Marriage
    b. Birth/adoption of a child
    c. Divorce/separation/break up
    d. Death of a loved one
    e. Illness of loved one
    f. Change of job
    g. Moving
    h. Immigration to a new country
    i. Loss of job
    j. Other
12. If "Other," please describe
13. Thinking back to when you first realized that your views or perspective had changed, what did program or the course materials in your classes have to do with the experience of change?
14. Would you characterize yourself as one who usually thinks back over previous decisions or past behavior?
   a. Yes
   b. No
15. Would you say that you frequently reflect upon the meaning of your studies for yourself personally?
   a. Yes
   b. No
16. Which of the following have been a part of your experience in this class? (Please check all that apply)
   a. Another student's support
   b. Your classmates' or cohort’s support
   c. Your group's support (if group work)
   d. Readings in the textbooks
   e. Class/group projects
   f. Writing about your concerns
   g. Journal entries
   h. Non-traditional structure of a particular course
   i. Deep, concentrated thought
   j. A challenge from your instructor
   k. Your instructor’s support
   l. Chapter questions in the textbooks
   m. Supplemental readings and materials
   n. Verbally discussing your concerns
   o. Self-assessment in the class
   p. Class activities/exercises
   q. Personal reflections
   r. Autoethnography or personal learning experience paper/project
   s. Field experiences
   t. Other
17. If ‘Other,’ please describe
18. Which of the following occurred while you have been enrolled in teacher preparation?
   a. Marriage
   b. Birth/adoption of a child
   c. Divorce/separation/break up
   d. Illness of a loved one
   e. Death of a loved one
   f. Change of job
   g. Moving
   h. Immigration to a new country
   i. Loss of job
19. If "Other," please describe
20. What is your sex?
   a. Male
   b. Female
21. What is your marital status?
   a. Single
   b. Married
   c. Partnered
   d. Divorce/separated
   e. Widowed
22. What is your race? How do you identify yourself?
   a. White, non-Hispanic
   b. Black, non-Hispanic
   c. Native American
   d. Asian or Pacific Islander
   e. Hispanic
   f. Bi-Racial
   g. Multi-Racial
   h. Other
23. If "Other," please identify
24. What is your current major?
   a. Education-Elementary
   b. Education-Secondary
   c. Education-Special Education
   d. Education-Early Childhood
   e. Education-Technology
   f. Non Education Major
25. If "Non Education Major," please specify
26. How many semesters have you been enrolled in your program?
27. What is your age?
   a. Below 21
   b. 21-24
   c. 25-29
   d. 30-39
   e. 40-49
   f. 50-59
   g. 60 or over
28. Please check if you took any of the following:
   a. EEX 4070 – Integrating Exceptional Students
   b. EEX 4742 – Narrative Perspectives on Exceptionality
   c. Collaborative Practicum
   d. None of the above
29. As a participant in this survey, you are also invited to take part in follow-up activities that will include a 30-45 minute interview, a written narrative, and a review of documents. This should take approximately 1-2 hours. Space is also
provided on this form to submit questions about the survey to the researcher. You will receive a $20 Barnes & Noble gift card if you are invited to participate and have a chance to win a NookColor® e-reader valued at $250.
   
a. Yes, I am willing to participate in follow-up activities regarding the educational experiences described in the survey.
   b. No, I would not like to participate in the follow-up activities.

30. If you answered “Yes,” you may be receiving a call from Vicki Caruana, Doctoral Candidate.
   Name: _______________________________________________________
   Email address: __________________________________________________
   Phone Number: ________________________________

   Thank you for completing this questionnaire!
APPENDIX C
Student ________________________________

Interviewer initials ________

Date ______________

LAS Follow-Up Interviews
(PT3, PT2)
Preservice Teachers 2011
See what the student might be able to further add or better explain about the original questions and then try to probe deeper. I expect that they might not have thought about these things very much, so they might come to an understanding and conclusions while talking with you.

1. Since you were enrolled in your teacher preparation program, in what way do you think any of your ideas or points of view have changed? (Your ideas about teaching, students with disabilities, diversity, or inclusion may be topics of possible change.) [Encourage the participant to describe this change of perspective.]

2. Some statements that could describe aspects of this change are listed here. Thinking about your experiences since being enrolled in your program, note which items describe the change.
   a. I had an experience that caused me to question the way I usually act.
   b. I had an experience that caused me to question my ideas about social roles. (Examples of social roles include what a teacher should do or how a mother or father should act.)
   c. As I questioned my ideas, I realized I no longer agreed with my previous beliefs or social behavior.
   d. Or instead, as I questioned my ideas, I realized I still agreed with my beliefs or social behavior.
   e. I realized that other people also questioned their beliefs.
   f. I thought about acting in a different way from my usual beliefs and roles.
   g. I felt uncomfortable with traditional social behavior.
   h. I tried out new roles so that I would become more comfortable or confident in them.
   i. I tried to figure out a way to adopt these new ways of acting.
j. I gathered the information I needed to adopt these new ways of acting.
k. I began to think about the reactions and feedback from my new behavior.
l. I took action and adopted these new ways of acting.
m. I do not identify with any of the statements above.

3. What did being enrolled in your program have to do with your ideas or views changing?

4. Is the change related to any of the following? If so, please describe how it relates.
   a. Thinking about teaching
      i. And/or how I will teach
   b. Thinking about learning
      i. And/or how I will learn
   c. Thinking about students with disabilities
      i. And/or how I will teach them
   d. Thinking about diversity
      i. And/or how I will respect it in my classroom
   e. Thinking about inclusion
      i. And/or how I will accept or reject it
   f. Thinking about relationships with students
   g. Thinking about classroom management

5. Did anything/anyone help or support you as you went through this change/s?

6. What kind of assistance/support would have been helpful as you went through (experienced) this change?

7. Did you have any other needs or concerns during this time?

8. Some possible contributors to such change were listed in this item. Please list those that were most significant in contributing to this experience. What could have triggered the change? (refer to instrument list and add any more and/or comments.)

9. What made you aware of the change in your perspective?

10. What will you do differently because of this change?

11. How do you feel about the change in perspective?

12. Do you have any additional comments?

Thank you for your participation in this research project.
LAS Follow-Up Interviews
(PT1)
Preservice Teachers 2011
See what the student might be able to further add or better explain about the original questions and then try to probe deeper. I expect that they might not have thought about these things very much, so they might come to an understanding and conclusions while talking with you.

1. As you remember the following learning experiences that were a part of your teacher preparation, did any of them hold more meaning for you than others? If so, which?
   a. another student’s support
   b. your classmates’ or cohort’s support
   c. your group’s support (if group work)
   d. readings in textbooks
   e. class/group projects
   f. writing about your concerns
   g. journal entries
   h. non-traditional structure of a particular course
   i. deep, concentrated thought
   j. a challenge from an instructor
   k. your instructor’s support
   l. chapter questions in a textbook
   m. supplemental readings and materials
   n. verbally discussing your opinions, ideas and/or concerns
   o. self-assessment in a class
   p. class activities/exercises
   q. personal reflections
   r. auto-ethnography or personal learning experience paper/project
   s. field experience
   t. other, please describe

2. Would you classify any of these learning experiences as “meaningful”?
3. How do you define a meaningful experience?
4. Tell me about a time during your preparation that you had a meaningful experience.
5. Is there anything else you want to tell me about your teacher preparation that you want me to know?

Thank you for your participation in this research project.
APPENDIX D

Informed Consent to Participate in Case Study
(Preservice Teachers Format)

Thank you for your willingness to participate in follow-up activities for this research study. The activities include (1) an interview that will take approximately 30 – 45 minutes; (2) a written narrative about your teacher preparation experience guided by a prompt provided to you; (3) permission for me to review documents relevant to your learning experiences (e.g., class assignments); and (4) permission for me to review the results of the dispositions surveys you have completed during your teacher preparation.

As previously stated, you will receive a $20 Barnes & Noble gift card after completing all the activities outlined above. Your name will then be entered to win a NookColor® e-reader valued at $250 which will be awarded and shipped to you free of charge at the completion of the research study. The decision to participate in this project will have no effect on your school performance or school records.

Your identity will be kept confidential throughout this study and only be used for communication purposes and to award the tangible incentives provided by the researcher for your participation. Any reporting of your experiences will use a pseudonym. No other identifying information will be provided in the research report. You will also have an opportunity to review the transcripts of your interview to ensure accuracy. All...
information and data collected from you or about you will be kept in a secure location electronically and only available to the researcher, Vicki Caruana, by use of a password.

I agree to participate in the follow-up case study research activities in the study investing adult learning experiences during teacher preparation.

Name

______________________________________________________________

Signature

______________________________________________________________

Date ________________________________
APPENDIX E

Narrative Prompts

PT 3 Prompt: Think of an experience when you realized that you suddenly understood an idea, a skill, or a concept you had been struggling with. It might be something related to a class that you took or a specific skill you were trying to perfect. For instance, you might think about trying to understand how to create a behavior intervention plan or how to differentiate instruction for diverse learners. Or you might consider trying to write a research paper and suddenly understanding how your APA format was affecting your success. Write a narrative that tells the story of your movement toward understanding. How did you finally come to understand? What changed your perceptions and gave you a new understanding? Your paper should help readers understand how you felt to struggle with the idea or skill and then to understand.

PT 2 Prompt: Think about an event in your life that seemed bad but turned out to be good. Maybe you got injured and while you were waiting for your broken leg to heal, you learned how to use a new software program on your computer. What makes the event change from bad to good may be something that you learned as a result, something that you did differently as a result, or something that happened that wouldn’t have occurred otherwise. Tell the story of the event that you experienced and help your readers understand how an event that seemed negative turned out to have valuable consequences.
**PT 1 Prompt:** Choose a time when you did something that took a lot of nerve; a time when you didn’t follow the crowd or a time when you stood up for your beliefs. Perhaps your friends were urging you to do something that you were uncomfortable with and you chose not to cave into peer pressure. Maybe you took a stance on a political issue that was important in your community, or one that wasn’t popular with those around you. Think about the details of the event and write a story that tells about what happened. Your narrative should show your readers why you decided to make a stand or try something that took nerve. Give specifics on the events, and share how you felt through the process as well as afterwards.
### APPENDIX F

**Pattern Matching Rating Sheets**

Table A1

*Transformative Learning Theory (how transformative learning is evident in the data)*

If a preservice teacher experiences transformative learning, it often begins with a disorienting dilemma to which that preservice teacher will have to respond. Transformative Learning Theory (TL) proposes several stages that individuals progress through following a disorienting dilemma.

<table>
<thead>
<tr>
<th>Parts of Proposition (Indicators):</th>
<th>Strong</th>
<th>Moderate</th>
<th>Mild</th>
<th>The data provides evidence that SUPPORTS the statement that fill in one part of proposition and the evidence is...</th>
<th>The data DOES NOT provide any evidence about the statement that fill in one part of proposition (NOTE: Mark this option only if there was NO evidence in the data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Preservice teachers who experience transformative learning experience a disorienting dilemma which causes them to question the status quo.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Preservice teachers who experience transformative learning often engage in critical reflection of their experiences.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Preservice teachers who experience transformative learning often engage in rational dialogue about their experiences.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Preservice teachers who experience transformative learning often plan to or act differently in response to their experiences.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table A2

Dispositions (how dispositions toward students with disabilities are evident in the data)

Preservice teachers’ emotional and behavioral changes towards persons with a disability could be achieved when information about disabilities (the cognitive component of attitudes) is provided, together with relating to practical experience (the behavioral component).

INSTRUCTIONS: Rate the following parts of the proposition. If data support or are against the statement, rate the evidence as strong, moderate, or mild by circling either +3, +2, +1, -3, -2, -1. If the data provide no evidence about the statement, then circle 0.

<table>
<thead>
<tr>
<th>Parts of Proposition (Indicators):</th>
<th>Strong</th>
<th>Moderate</th>
<th>Mild</th>
<th>The data DOES NOT provide any evidence about the statement that fill in one part of proposition (NOTE: Mark this option only if there was NO evidence in the data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Attitudes and dispositions of preservice teachers are often observable in the work they produce and in the way they interact with the experiences they encounter during their preparation.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
<td>(0)</td>
</tr>
<tr>
<td>b) Preservice teachers may engage in self-evaluation of their professional growth.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
<td>(0)</td>
</tr>
<tr>
<td>c) Preservice teachers may reflect critically on their own actions.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
<td>(0)</td>
</tr>
<tr>
<td>d) Preservice teachers may use past experiences to inform their decisions.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

Table A3

**Perspective Transformation toward Inclusion (how this perspective transformation is evident in the data)**

Preservice teachers may experience a perspective transformation toward students with disabilities in inclusive settings during their preparation or as a result of learning experiences they encounter.

INSTRUCTIONS: Rate the following parts of the proposition. If data support or are against the statement, rate the evidence as strong, moderate, or mild by circling either +3, +2, +1, -3, -2, -1. If the data provide no evidence about the statement, then circle 0.

<table>
<thead>
<tr>
<th>Parts of Proposition (Indicators):</th>
<th>Strong</th>
<th>Moderate</th>
<th>Mild</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Preservice teachers may reference an outside influence, such as a person, that triggered their change in perspective.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
</tr>
<tr>
<td>b) Preservice teachers may reference an activity, text, and/or experience from coursework that triggered their change in perspective.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
</tr>
<tr>
<td>c) Preservice teachers may reference a change in their life that influenced this change in perspective.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
</tr>
</tbody>
</table>

Preservice Teacher Identity Formation (how the formation and transformation of a professional identity is evident in the data)

Preservice teachers have an awareness of the normative behaviors and expectations of teachers and teaching. This is turn can act as challenges to the identity.

**INSTRUCTIONS:** Rate the following parts of the proposition. If data support or are against the statement, rate the evidence as strong, moderate, or mild by circling either +3, +2, +1, -3, -2, -1. If the data provide no evidence about the statement, then circle 0.

The data provide evidence that SUPPORTS the statement that fill in one part of proposition and the evidence is...

The data DOES NOT provide any evidence about the statement that fill in one part of proposition (NOTE: Mark this option only if there was NO evidence in the data)

<table>
<thead>
<tr>
<th>Parts of Proposition (Indicators):</th>
<th>Strong</th>
<th>Moderate</th>
<th>Mild</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Preservice teachers reflect on beliefs and understandings in light of new experiences.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
</tr>
<tr>
<td>b) Preservice teachers engage in discourse about their current roles and selves.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
</tr>
<tr>
<td>c) Contextual factors that impact preservice teachers’ identity are observable in their responses to their preparation.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
</tr>
<tr>
<td>d) Preservice teachers encounter dilemmas during their preparation that contribute to their identity transformations.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
</tr>
<tr>
<td>e) Preservice teachers are aware of the normative behaviors of teaching during their preparation and react to them during identity formation.</td>
<td>(+3)</td>
<td>(+2)</td>
<td>(+1)</td>
</tr>
</tbody>
</table>

**Table A5**

**Impact of Learning Experiences (how the impact of learning experiences is evident in the data)**

Preservice teachers may reference learning experiences they deem meaningful as contributing to their perspective transformation.

<table>
<thead>
<tr>
<th>INSTRUCTIONS: Rate the following parts of the proposition. If data support or are against the statement, rate the evidence as strong, moderate, or mild by circling either +3, +2, +1, -3, -2, -1. If the data provide no evidence about the statement, then circle 0.</th>
<th>The data provide evidence that SUPPORTS the statement that fill in one part of proposition and the evidence is...</th>
<th>The data DOES NOT provide any evidence about the statement that fill in one part of proposition (NOTE: Mark this option only if there was NO evidence in the data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parts of Proposition (Indicators):</td>
<td>Strong</td>
<td>Moderate</td>
</tr>
<tr>
<td>a) Preservice teachers who experience transformative learning often engage in critical reflection of their experiences.</td>
<td>(+3)</td>
<td>(+2)</td>
</tr>
<tr>
<td>b) Preservice teachers may use past experiences to inform their decisions</td>
<td>(+3)</td>
<td>(+2)</td>
</tr>
<tr>
<td>c) Preservice teachers may reference as activity, text, and/or experience from coursework that triggered their change in perspective</td>
<td>(+3)</td>
<td>(+2)</td>
</tr>
<tr>
<td>d) Contextual factors that impact preservice teachers’ identity are observable in their responses to their preparation</td>
<td>(+3)</td>
<td>(+2)</td>
</tr>
</tbody>
</table>