The NAEYC Classroom Portfolio Process:
Examining the Relationship between Demographic Characteristics and
External Factors that Support Teacher Motivation

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ABSTRACT
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The NAEYC Classroom Portfolio Process: Examining the Relationship between Demographic Characteristics and External Factors that Support Teacher Motivation
(Under the direction of Kathleen Gallagher, Sharon Ritchie and Sharon Palsha)

This study examined the relationship between demographic characteristics, (teacher age, education level, and prior NAEYC accreditation experience) and external factors (organizational structure and work climate) that support teacher motivation during the NAEYC classroom portfolio process. A self-administered survey was created and distributed online to early childhood teachers in one state who were responsible for compiling the classroom portfolio. Thirty-five teachers participated in this study. Correlation matrices and regression were used to test four hypotheses and examine the relationships between demographic characteristics and external factors. The results indicate a relationship between teacher age and organizational structure and work climate. In addition, a relationship was found between previous experience with NAEYC accreditation and work climate. Teacher age was best related to teacher perception of organizational structure and work climate. These results have implications for administrators and facilitation projects participating in the classroom portfolio process.
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CHAPTER 1: BACKGROUND

More than 20 years ago, The National Association for the Education of Young Children (NAEYC) launched an accreditation system to help identify quality components and support early childhood programs to reach a standard of excellence (NAEYC, 2005). Since then, early childhood education has grown and developed through the research and increasing knowledge of the field that it serves. In response to the needs of a field intent on increasing quality and competence, NAEYC introduced a reinvented accreditation system in 2006 that “outline[s] what NAEYC believes every early childhood program should be” (NAEYC, 2005). Since its introduction, programs across the country have pursued accreditation under the new process and requirements.

NAEYC’s reinvented accreditation system functions in alignment with three main principles of quality (NAEYC, 2005). The first principle maintains that quality is a complex element of a program, contributed to by teachers, families, children and administrators. Second, NAEYC states that quality is a dynamic element of a program requiring “ongoing attention and willingness to change—including change through development and learning—as program participants change” (NAEYC, 2005). Finally, program quality should be sustained and improved over time. By operating under these principles, NAEYC is setting high standards for quality and establishing themselves as a leader in early childhood education (NAEYC, 2005).

The reinvented accreditation system determined ten NAEYC Early Childhood Program Standards that define program quality. These topic areas include: Relationships,
Curriculum, Teaching, Assessment of Child Progress, Health, Teachers, Families, Community Relationships, Physical Environment and Leadership and Management (NAEYC, 2005). The rationale behind these choices was to comprehensively address quality “to help children develop, learn, and achieve their full potential” (NAEYC, 2005). Each standard contains a set of more detailed criteria outlining program quality. Programs are required to provide evidence of their adherence to these criteria through classroom observations, classroom and program portfolios, and staff and family surveys (NAEYC, 2005).

Many of the processes that demonstrate program compliance are new requirements for NAEYC Accreditation. One such requirement is the creation of a classroom portfolio (NAEYC, 2005). The portfolio provides an opportunity for each classroom to provide evidence of their compliance with the required accreditation criteria. The portfolio documents the life of a classroom in many ways. It is comprised of photographs, schedules, lesson plans and work samples, all of which are to be organized, labeled and prepared for the NAEYC site visit. An assessor observing on the day of the accreditation visit cannot possibly see all that a classroom has to offer, thus this source of evidence supplements the classroom observation. The process of using the portfolio to document the various components of quality was developed as the platform from which teachers could “become involved in a self-study process that would foster real and lasting improvements in the quality of their programs” (NAEYC, 2005).

Having previously consulted teachers through the classroom portfolio process, I found several issues surrounding the completion of the process. First, since this process was new to teachers, they had no template from which to model their portfolios. They did not
know what to expect or the kind of commitment the classroom portfolio required. Many teachers had to work on the portfolio at home, often without getting paid. Second, there was limited support for teachers during the process. Administrators were also learning about the classroom portfolio and often felt they could not provide adequate support for teachers. Finally, there was a lack of teacher motivation during the process. Teachers felt overwhelmed by the process and became less motivated to participate. Since NAEYC accreditation requires a collaboration of the administration and staff, it is imperative that teachers are motivated to participate in the classroom portfolio process.

One solution to these issues is research. There is currently no research surrounding the NAEYC classroom portfolio process. As such, this study sought to provide much needed research and guidance to an otherwise unexamined process. This is the first step in describing teacher perceptions of the classroom portfolio process. The purpose of this study was to examine the relationship between teachers’ demographic characteristics and their perception of external factors that support the NAEYC classroom portfolio process. By identifying these teacher characteristics, programs may become better equipped to foster engagement in the process.
CHAPTER 2: THEORETICAL FOUNDATIONS

There are multiple theories in early childhood education that have implications for teacher motivation. The framework for this research focused on two important theories: Adult Learning Theory (Knowles, 1968) and Transformational Learning Theory (Mezirow, 1978). Adult learning theory and the model of andragogy as outlined by Malcolm Knowles (1968) helps explore how teachers learn and identifies the factors that affect their learning. Motivation plays a central role in adult learning theory, and can be considered a catalyst for teacher change. To examine how teachers change their practice as a result of learning, Mezirow’s (1978) Transformational Learning Theory will demonstrate the relationship of critical reflection to the growth and development of teachers.

Since it is important to examine how teachers are motivated to learn and how they change or modify their practice, both theories provided a foundation for this research. However, it is important to note that while these theories are presented in their entirety, this research sought to address specific aspects of the theories which are identified in the subsequent sections. Future research should examine the full facets of these theories.

Adult Learning Theory

Malcolm Knowles is considered one of the great contributors to adult learning theory (Baumgartner, Lee, Birden, Flowers, & Eric Clearinghouse on Adult, 2003). He introduced the term andragogy which means “the art and science of helping adults learn” to explain the nature of learning among adults (Knowles, 1968). Andragogy proved to be a leading model in adult education, and was initially created to broaden the notion of pedagogy (Clardy, 2005;
Knowles, 1968). It should be noted that andragogy is often considered more of a model of adult learning, than a theory (Houde, 2006). This model, however, is useful in exploring the facets of adult learning and motivation.

There are five main assumptions of andragogy (Baumgartner et al., 2003). This section will demonstrate how these assumptions provided the foundation to this research. By examining how certain teacher characteristics are grounded in the assumptions of andragogy, programs may begin to understand the needs and perceptions of their teachers during the classroom portfolio process.

First, andragogy assumes that as adults learn, they move toward a state of self-direction and autonomy (Baumgartner et al., 2003; Houde, 2006; Knowles, 1980). In early childhood programs, as teachers gain knowledge from professional development opportunities, they may become more confident in their practice and take control of their learning. This concept is supported by Rogoff (2003) who suggests that scaffolding an individual’s learning (continuously building on previous knowledge) encourages them to become increasingly less reliant on the instructor and more reliant on themselves for learning (Rogoff, 2003). Thus, it is important to examine the relationship between teacher experience and the support needed during professional development opportunities (i.e. the classroom portfolio).

Second, andragogy assumes that adults use their past experiences as a resource for learning (Knowles, 1980). Their past experiences may shape how they perceive certain learning activities (Knowles, 1979). This assumption has implications for peer collaboration as well. It is important to examine and understand the perception of peer collaboration among experienced and novice teachers. The third assumption of andragogy is that adult
readiness to learn is related to their personal situation (Knowles, 1980). In other words, adults are ready to learn things that they need in order to cope with certain life situations (things that are useful to them personally) (St. Clair, 2002). For example, if teachers cannot recognize how the classroom portfolio will benefit them personally, they will be less likely to participate (Knowles, 1980). This assumption underlines the importance of staff inclusion in the classroom portfolio process.

Next, andragogy assumes that as an adults learn, they want to immediately apply their new knowledge to real-world situations (Knowles, 1980). If teachers do not understand the relevance of a professional development opportunity, they will be less inclined to participate (Baumgartner et al., 2003). However, immediate application of new learning to their practice may help teachers expand their knowledge of teaching and enhance their repertoire of skills (Taylor, 2000). This has implications for staff inclusion as well. It is important to understand how the inclusion of teachers may be related to their perception of a new professional development opportunity (i.e., the classroom portfolio).

Finally, andragogy assumes that adults are intrinsically motivated to learn (Knowles, 1980). This means that internal factors (self-efficacy, self-confidence, their impact on children, etc.) motivate teachers to learn, rather than external rewards (job promotions, higher salaries, etc.) (Houde, 2006). The literature surrounding adult learning suggests that motivation plays a critical role in understanding why adults participate in professional development opportunities to enhance their practice (Houde, 2006). Overall, these assumptions of andragogy demonstrate how teacher characteristics are related to motivation and perception of professional development opportunities. In terms of this research, this
assumption may help explain why certain perceptions exist among teachers and the motivation behind them.

In applying andragogy to the NAEYC classroom portfolio process, it is evident that the perception of the process varies between individual teachers. Each teacher approaches the process with a different repertoire of experiences and thus, has different views on the process. By examining the assumptions of andragogy, we begin to understand how teachers may differentially approach the classroom portfolio and the implications for creating an environment conducive to learning.

Next, transformational learning theory (Mezirow, 1978) will be presented to examine how teachers change their practice as a result of professional development. Several facets of this theory are centered around critical reflection, which will be addressed in future research. However, it was important to present the theory in its entirety as certain aspects are relevant to this research.

**Transformational Learning Theory**

In transformative learning, Mezirow (1978) describes a process in which “individuals change their frame of reference by critically reflecting on their assumptions and beliefs and consciously making and implementing plans that bring about new ways of defining their worlds” (Imel, 1998). Within this theory, critical reflection is the central force driving change, transforming learners and ultimately creating autonomous thinkers (Mezirow, 1997; Wilson & Kiely, 2002). Mezirow (1991) believes that by modifying a person’s frame of reference (concepts, values, assumptions, beliefs that shape how we view the world), they will begin to view experiences through a more diverse lens (Merriam, 2004).
More specifically, he believes that learning is a process of using previous experiences to create a new interpretation of present experiences which ultimately guides future action (Mezirow, 1997). In terms of this research, this theory provides the foundation for examining the nature of teachers’ previous experiences during the classroom portfolio process. It is important to examine the relationship between teachers’ experiences and their perceptions of the process. While this process of transformation is inherent in the transformational learning theory, it is not possible without critically reflecting on personal beliefs and assumptions (Mezirow, 1997).

Critical Reflection

The concept of reflective practice was introduced in 1987 by Donald Schon as a way to “thoughtfully consider one’s own experiences in applying knowledge to practice while being coached by professionals in the discipline” (Ferraro, 2000; Schon, 1996). This proactive approach to education, also known as active research, allows the teacher to assume the role of researcher in his/her own practice (Ferraro, 2000). The creation of a portfolio allows teachers to continuously examine their practice for strengths and weaknesses and refine it accordingly (Hopkins & Antes, 1990). As such, they become active researchers in their own teaching practice.

While Schon’s (1987) model formed the origins of reflective practice, Mezirow (1978) is often credited for the idea of critically reflective practice. Critical reflection involves an analysis of perceptions, questioning new ways of thinking, making modifications, and applying new knowledge to practice (Mezirow, 1978). Critical reflection, as described above, is the central force in Mezirow’s (1978) Transformational Learning Theory.
Extensive literature is dedicated to critical reflection (Brookfield, 1995; Brown, 2006; Rodriguez & Sjostrom, 1998; Taylor, 2000; Wilson & Kiely, 2002). In his research, Stephen Brookfield (1995) examined the process specific to teachers. Through critical reflection, Brookfield (1995) found that teachers were able to make more informed actions and justify them. Teachers experienced increased credibility among the children in their class and were more confident in their teaching because they had critically examined their practice. This way of thinking enabled teachers to challenge children and provided a model of professional development for children to emulate (Brookfield, 1995).

Teachers use three critically reflective lenses in their classroom to transform their thinking: peer reflection, reflection on the experience from the children’s point of view, and the reflection of current literature to broaden perspectives (Brookfield, 1995). The latter is commonly referred to as reflecting on evidence-based practice. During my consulting work with early childhood programs, I found that many teachers utilized peer collaboration during the classroom portfolio process. This process allowed them to become a resource for other teachers, while learning from them as well. This research sought to address specific teacher characteristics that may be associated with teacher perceptions of peer collaboration during the classroom portfolio process. Reflection from the child’s point of view and the reflection of current literature will also be introduced in this section, but will be addressed in future research.

**Peer Reflection**

Using peer relationships as a means of reflection can play an important role in critical reflection, or what can be known as collaborative reflection (Brookfield, 1995). The reflection that occurs in a group setting not only provides teachers with diverse ideas, it
allows them to challenge their existing assumptions, as well as those of others, and transform their ideas (Wesley & Buysse, 2001). A study by Kettle and Sellars (1996) examined collective critical reflection among pre-service teachers. The participants reported that peer reflective groups encouraged the challenging of existing theories and views of teaching. In addition, they felt it modeled a style of collaborative learning that could be used in the future (Kettle & Sellars, 1996).

In applying this theory to the classroom portfolio process, this research examined the relationship of teacher characteristics and the perception of peer collaboration. During my consulting work, I found that younger teachers utilized peer collaboration more during the classroom portfolio process. This might be due to the social aspect of peer collaboration, or their comfort level with sharing their work. As such, it was important to examine the how different teachers perceived peer collaboration during the process, as this may serve as a tool to aid them through the process. The next two sections explore the remaining lenses of critical reflection. As mentioned earlier, these lenses were not addressed specifically in this research, but will serve as the foundation for future research.

*Child’s Perspective*

Brookfield (1995) also describes critical reflection as a process of assumption analysis, contextual awareness, imaginative speculation and reflective skepticism. This process plays a large role in the aspect of social justice, or culturally responsive teaching. In order to be responsive to the cultures, backgrounds, and family history of children, teachers must first analyze their personal assumptions (Mezirow, 1997). This involves challenging their beliefs, values, cultural practices and structures and the impact they have on their teaching practice (Mezirow, 1997). Teachers may have preconceived notions or beliefs
about a certain cultures based on their own personal history or experience (Rogoff, 2003). In order to move past this, they must analyze their existing assumptions (Merriam, 2004; J. Mezirow, 1991).

Next, teachers should be aware that their assumptions are affected by context (Brookfield, 1995). It is important for teachers to realize that the assumptions they hold are a result of a specific cultural context and are not universal (Merriam, 2004). By reflecting on their own cultural assumptions, teachers will be able to imagine or speculate on new ways of thinking (J. Mezirow, 1991). Finally, this process will allow them to approach new situations with reflective skepticism (Brookfield, 1995). They may then critically reflect on their views to grow as a learner.

Transformative learning maintains that as people reflect on their learning and open themselves to new ways of thinking, they become more diverse in their practice (J. Mezirow, 1991). This means that by utilizing different points of view in their practice, they are able to think outside the box of their practice and incorporate different techniques into their practice. Rodriguez and Sjostrom (1998) examined the effects of critical reflection on cultural responsiveness in their study of pre-service teachers. The teachers were asked to reflect on encounters with different cultures in their past. Their responses suggest that through self-critical reflection, the teachers became more accepting of individual and group differences in the classroom (Rodriguez & Sjostrom, 1998).

Kathleen Brown (2006) expanded on this issue by examining the relationship between transformative learning and social justice. Education graduate students participated in several reflective activities and completed surveys regarding the experience (Brown, 2006). The results suggest that students who experienced transformative learning (i.e.,
transformed their frame of reference to modify future activities) experienced more growth in their ability to apply a social justice lens to their work. Brown’s (2006) research has implications for the quality of future professional development programs, suggesting that all programs promote critical reflection among teachers. If teachers participate in critical reflection and ultimately transformative learning, the next step will be implementing their new knowledge into practice (Brown, 2006).

Evidence-Based Practice

The final lens in critical reflection is the use of current literature to expand perspectives (Brookfield, 1995), which is also known as evidence-based practice. Evidence-based practice provides teachers with a variety of teaching approaches from which to choose. By reflecting on their current teaching practices, teachers can challenge their existing assumptions and incorporate practices that are evidence based (Merriam, 2004). This may enrich their practice and broaden their scope of teaching (Mezirow, 1997).

Many teachers create lesson plans or curricula that they use for multiple years, with multiple children. Further, prescribed curriculum dictates teacher’s approaches and practices. The act of critical reflection may enable teachers to move beyond their comfort zone or the demands of a curriculum, and incorporate new techniques that are research based. The NAEYC classroom portfolio is an evidence-based tool that can be used to promote ongoing critical reflection. In her research on portfolios, Lyons (1998) noted that teachers who participated in portfolios were more likely to adopt reflection as part of their teaching practice (Lyons, 1998). Similarly, Athanases (1994) found that teachers reported a change in their practice as a result of portfolios (Athanases, 1994).
Critical reflection is an essential tool in the classroom portfolio process. By participating in the process, teachers reflect on their own practice and utilize the portfolio to create a more diverse way of teaching. In addition, they gain insight from their peers and are able to view their practice from the child’s point of view, making modifications when necessary. While these two theories have formed the foundation for this research, it is important to consider, that they each assume the teacher is present and ready to learn (Ahl, 2006). As such, one aspect of this research focuses on the recruitment of learners. If teachers are not ready or willing to learn, this process may not affect their practice.
CHAPTER 3: CONCEPTUAL MODEL

To explore the dynamic of teacher perception during the NAEYC classroom portfolio process, this research considered a model that identifies demographic characteristics and external factors that are present during the process (Figure 3.1). Specifically, this model suggests that there is a relationship between demographic characteristics and external factors present during the classroom portfolio process. By better understanding this relationship, programs may be able to modify or add features to more fully motivate teachers to engage in the classroom portfolio process.

Figure 3.1. Conceptual Model: The Relationship between Demographic Characteristics and External Factors during in the Classroom Portfolio Process.

Explanation of the Model

The model suggests that teachers’ demographic characteristics are related to teacher perceptions of programs’ characteristics during the classroom portfolio process (Figure 3.1). The three demographic characteristics included were age, education level and previous experience with NAEYC accreditation. A teacher with previous experience with NAEYC
accreditation means that they had been through the accreditation process in the old NAEYC accreditation system. While this would be their first experience with the classroom portfolio process, this was not their first encounter with the accreditation process. These demographic characteristics were chosen based on my consulting experience. While working with teachers during the classroom portfolio process, I noted that these demographics seemed to be related to how teachers perceived the process. As such, this research addressed these characteristics.

The two external factors included in the conceptual model were organizational structure and work climate. The basis of these factors resulted from my consulting work as well. Through teacher interviews, I was able to gain an understanding of teacher perceptions of support during the classroom portfolio process. Teachers commented on how certain factors in a program helped them through the process, while others were less useful. I noted that these factors often varied with relation to certain demographic characteristics.

As such, I identified two external factors, organizational structure and work climate, to describe the facets of program support during the classroom portfolio process. Organizational structure was defined as a program’s policies, resources and administration. In terms of this research, a program’s organizational structure was comprised of factors that may support the classroom portfolio process (administrator support, planning time, access to work room, materials, and availability of assistant teachers). The work climate of a program was defined as the atmosphere or environment that is created within the program itself. Factors of the work climate that may support the classroom portfolio are peer collaboration, staff inclusion in accreditation process, staff meetings, and professional development opportunities.
Research Questions and Hypotheses

The model suggests a relationship between the three demographic characteristics and the two external factors. The research questions and hypotheses are:

1. Is there a positive relationship between teacher age and their perceptions of external factors (organizational structure, work climate) that support the classroom portfolio process (Figure 3.2)?

   **Hypothesis 1a:** There is a positive relationship between teacher age and their perception of organizational structure that supports the classroom portfolio process.

   **Hypothesis 1b:** There is a positive relationship between teacher age and their perception of work climate that supports the classroom portfolio process.

   ![Figure 3.2](image.png)

   Figure 3.2. Visual Representation of Research Question 1.

2. Is there a positive relationship between teacher education level experience and their perceptions of external factors (organizational structure, work climate) that support the classroom portfolio process (Figure 3.3)?

   **Hypothesis 2a:** There is a positive relationship between teacher education level and their perception of organizational structure that supports the classroom portfolio process.

   **Hypothesis 2b:** There is a positive relationship between teacher education level and their perception of work climate that supports the classroom portfolio process.
3. Is there a positive relationship between previous experience with NAEYC accreditation and teacher perceptions of external factors (organizational structure, work climate) that support the classroom portfolio process (Figure 3.4)?

**Hypothesis 3a:** There is a positive relationship between previous experience with NAEYC accreditation and teacher perception of organizational structure that supports the classroom portfolio process.

**Hypothesis 3b:** There is a positive relationship between previous experience with NAEYC accreditation and teacher perception of work climate that supports the classroom portfolio process.

4. Is there a model of demographic characteristics that best describes teacher perception of organizational structure and work climate?
Hypothesis 4a: There is a model of demographic characteristics that best describes teacher perception of organizational structure.

Hypothesis 4b: There is a model of demographic characteristics that best describes teacher perception of work climate.
CHAPTER 4: LITERATURE REVIEW

Since the classroom portfolio process is a new requirement for NAEYC accreditation (NAEYC, 2005), there is no literature specific to the process. As such, literature relevant to the conceptual model (Figure 3.1) was examined. In addition, this review explored research surrounding classroom portfolios, as they were the essential base of the model.

Classroom Portfolios

Before discussing the motivators that lead to engagement in the classroom portfolio, it is important to understand the value behind the portfolio itself. The literature surrounding portfolios outlines three major purposes for the creation and use of a classroom portfolio (Borko, Michalec, Timmons, & Siddle, 1997; Loughran & Corrigan, 1995; Zubizarreta, 1994). First, the creation of a classroom portfolio supplies a teacher with the framework within which to document their teaching. Second, it provides an opportunity for teachers to articulate their teaching knowledge and, finally, a portfolio provides teachers with a tool to reflect on their teaching practice (Borko et al., 1997).

Framework for documentation

The NAEYC classroom portfolio provides teachers with a framework to collect evidence that documents their work with children. Teachers are encouraged to utilize multiple sources of evidence (lesson plans, schedules, pictures, etc.) to demonstrate how they meet each of the NAEYC criterion required for their age group (NAEYC, 2005). The criteria serve as an outline, or framework, for teachers to use when collecting their documentation.
While NAEYC requires evidence specific to the criteria, there is no requirement as to how teachers choose to demonstrate competence. By allowing the process to remain open-ended and flexible, teachers are able to be creative and express themselves through the documentation and organization of the portfolio (Simmons, 1996). The differences among portfolios reflect individual differences in teaching practice and philosophy and should be celebrated as such (Loughran & Corrigan, 1995). Once completed, a program will likely have several very different classroom portfolios that reflect the diversity among their teachers.

Articulation of Knowledge

While the framework provided by a classroom portfolio enables teachers to shape their professional knowledge (Bullard, 1998; Loughran & Corrigan, 1995), the process of creating a portfolio empowers teachers to document their thoughts and articulate their knowledge of teaching (Loughran & Corrigan, 1995). According to Loughran and Corrigan (1995), classroom portfolios are both a process and a product. The process of a portfolio documents the professional growth and development that occurs as a result of self-reflection (Loughran & Corrigan, 1995). The product is the actual portfolio, which is an articulation of the teacher’s practice and “meant to convey to others an individual’s understanding of their view of teaching and learning” (Loughran & Corrigan, 1995).

In their research on student teachers, Loughran and Corrigan (1995) found that forty-five percent of the teachers viewed the portfolio as a vehicle to show what they had learned about teaching and learning. Many of the participants even viewed the portfolio as a tool useful in job interviews. Interviews with the student teachers further indicated that a deeper understanding of their teaching was reached as items in the portfolio were discussed. As the
student teachers began to appreciate the portfolio as a representation of their knowledge, they became more insightful about their own teaching practice.

**Reflection**

The final purpose of creating a portfolio is self-reflection or reflective practice (Borko et al., 1997). While literature surrounding reflection has been previously examined in this proposal, it is important to introduce research specific to portfolio development. Extensive research examines reflective practice at the pre-service level among teachers (Ferraro, 2000; Loughran & Corrigan, 1995; Zubizarreta, 1994) however; minimal research has examined the effects of reflective practice among novice and veteran teachers as a means of professional development. While this research will not specifically address the aspects of reflection, it will be addressed in future research. It is important to examine reflection as a part of the classroom portfolio process, as it provides an overall understanding of the process as a whole.

The need for this future research is imperative as many organizations, including NAEYC, are requiring the compilation of a portfolio. The National Board for Professional Teaching Standards and the National Council for Accreditation of Teacher Education (NCATE) both utilize classroom portfolios as a way for teachers to demonstrate their teaching abilities and reflect on their practice (Senne & Rikard, 2004).

To examine the role of peer reflection in the National Board Certification (NBC) process, Park, Oliver, Johnson, Graham, and Oppong (2007) conducted teacher interviews among individuals who were renewing or entering the NBC process, as required by the National Board for Professional Teaching Standards. They found that teachers were most interactive with those going through the process simultaneously as they had something in
common. They reported an increased level of understanding gained through sharing ideas with other teachers, and also found that collaboration raised the bar of their practice. The interviews suggest that as they participated in peer reflection, they shared an increased collaborative self-efficacy, and pushed themselves further (Park, Oliver, Johnson, Graham, & Oppong, 2007).

Although many organizations urge reflection through portfolios, Bright (1996) argues that the process itself requires three levels of understanding to gain optimal outcomes. The first level simply involves understanding the process of reflective practice (Bright, 1996). Teachers who create a portfolio will enter the process at this level. However, if the process does not push them to inquire further, they will not benefit professionally from the work. The second level involves applying reflective practice to daily teaching (Bright, 1996). This “action” level demonstrates teachers’ understanding of their growth and development. While working on the classroom portfolio, teachers will begin examining their practice with respect to NAEC’s criteria. They may look at the importance or meaning behind certain activities and their compliance with the criteria.

The third level involves turning a critical eye to the outcomes of their practice (Bright, 1996). Teachers at this stage evaluate the changes they have made as a result of reflection. During this stage, teachers are able to identify the strengths and weaknesses of the overall practice. Bright (1996) argues that if teachers move through reflective practice at a superficial level (level one); they will not grow or develop in their teaching practice.

The review of this literature has demonstrated that portfolios provide teachers with a framework to document their teaching, a vehicle to articulate their knowledge, and a means from which to reflect on their practice. The latter propels teachers into a mindset of
continuous professional development, which allows them to grow and develop in their profession. However, as stated earlier, teachers must be motivated to learn in order to benefit from the portfolio process. The next section examines research surrounding teacher motivation, as relevant to the conceptual model (Figure 3.1).

**Teacher Motivation**

For the purpose of this review, the conceptual model (Figure 3.1) was examined in conjunction with supporting literature. This section examined factors that are associated with teacher motivation, with specific focus on organizational structure and work climate.

**Factors Associated with Teacher Motivation**

Teacher motivation plays a large role in adult learning (Knowles, 1980). In her review of motivation in adult education, Ahl (2006) suggests three factors that may serve as barriers to motivation: dispositional barriers, situational barriers, and institutional barriers. She suggests that once a barrier to learning has been identified, it can be removed and motivation can resurface (Ahl, 2006). This has implications for the facilitation of adult learning. In terms of this research, it was suggested that teachers participating the NAEYC classroom portfolio process experience different barriers to motivation. By identifying these barriers, programs may be able to motivate their teachers to participate in the process. In this section, the three barriers to motivation will be examined in terms of this research on the NAEYC classroom portfolio process.

**Demographic Characteristics**

The first barrier to motivation is that of dispositional factors, or demographic characteristics. These include any characteristics that teachers have when beginning the process that may be related to their motivation in the process. The present study included
age, education level and previous experience with NAEYC accreditation as the demographic
c characteristics to be examined. It is important to note that these characteristics are not
automatically “barriers” to motivation. Rather, this research examined whether they were
related to certain perceptions of support. If the proper support was not provided, the
literature suggests that these could become barriers to teacher motivation (Ahl, 2006).

Research by Feistritzer (1986) suggests that age may be associated with teacher
motivation. Feistritzer (1986) conducted a survey on teacher motivation and found that older
adults with four-year degrees rated salary first on their list of motivators. One explanation
for this result may be that older professionals have different needs from a job or career than
younger teachers (Feistritzer, 1986). In addition, they often have a different outlook on the
profession than do younger teachers. Older teachers may be experiencing burn-out as a
result of many years in the field. Thus, they may find their greatest motivation in salary.
Moreover, teachers with a four-year degree may have student loans to repay and rely on their
salary for those payments. They may have also family obligations and other financial factors
that cause a greater need for monetary rewards, and thus view salary as a motivator (Medved,
1982). As such, this research considered teacher age when examining factors that support
the classroom portfolio process.

Additional research by Ma and MacMillan (1999) addresses the influence of teacher
age on job satisfaction and motivation. Using data from the New Brunswick Elementary
School Study, Ma and MacMillan (1999) found that teachers who were practicing longer
were less satisfied with their jobs. They suggest that these teachers may need a
“reorientation” to teaching (Ma & MacMillian, 1999). By participating in professional
development activities, Ma and MacMillian (1999) propose that older teachers may be
“exposed to new instructional techniques that challenge their philosophies and routines…
and renew their interest in the workplace.”

Education level was also important when considering teacher motivation. A study conducted by Bridges and Carlat (2003) examined the relationship of teacher education and job satisfaction and retention. Participants in California were given the option of participating in a child-care retention incentive (CRI). They found that teachers participating in CRI had higher education levels and were more likely to be retained in their program (Bridges, Carlat, & Policy Analysis for California Education, 2003). Their results suggest that teachers who choose professional development may be more likely to participate in activities that promote quality. In addition, their research suggests that these teachers were more likely to participate in ongoing early childhood professional development.

This may suggest that education level plays a role in ongoing professional development (Bridges et al., 2003). An increase in teacher education may motivate teachers to participate in the classroom portfolio process, as they view it as a professional development opportunity. In terms of this research, it was suggested education levels were related to teacher perceptions of organizational structure and work climate.

While there is no research specific to teachers with previous NAEYC accreditation experience, at least one study supports examining the relationship between teacher experience and motivation. Research by Robertson (2006) suggests that novice teachers are less motivated to participate in professional development opportunities. They found a decrease in motivation that resulted from the discrepancy between what novice teachers perceived teaching would be and what it actually was. Meaning, novice teachers became less motivated by the reality of teaching and it’s everyday tasks (Robertson, 2006). In my
previous consulting work, I found that teacher who had been through accreditation in the old system were more familiar with the overall process. In terms of the current research, previous experience with NAEYC accreditation was examined to determine how it related to teacher perception of the classroom portfolio process.

Organizational Structure

The second barrier to motivation is a situational barrier. In terms of this research, the situational barrier is a program’s organizational structure. This includes factors in a program that may be associated with teacher perceptions of the classroom portfolio process (e.g., administrator support, planning time, delegation of tasks, access to materials, and access to a work room). While there is no literature surrounding situational barriers, this section examines relevant literature regarding the administrator support of a program.

Administrator support can play a large role in teacher motivation. Sergiovanni’s (1967) research on motivation suggests that teachers are motivated by recognition for their job performance. This not only builds confidence, it can strengthen the relationship between teacher and administrator (Sergiovanni, 1967). The current study examined how certain teacher demographics (age, education level and previous experience) are related to teacher perceptions of administrator support during the classroom portfolio process.

In their research, Davis and Wilson (2000) examined the principal’s role in teacher empowerment, motivation and job satisfaction. The authors suggest that increased teacher empowerment is associated with increased teacher motivation (Davis & Wilson, 2000). Meaning, the more a principal encourages autonomy and leadership among their teachers, the more motivated the teachers will become. In addition, this increase in motivation made the
teachers feel they had more choice in the school and could make more of an impact on the children—all of which increased job satisfaction (Davis & Wilson, 2000; Sergiovanni, 1967).

**Work Climate**

The third barrier to teacher motivation occurs at the structural (or institutional) level, more commonly known as work climate. In this research, these barriers include factors such as: peer collaboration, staff inclusion in process, staff meetings focused on NAEYC accreditation, and professional development.

Peer collaboration has proven an important factor in teacher motivation (Lee, Dedrick, & Smith, 1991). Not only is social interaction associated with learning, it can also create an environment conducive to learning (Wesley & Buysse, 2001). In their comparison study of Catholic and public school teachers, Lee, Dedrick and Smith (1991) examined the relationship between teacher collaboration and job satisfaction. Although Catholic school teachers had lower salaries and larger classes, they reported higher feelings of job efficacy and satisfaction (Lee et al., 1991). The authors suggest that Catholic school teachers were more likely to collaborate with other teachers which may have influenced their overall job satisfaction (Latham, 1998; Lee et al., 1991).

In relating this literature to the current study, it was important to examine the relationship between peer collaboration and teacher demographic characteristics. Not only is peer collaboration related to teacher job satisfaction (Latham, 1998; Lee et al., 1991), the perception of it may vary among teachers. This research sought to understand the relationship between teacher characteristics and their perceptions of peer collaboration. This literature has demonstrated external factors that are associated with teacher motivation. Moreover, it is imperative that these factors be examined based on their association to the
demographic characteristics of teachers (age, education level and previous experience with NAEYC accreditation).
CHAPTER 5: METHODOLOGY

The purpose of this research was to examine the relationship between teachers’ demographic characteristics and their perception of external characteristics that support the NAEYC classroom portfolio process. The research questions and hypotheses were as follows:

1. Is there a positive relationship between teacher age and their perceptions of external factors (organizational structure, work climate) that support the classroom portfolio process?

   **Hypothesis 1a:** There is a positive relationship between teacher age and their perception of organizational structure that supports the classroom portfolio process.

   **Hypothesis 1b:** There is a positive relationship between teacher age and their perception of work climate that supports the classroom portfolio process.

2. Is there a positive relationship between teacher education level and their perceptions of external factors (organizational structure, work climate) that support the classroom portfolio process?

   **Hypothesis 2a:** There is a positive relationship between teacher education level and their perception of organizational structure that supports the classroom portfolio process.

   **Hypothesis 2b:** There is a positive relationship between teacher education level and their perception of work climate that supports the classroom portfolio process.
3. Is there a positive relationship between previous experience with NAEYC accreditation and teacher perceptions of external factors (organizational structure, work climate) that support the classroom portfolio process?

**Hypothesis 3a:** There is a positive relationship between previous experience with NAEYC accreditation and teacher perception of organizational structure that supports the classroom portfolio process.

**Hypothesis 3b:** There is a positive relationship between previous experience with NAEYC accreditation and teacher perception of work climate that supports the classroom portfolio process.

4. Is there a model of demographic characteristics that best describes teacher perception of organizational structure and work climate?

**Hypothesis 4a:** There is a model of demographic characteristics that best describes teacher perception of organizational structure.

**Hypothesis 4b:** There is a model of demographic characteristics that best describes teacher perception of work climate.

**Participants**

A sample of thirty-five early childhood teachers participated in this study (n=35, mean age=38). All participants were employed at early childhood programs in Connecticut and were female. The sample was composed of 74.3% Caucasian, 14.3% African American and 11.4% Hispanic teachers. The majority of participants were lead teachers (65.7%) with bachelor’s degrees (48.6%). Almost 29% of the participants were co-teachers, which meant that two teachers in that classroom served as the lead (i.e., they held the same position).
Approximately one-third (34.3%) of teachers had no previous experience with NAEYC accreditation, however all thirty-five teachers (100%) worked at programs that were currently NAEYC accredited. The majority of participants had been teaching for 7-10 years (22.9%) and 28.6% of participants had been at their current program for 4-6 years (see Appendix E for full list of participant demographics).

Since the survey was distributed by the facilitation project via a state-wide listserv, there was no information regarding the number of programs or teachers who received the online survey. In addition, there was no information regarding how many were eligible to participate. Thus, an overall response rate cannot be reported. Future research should address these issues by utilizing the NAEYC membership as a source of participants. This will provide the accreditation status of programs nationwide, which will allow for eligibility data. In addition, NAEYC membership information will provide a teacher return rate.

Inclusion/Exclusion Criteria

The inclusion/exclusion criteria for this research occurred on three levels: facilitation project, program and teacher. Due to the author’s previous consulting work with NAEYC accreditation, there was an existing relationship with a Facilitation Project in Connecticut who has long standing relationships with NAEYC. This Facilitation Project is designed to network and support programs engaged in the accreditation process. While they were under no obligation to participate, the facilitation project was sought to participate in this study.

Programs invited to participate in this study 1) received their NAEYC accreditation visit and are currently awaiting an accreditation decision or 2) successfully completed the accreditation process within the last six months. Teachers invited to participate were employed at the participating program as a lead teacher, co-teacher or assistant in a
classroom that is/was responsible for compiling the NAEYC classroom portfolio. These criteria ensured that participants had fully completed the classroom portfolio process.

Recruitment and Consent

Recruitment for this study occurred in three stages: facilitation project, program and teacher.

Facilitation Project

The Connecticut Facilitation Project was sent an email with a description of the study (Appendix A). This email explained the details of participation in the study along with the inclusion/exclusion criteria for participating programs. The Facilitation Project then sent an email to programs who met the inclusion criteria. The email explained that by emailing affiliated programs, they connoted their consent to participate in the recruitment for this study.

Program

Programs recruited for this study were affiliated with the Connecticut Facilitation Project. Due to the inclusion criteria mentioned above, programs were either currently supported by the Facilitation Project (i.e., currently awaiting an accreditation decision) or previously supported by the Facilitation Project (i.e., successfully completed in the last 6 months). While this did provide a sample of convenience, I had no relationship with the programs or teachers participating in this study.

The Connecticut Facilitation Project emailed programs who met the inclusion criteria with an attached letter (Appendix B). The email included a description of the study, the inclusion criteria for participating teachers, and a letter to distribute to eligible teachers (Appendix C). There was no direct contact with the program or teachers. This process
ensured that program and teacher participation was voluntary and anonymity was protected. The email sent to programs explained that their willingness to participate was anonymous and voluntary. Each program indicated their willingness by distributing a letter to eligible teachers. If they were unwilling to participate, they did not distribute the letter.

*Teacher*

Participating programs distributed a letter to all eligible teachers (Appendix C). The teacher letter included a description of the study, the survey topics, the time frame to complete the online survey and an explanation that the completion of the online survey connotes their consent to participate. It is important to note that teachers were under no obligation to participate. Teachers who did not wish to participate simply did not complete the survey. Neither the program nor I had any knowledge of which teachers chose to participate.

*Measures*

An online survey was created to examine the components of this research (for hard copy, refer to Appendix D). My previous consulting work with teachers participating in the NAEYC classroom portfolio process served as the foundation for this survey. Through teacher interviews I was able to gain a qualitative perspective of teacher perceptions of the process. The individual survey questions were a result of teacher interview responses. As teachers elaborated on their experience, I began to see trends among their responses. While their perceptions may have differed, the overall trends were universal. These trends became the nine components of the survey (administrator support, planning time, materials, workroom, teacher delegation, peer collaboration, staff inclusion, staff meetings and professional development). These components were then grouped into external factors; organizational
structure and work climate, based on the nature of the component and the literature supporting these factors (see Table 5.1).

The survey was created on www.surveymonkey.com (Survey Monkey). Prior to distribution, it was piloted among eight teachers in North Carolina who participated in the classroom portfolio process. They were asked to complete the survey and answer open-ended questions regarding the survey questions, as recommended by Dillman (2007). Some questions included specifics about the length of the survey and the amount of time it took to complete. Others questions were more objective and asked the pilot participants to identify questions that were confusing or asked them to give suggestions to improve survey questions. All responses were used to inform the final survey that was sent out to participants (Dillman, 2007). Once the survey was finalized, the content was divided into two sections, demographics and survey questions.

Demographics

This section of the survey requested demographic information from each teacher, including information on the desired demographic characteristics (age, education level, previous experience with NAEYC accreditation). A total of ten demographic questions were included in this survey: age, ethnicity, job title, education level, years since education, number of years teaching, number of years teaching at current program, time intended to stay at current program, current accreditation status, and previous experience with NAEYC accreditation. Teacher age was collected as a continuous variable, which allowed the responses to be more precise (Figure 5.1). All other demographic characteristics were itemized so teachers could be grouped based on their response to each characteristic (Figure 5.1).
The demographic question in Figure 5.1 regarding previous experience with NAEYC accreditation contains three possible responses (Yes, No, I’m not sure). I found during my consulting work that many teachers were unsure whether they had ever been through the accreditation process. The previous NAEYC accreditation system did not require extensive collaboration among teachers therefore many were not aware of the process taking place.

**Age _______**

<table>
<thead>
<tr>
<th>Education Level (Please indicate highest level)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Some High School</td>
</tr>
<tr>
<td>□ High School Graduate or GED</td>
</tr>
<tr>
<td>□ Some College</td>
</tr>
<tr>
<td>□ CDA</td>
</tr>
<tr>
<td>□ Associate’s Degree</td>
</tr>
<tr>
<td>□ Bachelor’s Degree</td>
</tr>
<tr>
<td>□ Master’s Degree</td>
</tr>
<tr>
<td>□ Doctorate Degree</td>
</tr>
</tbody>
</table>

**Have you been through the NAEYC Accreditation process before (at current or past program)?**

- □ Yes
- □ No
- □ I’m not sure

Figure 5.1. Sample demographic questions.

Survey Questions

The next section of the survey contained questions based on a 4-point Likert scale.

This ordinal scale reflected teachers’ perceptions of the classroom portfolio process (Figure 5.2). Teachers were asked to rate each situation based on their experience with the classroom portfolio process. The scale was defined as: 1=Definitely does not apply, 2=Does not really apply, 3=Applies somewhat, 4=Definitely applies.

35
Relationships

Please rate the following as they apply to your experience with the Classroom Portfolio

1. I felt comfortable working with other teachers during the classroom portfolio process

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>

Figure 5.2. Sample survey question.

Each survey question was identified under a topic area or component. There were nine total components in the survey: peer collaboration, administrator support, planning time, materials, work room, teacher delegation, staff inclusion, staff meetings and professional development (Table 5.1). The internal reliability of each component was examined using Cronbach’s alpha (Table 5.1, in parenthesis). This measure examined the scale items to ensure they were measuring the same construct, thus having internal reliability (Howell, 2007).

Definition of Components

The peer collaboration component referred to how teachers felt about working with others (i.e., did they benefit from peer collaboration, did it slow their work down, etc.). For example, the survey question in Figure 5.2 was identified as peer collaboration due to its reference to working with other teachers (Appendix D).

The administrator support component contained survey questions referring to the feedback and support teachers received from their administrator during the process. Did their administrator boost morale or give them praise? Was their work appreciated? Did they feel comfortable with the knowledge of their administrator? The purpose of this component was to understand the relationship that administrator support has with the classroom portfolio process.
The planning time component contained questions relating to the use of planning time during the process. Planning time may be a useful tool in completing this process, though many teachers do not receive it. This component sought to understand if teachers received planning time, if they received enough time and if they used their planning time to work on the classroom portfolio.

Questions included under the materials component referred to the actual materials used to compile the classroom portfolio. Did they use a computer? Did they use a digital camera? Did the program supply them with enough materials? Many programs lack the resources to fully equip their teachers. Results from this component may provide insight into what is needed to complete the classroom portfolio process. The next component, work room, examined the presence of a work room, along with teachers' comfort level and use of the work room. Since many teachers work on the classroom portfolio during work hours, the importance of having a work room may provide insight into how teachers complete the process. The low reliability found among items in this component suggests that the scale items may not have measured the same construct. Thus, this component should be re-examined in future research.

The component of teacher delegation examined the importance of assistant teachers in the process. During the classroom portfolio process, teachers may fall behind in their daily work. This component examined the delegation of tasks to their assistants. Next, the component of staff inclusion was designed to examine teachers' feelings of inclusion in the process; and understand if it was a collaborative process or one imposed upon them. This component included survey questions such as, “The classroom portfolio process was explained to me” and “I felt that I was part of an effort to improve quality.”
The staff meeting component examined the importance of having staff meetings during the classroom portfolio process. Did teachers feel they were helpful? Did sharing during staff meetings make them uncomfortable? All of these questions are designed to examine the different preferences among teachers during this process. Finally, the professional development component was created to examine the role of professional development tools in the classroom portfolio process. Were the NAEYC self-study tools easy to understand? Did they utilize consultants or trainings to assist the process? NAEYC provides several tools to help programs and teachers through the process. The purpose of this component was to examine the usefulness of these tools.

Definition of External Factors

To further examine the role of these nine components, each was grouped under one of two external factors: organizational structure or work climate. Organizational structure was defined as a program’s policies, resources and administration. In terms of this research, a program’s organizational structure is comprised of components that may support the classroom portfolio process. These included administrator support, planning time, access to work room, materials, and teacher delegation. The work climate of a program was defined as the atmosphere or environment that is created within the program itself. Components of the work climate that may support the classroom portfolio were peer collaboration, staff inclusion in accreditation process, staff meetings, and professional development opportunities. Table 5.1 provides a complete list of the components in each external factor and the Cronbach’s alpha for each (in parentheses).
Table 5.1. Components included in each External Factor

<table>
<thead>
<tr>
<th>Component</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Structure (.758)</td>
<td></td>
</tr>
<tr>
<td>Work Climate (.671)</td>
<td></td>
</tr>
<tr>
<td>Administrative Support (.802)</td>
<td></td>
</tr>
<tr>
<td>Peer Collaboration (.518)</td>
<td></td>
</tr>
<tr>
<td>Planning Time (.457)</td>
<td></td>
</tr>
<tr>
<td>Staff Inclusion (.710)</td>
<td></td>
</tr>
<tr>
<td>Materials (.178)</td>
<td></td>
</tr>
<tr>
<td>Staff Meetings (.842)</td>
<td></td>
</tr>
<tr>
<td>Work Room (.026)</td>
<td></td>
</tr>
<tr>
<td>Professional Development (.426)</td>
<td></td>
</tr>
<tr>
<td>Teacher Delegation (.914)</td>
<td></td>
</tr>
</tbody>
</table>

Due to the low reliability found among several components (Table 5.1), future research should consider scale development on this measure. Future research should include factor analysis which will allow for the elimination of survey questions and components that do not apply, while creating a more concise grouping of the remaining components. This will provide higher internal reliability among the components of the survey.

**Procedures**

To obtain the necessary data an online survey was distributed state-wide to early childhood programs in Connecticut. While online surveys historically produce high response rates (Bowker, 1999), the response to this survey was lower than expected (n=35). It is possible that some teachers did not have access to computers or the comfort level to work with them, so the sample may not have been representative of all teachers participating in the classroom portfolio process. In addition, since programs were responsible for distributing the survey to teachers, some administrators may have forgotten to distribute it.

However, teachers who met the inclusion were given a letter which referred them the Survey Monkey website to complete the online survey (Appendix C). This letter also gave
them a time frame to complete the survey, as it was only available online during the dates provided. Survey Monkey allows participants to log in and complete the designated survey from their computer. The responses were confidential and allowed the participant to complete the survey at their own pace, while retaining anonymity. The results were then downloaded from Survey Monkey directly into SPSS 16.0 for analysis.
CHAPTER 6: RESULTS

Initially, the data was scanned in SPSS 16.0 in preparation for analysis. Nine survey questions were reverse coded because they were measured on a negative scale. In addition, one demographic variable (previous experience with NAEYC accreditation) was reverse recoded for the same reason.

After these variables were recoded, average scores were created for each teacher with regard to organizational structure and work climate. This process ensured that the results were not skewed due to non-response. In addition, average scores were created for each component of the dependent variables (Table 5.1).

Data analysis for this research occurred in three stages:

1. Descriptive statistics
2. Research Questions 1, 2, and 3
3. Research Question 4

The results of this research will be presented in terms of these stages of analysis.

Descriptive Statistics

To analyze the descriptive statistics, the three independent variables age, education level, and previous experience with NAEYC accreditation were examined (Table 6.1). Table 6.1 indicates that the mean age of participants was just over 38 years. The minimum education level was a High School diploma or GED while the maximum education level was that of a Master’s degree. The mean education level among participants was that of an
Associate’s degree. Previous experience with NAEYC accreditation was a yes/no question (1=no, 2=yes).

Table 6.1. Univariate Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>35</td>
<td>22</td>
<td>59</td>
<td>38.94</td>
<td>11.862</td>
<td>.323</td>
<td>.409</td>
<td>-1.373</td>
<td>.798</td>
</tr>
<tr>
<td>Education</td>
<td>35</td>
<td>2</td>
<td>7</td>
<td>5.49</td>
<td>1.401</td>
<td>-1.226</td>
<td>.409</td>
<td>.778</td>
<td>.798</td>
</tr>
<tr>
<td>Previous Experience with NAEYC Accreditation</td>
<td>34</td>
<td>1</td>
<td>2</td>
<td>1.35</td>
<td>.485</td>
<td>.741</td>
<td>.409</td>
<td>-1.548</td>
<td>.798</td>
</tr>
</tbody>
</table>

Next, the data was scanned for outliers. The extreme values seemed reasonable, as there were multiple duplicate scores in each the high and low range. However, examining boxplots of the data, the results suggest that there were four possible outliers in education (cases #10, #12, #30, and #31). These cases can also be confirmed in the extreme values table. They will be considered in future analysis.

**Research Questions 1, 2, and 3**

The independent and dependent variables examined in each research questions 1, 2 and 3 can be found below in Table 6.2.

Table 6.2. Variables for Research Questions 1, 2 and 3

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Independent Variable (IV)</th>
<th>Dependent Variables (DV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher Age</td>
<td>Organizational Structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Work Climate</td>
</tr>
<tr>
<td>2</td>
<td>Education Level</td>
<td>Organizational Structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Work Climate</td>
</tr>
</tbody>
</table>
Prior to analysis, the power was calculated for each variable at the two-tailed level. The highest power was between age and work climate (.78) while the lowest was between previous experience with NAEYC accreditation and organizational structure (<.26). Due to the small sample size and low power of this research, the alpha level was examined at 0.05 for significance and at 0.10 to identify trends.

To examine the relationship between each of the three independent variables (teacher age, education level and previous experience with NAEYC accreditation) and the two dependent variables (organizational structure and work climate), correlations were conducted for each hypothesis at the two-tailed level (Table 6.3). These tests assume that the dependent variables are normally distributed in the population for each level of the independent variables. If a significant correlation was present, the components of organizational structure and work climate were examined to provide specific correlations. Refer to Table 5.1 in the previous chapter for a list of the components included in each dependent variable.

Table 6.3. Correlation Matrix of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher Age</td>
<td>_</td>
<td>-.050</td>
<td>-.343**</td>
<td>.343**</td>
<td>.415**</td>
</tr>
<tr>
<td>2. Education Level</td>
<td>_</td>
<td>.249</td>
<td>-.270</td>
<td>-.183</td>
<td></td>
</tr>
<tr>
<td>3. Previous Experience with NAEYC</td>
<td>_</td>
<td>__</td>
<td>.121</td>
<td>.299*</td>
<td></td>
</tr>
<tr>
<td>Accreditation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Organizational Structure</td>
<td>_</td>
<td>__</td>
<td>.572***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Work Climate</td>
<td>_</td>
<td>__</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p<.10. **p<.05. ***p<.01.
Research Question 1

Research question 1 examined the relationship between the independent variable teacher age and the dependent variables organizational structure and work climate. The correlation matrix (Table 6.3) indicates that teacher age had a significant positive correlation with organizational structure (p=.044), and with work climate (p=.013). This means older teachers reported higher levels of organizational structure and work climate. Therefore, we can fail to reject both hypothesis 1a and 1b since a positive relationship exists between teacher age and both organizational structure and work climate.

To further explore these relationships, the correlations among the components of each dependent variable were examined. In examining the components of organizational structure, the results indicate a significant positive correlation between teacher age and administrator support (r=.369, p=.029). Older teachers were more likely to report a need for administrator support. Teacher age was also significantly positively correlated with peer collaboration (r=.376, p=.026) and staff inclusion (r=.420, p=.012). Older teachers were more likely to perceive higher peer collaboration and staff inclusion.

Research Question 2

Next, the hypotheses for research question 2 were tested. It was hypothesized that a relationship existed between education level and organizational structure (hypothesis 2a) and education level and work climate (hypothesis 2b). A significant relationship did not exist between education and organizational structure or between education and work climate. Therefore, hypothesis 2a and 2b should be rejected. Since a relationship did not exist between the variables, the components of organizational structure and work climate were not examined.
Research Question 3

Research question 3 examined the relationship between a teacher’s previous experience with NAEYC accreditation and their perception of organizational structure and work climate. It was hypothesized that a relationship existed between previous experience with NAEYC accreditation and organizational structure (hypothesis 3a) and work climate (hypothesis 3b). It should be noted that the independent variable had one case missing. SPSS 16.0 removed this case from the analysis (n=34).

Regarding Hypothesis 3a, there was not a significant relationship between previous experience with NAEYC accreditation and organizational structure, therefore hypothesis 3a should be rejected. However, the results did suggest a positive trend between previous experience with NAEYC accreditation and work climate (p=.086). Teachers with previous NAEYC accreditation experience reported higher perceptions of work climate. However, since this correlation was not significant at the .05 level, hypothesis 3b should be rejected.

Since a relationship did not exist between previous experience with NAEYC accreditation and organizational structure, the components of organizational structure were not examined. However, after examining the components in relation to work climate, the results suggested a significant positive correlation between previous experience with NAEYC accreditation and peer collaboration (r=.341, p=.049). Teachers who had previous experience with NAEYC accreditation reported higher perceptions of peer collaboration during the classroom portfolio process.

In summary, the hypotheses for research questions 1, 2 and 3 were examined using correlation matrices. The results indicated that we should fail to reject hypotheses 1a and 1b while hypotheses 2a, 2b, 3a and 3b should be rejected. Further analysis indicated that
relationships existed between the independent variables and specific components of the dependent variables.

**Research Question 4**

Research question 4 examined a model that was related to teacher perception of organizational structure and work climate. It was hypothesized that a model would exist for each dependent variable, respectively (hypotheses 4a and 4b). To test these hypotheses, multiple regressions were conducted using organizational structure and work climate as the dependent variables.

**Organizational Structure (Hypothesis 4a)**

The full model was considered including all three independent variables (teacher age, education level and previous experience with NAEYC accreditation). Since previous experience with NAEYC accreditation had one case missing, SPSS 16.0 removed this case from the overall analysis (n=34). The regression results suggest a positive trend at the .10 level ($F(3, 33)=2.875$, $p=.053$), indicating that the variables may be related (Table 6.4). However, since the model is not significant at the .05 level, hypothesis 4a should be rejected.

In examining the trends of the full model, the $R^2$ suggests that the three independent variables account for 22.3% of the variation in organizational structure ($R^2=.223$). However, the regression results in Table 6.4 suggest that only teacher age contributed to the variation in organizational structure ($p=.043$). Thus, the remaining variables can be excluded from the model.

The results regarding teacher age suggest that as teacher age increased one standard deviation (11.8 years), the teacher response of organizational structure increased .368
standard deviations, or about 12%. This means that teacher perception of organizational
structure increased about 1% with each yearly increase in teacher age.

Table 6.4. Full Model (Dependent Variable: Organizational Structure)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Raw Coefficient</th>
<th>Beta Weight</th>
<th>t-statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Age</td>
<td>.010</td>
<td>.368</td>
<td>2.119</td>
<td>.042</td>
</tr>
<tr>
<td>Education Level</td>
<td>-.060</td>
<td>-.258</td>
<td>-1.535</td>
<td>.135</td>
</tr>
<tr>
<td>Previous Experience with NAEYC Accreditation</td>
<td>.040</td>
<td>.059</td>
<td>.331</td>
<td>.743</td>
</tr>
</tbody>
</table>

Work Climate (Hypothesis 4b)

Work climate was regressed on all three independent variables (teacher age, education level and previous experience with NAEYC accreditation). Since previous experience with NAEYC accreditation had one case missing, SPSS 16.0 removed this case from the overall analysis (n=34).

The results from the multiple regression analysis suggest that by all independent variables, the model was statistically significant (F(3, 33)=4.175, p=.014) (Table 6.5). This means that the variables are related, and that we can fail to reject hypothesis 4b. In addition, the full model explains 29.5% of the variance in work climate (R²=.295). The results in Table 6.5 indicate that teacher age made a statistically significant contribution in explaining the variation in work climate (p=.020). However, previous experience with NAEYC accreditation (p=.220) and education level (p=.228) do not make significant contributions to the model. This suggests that a one-variable model containing only teacher age was the most appropriate.
The regression results regarding teacher age suggest that as teacher age increases one standard deviation (11.8 years), the perception of work climate increases .405 standard deviations or about 12%. Meaning, as teachers age, they reported higher perceptions of work climate in relation to the classroom portfolio process.

Table 6.5. Full Model (Dependent Variable: Work Climate)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Raw Coefficient</th>
<th>Beta Weight</th>
<th>t-statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Age</td>
<td>.010</td>
<td>.405</td>
<td>2.449</td>
<td>.020</td>
</tr>
<tr>
<td>Education Level</td>
<td>-.040</td>
<td>-.201</td>
<td>-1.252</td>
<td>.220</td>
</tr>
<tr>
<td>Previous Experience with NAEYC Accreditation</td>
<td>.122</td>
<td>.209</td>
<td>1.230</td>
<td>.228</td>
</tr>
</tbody>
</table>
CHAPTER 7: DISCUSSION

The results of this research provided insight into teacher perceptions of the NAEYC classroom portfolio process. Since the classroom portfolio is a new requirement for NAEYC accreditation, there was no current research surrounding the process. As such, results from this study may begin to provide much needed guidance to administrators and facilitation projects that are assisting teachers through the classroom portfolio process. The discussion surrounding the results of this research are presented in terms of the demographic variables that were examined (teacher age, education and previous experience with NAEYC accreditation). In addition, the limitations of this study and recommendations for future research were examined.

Teacher Age

Findings from this research suggest that teacher age may be related to their perceptions of external factors that support the classroom portfolio process. First, a positive relationship was found between teacher age and organizational structure. Specifically, the results suggested that teacher age may be associated with their perception of administrator support. This means that as a teacher’s age increases, their perception of administrator support increases, i.e. older teachers may need more administrator support.

These findings support that of Ma and MacMillian (1999) who suggest that older teachers may need more administrator support because they are less satisfied with their jobs. In addition, research has shown that older teachers may be more motivated by the recognition and praise of their administrator (Sergiovanni, 1967). This has important
implications for administrators. By understanding that older teachers may need more of their support and encouragement, administrators may be able to create an environment that allows for more of their time and counsel during the classroom portfolio process (i.e., checking in with them, scheduling meetings, etc.).

Second, older teachers reported greater perceptions of peer collaboration during the classroom portfolio process. This may be explained a few different ways. Similar to administrator support, older teachers may need more support and thus seek it from peers (Feistritzer, 1986); or, as transformational learning would suggest, peer collaboration may allow teachers to challenge their existing beliefs and transform their ideas (Mezirow, 1991). As teachers age, they may utilize peer collaboration as a way to critically reflect on their own practice and broaden their repertoire of teaching.

On the other hand, the assumptions of andragogy suggest that adults use past experiences as a resource for learning (Knowles, 1968). Thus, it is also possible that as teachers age, they become the resource for younger teachers. They may have more life experiences from which to broaden the interpretation of the criteria required for the classroom portfolio, and be able to provide support for younger teachers (Knowles, 1968). While it is unclear from this research whether older teachers need the support of peer collaboration or whether they are the support for other teachers; the results demonstrate the importance of peer collaboration in the classroom portfolio process.

Finally, older teachers reported higher perceptions of staff inclusion during the classroom portfolio process. The positive relationship between age and staff inclusion may be due to the way older teachers view teaching. Younger teachers may view teaching as a job, while older teachers may view it as a career (Feistritzer, 1986). Older teachers may be
more invested and have different needs from their job (Feistritzer, 1986). As teachers get older, they may view the classroom portfolio as an effort to improve quality, not just another task imposed upon them.

These results are supported by the fourth assumption of andragogy (Knowles, 1968), which suggests that teachers are more likely to participate in a professional development opportunity if they understand the relevance of it (Baumgartner et al., 2003). Older teachers may recognize the importance of the classroom portfolio as way to improve quality and value staff inclusion as way to be a part of this process.

The facets of the transformational learning theory (Mezirow, 1997) can also be applied to the results regarding staff inclusion. Research suggests that when teachers feel empowered (i.e., through staff inclusion), it increases their job satisfaction and ultimately their motivation (Davis & Wilson, 2000). It can be argued that older teachers have more life experiences from which to interpret the classroom portfolio (Mezirow, 1978). They have a greater repertoire from which to draw, making the experience more meaningful. Since they feel they have more to offer, older teachers may benefit from increased staff inclusion.

When examining the notion of teacher age in this study, it is important to point out that the participants had a mean age of 38. This was older than expected from a sample of early childhood teachers. Furthermore, since this survey was conducted online, a younger sample was anticipated due to their familiarity and comfort with computers. However, since older teachers may be more invested in their careers (Feistritzer, 1986), they may have felt more of a duty to complete the survey. In addition, older teachers may have understood the significance of this research and the relationship it may have on the quality of their program (Knowles, 1980).
Education Level

The results of this research did not suggest a relationship between education level and organizational structure or work climate. However, the limitations of this study may have contributed to these results. There was a lack of diversity among the education levels of the participants in this study. The majority of participants had bachelor’s degrees (48.6%) or master’s degrees (20%) (Appendix E). Only 5.7% of participants indicated a High School diploma as their highest level of education. This may be explained by the fact that an online survey was used. Higher educated teachers may have been more likely to fill out an online survey due to their comfort level with and access to computers. In addition research suggests that higher educated teachers are more likely to participate in professional development opportunities (Bridges et al., 2003). Having viewed this survey as professional development, the majority of participants were highly educated.

Previous Experience with NAEYC Accreditation

A teacher’s previous experience with NAEYC accreditation was important to consider when examining their perception of the classroom portfolio process. The results suggest that a positive relationship existed between previous experience with NAEYC accreditation and work climate. Specifically, a teacher’s previous experience with NAEYC accreditation was positively related to peer collaboration; such that teachers who had been through the accreditation process in the past had higher perceptions of peer collaboration during the classroom portfolio process.

Similar to the relationship between teacher age and peer collaboration, this may be explained through the assumption of andragogy (Knowles, 1968). Teachers who have been through the accreditation process may serve as a resource for those who haven’t been through
the process. They may be able to provide insight and knowledge through collaboration with their peers (Knowles, 1968). In addition, andragogy assumes that teachers use their past experiences to enhance their learning (Knowles, 1968). Having previous experience with NAEYC accreditation may augment teacher engagement in the classroom portfolio process.

These results also support Robertson’s (2006) research which suggests that increased teacher experience may prepare teachers for the reality of certain tasks, making their experience more manageable. Teachers with previous NAEYC accreditation experience may serve support for novice teachers, helping alleviate the overwhelming nature of the classroom portfolio process. Using this idea, administrators may be able to create a mentoring system that pairs teachers with experience with those who have not been through the process (Robertson, 2006). While compiling the classroom portfolio may be new to all teachers, previous experience with the accreditation process may be a useful resource. The peer collaboration that occurs between these teachers may result in the growth and development of novice teachers who have not been through the process (Mezirow, 1997).

It is important to note, however, that a relationship was not found between previous experience with NAEYC accreditation and organizational structure. A relationship was expected due to the nature of the components in organizational structure. Andragogy suggests that as adults gain knowledge, they become more independent (Knowles, 1968). As such, a teacher with previous accreditation experience would be expected to have a lower perception of administrator support during the process due to their existing knowledge.

However, this relationship was not found. This may be due to the limitations of sample size. As mentioned earlier, thirty-five teachers participated in this study. While this sample size did provide significant results, it may not have been representative of the
population as a whole. Further research should be conducted with a larger sample size to fully examine the relationship between previous experience with NAEYC accreditation and organizational structure.

**Full Model**

It is also important to discuss the results from hypotheses 4a and 4b, which suggested that the best model for explaining the relationship between all variables, included only teacher age. Education level and previous experience with NAEYC accreditation may have been related with certain components of work climate when examined solely, but when examined in a model containing teacher age, age contributed the most significant variation in organizational structure and work climate. By considering teacher age during the classroom portfolio process, administrators may be able to create an environment conducive to learning.

**Limitations and Recommendations for Future Research**

Recommendations will be discussed in terms of the limitations of this research as well as suggestions for future research. These will be presented in terms of sample size, survey design and contributions to evidence-based practice.

**Sample Size**

Additional research should be conducted to further examine the classroom portfolio process. As such, this research may serve as a pilot study for future research. An important factor in future research should include an increased sample size. Not only will this be more representative of the population, it will likely provide more diversity among participants. The current study sampled participants from the state of Connecticut, 74% of which were Caucasian. To increase sample size and diversity, future research should distribute the
survey nation-wide to gain a large number and more diverse sample of teachers. This may provide results that are easier to generalize to the population as a whole.

Furthermore, to increase sample size, the inclusion/exclusion criteria of this study should be broadened. The current inclusion criteria included programs that had successfully completed the NAEYC accreditation process in the past six months OR were currently awaiting their accreditation visit. Future research should expand these requirements to include successful completion of the accreditation process in the past 12 months OR having candidate status for accreditation. Candidate status is awarded to programs that are ready for their accreditation visit. Therefore, they would have completed the classroom portfolio process. By expanding these criteria, more teachers will be eligible to participate.

It is also important to consider return rates in future research. This study was unable to capture return rates due to the nature of the survey distribution. However, future research should consider utilizing NAEYC and its national membership for future participants. This will allow for a reported return rate and may provide some perspective on sample size.

Finally, to increase sample size future research should be conducted during the fall of a school year. The current research was conducted in August, which may have contributed to the low sample size. Some child care programs may have been closed during the survey distribution period. In addition, teachers may have been on vacation and unaware of the survey. By conducting this study in the fall, more teachers may be available to participate.

Survey Design

In addition to sample size, the actual survey should be revised for future research. One reason is to increase internal reliability. Future research should include factor analysis.
which will eliminate certain survey questions that do not apply. This will not only shorten the survey, it will provide a more reliable survey to use in the future.

Next, the demographics of the survey should be revised. A question should be added to identify the type of program each teacher worked at (i.e., non-profit, faith based, head start, part-day, etc.). Future research could then examine the relationship between this demographic and teacher perceptions of the classroom portfolio process. This will allow the study to examine the role that program type plays in teacher perceptions, if any.

In addition, there were several elements that were not addressed in this study, which should be considered in future research. First, the concept of critical reflection should be examined. Through my previous consulting work, I found that teachers used the classroom portfolio to reflect on their practice, and many indicated that this reflection resulted in changes in the classroom. The transformational learning theory suggests that critical reflection is essential in transforming how teachers think (Mezirow, 1978). Future research should include survey questions regarding critical reflection to understand if teachers utilized this during the classroom portfolio process.

Next, future research should examine the relationship between a teacher’s job title and their perceptions of the classroom portfolio process. This study asked teachers to identify their job title as lead teacher, co-teacher, assistant teacher or floater. The current study used these responses for demographic information. Future research should consider examining the role that job title plays in teacher perceptions. For example, teachers who work in teaching teams or as co-teachers may report different perceptions of peer collaboration due to the nature of their everyday collaboration. Or, assistant teachers who are responsible for compiling the classroom portfolio may report different levels of perception
due to the nature and hierarchy of their job. All of these are relevant to consider in future research.

Next, future research should examine the use of the classroom portfolio as an evidence-based tool (Brookfield, 1995). Survey questions should be designed to determine if teachers used the classroom portfolio to incorporate new teaching techniques that are research based. As examined in the next section, this will provide much needed evidence-based support for the classroom portfolio as a whole.

**Evidence-Based Practice**

Future research will enhance evidence-based practice regarding the classroom portfolio process. Given that the classroom portfolio process is new, there is no evidence to directly suggest its benefits to teachers or programs. Over the past several years, evidence-based practice has become increasing influential in the field of education. This practice involves “scientific evidence and the integration of practice, policy, and research when making decisions about children and families” (Justice & Pence Khara, 2004). Policy makers and educators alike require considerable research supporting the effectiveness of new teaching methods before they are willing to implement them. By conducting additional research on the classroom portfolio process, educators and administrators will have more information from which to make decisions on its implementation.

In today’s society, policy makers require extensive evidence to support programs which they endorse (Smith, 2003). With the current lack of classroom portfolio research, it may be unlikely improvements will be implemented. However, by integrating the professional wisdom of the education field with extensive research (Smith, 2003), policy makers and educators will have the tools to make confident decisions regarding the future of
classroom quality. By conducting future research, NAEYC will become equipped with the evidence-based research needed to support the legitimacy of the classroom portfolio process.
CHAPTER 8: CONCLUSION

The reinvented NAEYC accreditation system introduced the field of early childhood education to a new vision of quality. The new requirements of accreditation have challenged administrators, teachers and parents to raise the bar of quality in their own program. The classroom portfolio process not only requires teachers to critically examine their own practice, it allows for professional growth within the field. While beneficial, compiling the classroom portfolio has proven to be a challenge for teachers, while motivating them is a challenge for administrators.

The purpose of this study was to examine the relationship between teachers’ demographic characteristics and their perception of external factors that support the NAEYC classroom portfolio process. This research sought to provide insight into the classroom portfolio process and equip administrators with the tools to foster teacher motivation. The results suggest that a teacher’s age and previous experience with NAEYC accreditation may have a relationship to their perception of the classroom portfolio process. By identifying these relationships and examining them in future research, we may begin to understand the dynamic of teacher participation in the process and assist them to successfully participate in the classroom portfolio process.
APPENDIX

Appendix A: Email to Facilitation Project

Dear Colleague,

I am writing to ask your help in a research study being conducted for the completion of my Master’s degree in the School of Education at the University of North Carolina. This study is designed to examine teacher perceptions of the NAEYC classroom portfolio process.

I would like to survey a sample of teachers in your state who participated specifically in the classroom portfolio process to gain their perspective of the process. I would like to understand some of the challenges that they faced as well as successes they experienced. You are under no obligation to participate in this study, it is completely voluntary. If you choose to participate, your only participation will be sending an email to programs, as explained below. By sending an email to programs, you will be connoting your consent to participate.

I would like your help in emailing programs in your state to participate in this study. Their participation is completely voluntary. They are under no obligation to participate. You will not be in any additional contact with them regarding this study. However, not all programs are eligible for this study. Here are the criteria for participation:

1. Programs who have received their NAEYC accreditation visit and are currently awaiting an accreditation decision, OR
2. Programs that successfully completed the accreditation process within the last six months.

Please send the following attachment in email form to all eligible programs in your state. You may contact us with any questions at (919) 671-5546 or by email (hward@email.unc.edu, ritchie@fpg.email.unc.edu).

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thank you for assistance in this research.

Sincerely,

Heather Kiser    Sharon Ritchie, Ed.D
Master’s Candidate,  Senior Scientist
School of Education  Frank Porter Graham
The University of North Carolina  Child Development Institute
Appendix B: Email to Administrators
(To be distributed by the Facilitation Project)

Dear Administrator:

I am writing to ask your help in a research study being conducted for the completion of my Master’s degree in the School of Education at the University of North Carolina. This study is designed to examine teacher perceptions of the NAEYC classroom portfolio process.

It’s my understanding that your program is currently pursuing or recently pursued accreditation through NAEYC’s reinvented accreditation system. I would like to contact a sample of teachers who participated specifically in the classroom portfolio process to gain their perspective of the process. I would like to understand some of the challenges that they faced as well as successes they experienced.

As such, I would like teachers in your program who participated in the classroom portfolio process to complete an online survey. However, not all teachers are eligible for this study. Teachers sought to participate must be employed at the participating program as a teacher, co-teacher or assistant in a classroom that is/was responsible for compiling the NAEYC classroom portfolio. Please only include teachers who were responsible for compiling the classroom portfolio.

Your participation in this study is completely voluntary. Your program and your teachers are under no obligation to participate. If you are willing to participate, please distribute the attached letter to all eligible teachers. The distribution of this letter will indicate your consent to participate in this study. This letter includes instruction for the survey, as well as information regarding their consent to participate. However, eligible teachers do not have to participate. Their participation is voluntary.

The survey will be available from DATE through DATE. Teachers who wish to participate must complete the survey before DATE.

All answers will be completely confidential. The survey will be completed and returned online. No one other than research staff will have any access to the data. Reports, papers, and presentations will not include any information that would allow anyone to identify any child, family, class, teacher, specialist, or school.

Results from the survey will be used to help NAEYC and other child care programs understand how teachers compile the classroom portfolios. Since this is a new process, many child care programs have little guidance. Their feedback may help other programs and teachers succeed in the classroom portfolio process.
You may contact us with any questions at (919) 671-5546 or by email (hward@email.unc.edu, ritchie@fpg.email.unc.edu).

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thank you for considering participation in this study. We hope that we can share your views with the greater professional community and use your response to help shape recommendations for addressing the NAEYC classroom portfolio process.

Sincerely,

Heather Kiser  
Master’s Candidate,  
School of Education  
The University of North Carolina

Sharon Ritchie, Ed.D  
Senior Scientist  
Frank Porter Graham  
Child Development Institute
Appendix C: Letter to Teachers (Consent Alternative)  
To be included with the email to Administrator (Appendix B)  

The NAEYC Classroom Portfolio Process Study

Date

Dear Colleague:

I am writing to ask your help in a research study being conducted for the completion of my Master’s degree in the School of Education at the University of North Carolina. This study is designed to examine teacher perceptions of the NAEYC classroom portfolio process. Your participation is completely voluntary.

It’s my understanding that your program is currently pursuing or recently pursued accreditation through NAEYC’s reinvented accreditation system. I would like to survey a sample of teachers who participated specifically in the classroom portfolio process to gain your perspective of the process. I would like to understand some of the challenges that you faced as well as successes you experienced. In order to participate, you must be a lead/co-teacher, assistant teacher or floater is/was responsible for compiling the NAEYC classroom portfolio.

To participate in the study you would complete an online questionnaire via the website: www.surveymonkey.com. Completing this online questionnaire connotes your consent to be a participant in this study. This questionnaire is composed of questions addressing your experience with the NAEYC classroom portfolio process such as the materials you used, the information that you received regarding the process, the support you received and some questions (demographic) used to describe the respondents in this study. Completion of the questionnaire should take no longer than 30 minutes. You are free to answer or not answer any particular question and have no obligation to complete answering the questions once you begin.

If you choose to participate, please note that the survey will only be available online from DATE through DATE. The survey will only be available during these dates, and will officially conclude on DATE.

Your participation is anonymous. You will not be asked any identifying information during the questionnaire process. All data obtained in this study will be reported as group data. No individual can be or will be identified. We plan on publishing the results of this research as well as communicating these results to the professional associations in nursing. The only persons who will have access to these data are the investigators named on this letter and the staff handling the return mail and the data entry personnel.

There are neither risks anticipated should you participate in this study nor any anticipated benefits from being involved with it. However, there will be professional benefit from this study, as the information we obtain will be communicated to the profession through publication in the literature, presentation at professional meetings and directly dissemination to the professional associations. There is no cost to you or financial benefit for your participation.
You may contact us with any questions at (919) 671-5546 or by email (hward@email.unc.edu, ritchie@fpg.email.unc.edu).

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thank you for considering participation in this study. We hope that we can share your views with the greater professional community and use your response to help shape recommendations for addressing the NAEYC classroom portfolio process.

Sincerely,

Heather Kiser
Master’s Candidate,
School of Education
The University of North Carolina

Sharon Ritchie, Ed.D
Senior Scientist
Frank Porter Graham
Child Development Institute
Appendix D: Self-Administered Survey

The self-administered survey shown below is a paper sample of the survey. Participants in this study completed an online survey, which contained the same questions.

The survey shown below contains one extra column to the left of each question. These columns were not present on the survey that was distributed to teachers; they are for internal use only. The items in the column indicate which component the question represents. The table below lists each component that is present in the survey.

<table>
<thead>
<tr>
<th>External Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator Support</td>
</tr>
<tr>
<td>Planning Time</td>
</tr>
<tr>
<td>Work Room</td>
</tr>
<tr>
<td>Materials</td>
</tr>
<tr>
<td>Teacher Delegation</td>
</tr>
<tr>
<td>Peer Collaboration</td>
</tr>
<tr>
<td>Staff Inclusion</td>
</tr>
<tr>
<td>Staff Meetings</td>
</tr>
<tr>
<td>Professional Development</td>
</tr>
</tbody>
</table>
**NAEYC Classroom Portfolio Survey**

Thank you for taking the time to complete this survey! The survey consists of 6 pages. The survey questions are grouped according to a topic area (in bold). When you are finished, place the completed survey in the envelope (included) and turn in to your administrator.

**Relationships**

*Please rate (circle) the following as they apply to your experience with the Classroom Portfolio*

<table>
<thead>
<tr>
<th></th>
<th>1 Definitely does not apply</th>
<th>2 Does not really apply</th>
<th>3 Applies Somewhat</th>
<th>4 Definitely Applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 1.</td>
<td>I worked with other teachers during the process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC 2.</td>
<td>I felt comfortable sharing my ideas with other teachers</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC 3.</td>
<td>It was helpful to hear other teachers ideas throughout the process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC 4.</td>
<td>I felt like working with others slowed my work down</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC 5.</td>
<td>I felt anxious when other teachers discussed the classroom portfolio</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC 6.</td>
<td>When talking to other teachers, I felt that I was behind in my portfolio compared to theirs</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC 7.</td>
<td>By talking to other teachers, I felt that I was on the right track with my ideas (I got confirmation)</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WR 8.</td>
<td>There is a teacher work room/staff lounge at my program <strong>if you did not have a work room/staff lounge, skip to #12)</strong></td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WR 9.</td>
<td>I felt comfortable working on classroom portfolio in the work room/staff lounge</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WR 10.</td>
<td>I needed more privacy to work on the classroom portfolio</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TD 11.</td>
<td>My assistant/co-teacher helped me with classroom tasks while I was working on the classroom portfolio</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TD 12.</td>
<td>I delegated tasks to my assistant/co-teacher during the process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Staff Meetings
*Please rate (circle) the following as they apply to your experience with the Classroom Portfolio*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI</td>
<td><strong>1.</strong> The NAEYC Accreditation process was explained to me (personally or in a meeting)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SI</td>
<td><strong>2.</strong> The classroom portfolio process was explained to me (personally or in a meeting)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SI</td>
<td><strong>3.</strong> I felt that I was a part of an effort to improve quality for our program</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SI</td>
<td><strong>4.</strong> I felt that I had some input on how our program was going to complete the process</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SI</td>
<td><strong>5.</strong> I understood how the classroom portfolio process worked (what it was supposed to look like)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SI</td>
<td><strong>6.</strong> I felt embarrassed asking for help understanding the classroom portfolio process</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SM</td>
<td><strong>7.</strong> My program discussed the classroom portfolio during staff meetings (if no, skip to next section)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SM</td>
<td><strong>8.</strong> I felt staff meetings were a helpful place to discuss the classroom portfolio</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SM</td>
<td><strong>9.</strong> I felt more confident about the classroom portfolio process after staff meetings</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SM</td>
<td><strong>10.</strong> I felt comfortable speaking up during staff meetings</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PC</td>
<td><strong>11.</strong> I liked hearing other teacher’s ideas regarding the classroom portfolio</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Materials and Information
*Please rate (circle) the following as they apply to your experience with the Classroom Portfolio*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td><strong>1.</strong> I used a computer during the process <strong>if this does not apply to you, please skip to #4</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>M</td>
<td><strong>2.</strong> I used the internet during the classroom portfolio process</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>M</td>
<td><strong>3.</strong> I used Microsoft Word during the classroom portfolio</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>M</td>
<td>4.</td>
<td>I used a digital camera during the classroom portfolio process</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>M</td>
<td>5.</td>
<td>I used a non-digital camera during the classroom portfolio process</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>M</td>
<td>6.</td>
<td>I felt that I had enough materials to complete the portfolio (binders, markers, paper, scissors, etc).</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>M</td>
<td>7.</td>
<td>I had to buy some materials to complete the portfolio</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>M</td>
<td>8.</td>
<td>I borrowed materials from other teachers during the process</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>9.</td>
<td>A consultant worked with us during the process <strong>If this does not apply to you, please skip to #11</strong></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>10.</td>
<td>I felt the consultant was helpful</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>11.</td>
<td>I attended a training outside the program regarding the classroom portfolio process <strong>If this does not apply to you, please skip to #13</strong></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>12.</td>
<td>I felt the training was helpful</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>13.</td>
<td>I sought help from other programs who had already been through the process</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>14.</td>
<td>I was familiar with NAEYC Accreditation before the process began</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>15.</td>
<td>I read through the NAEYC self-study materials <strong>If this does not apply to you, please skip to #18</strong></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>16.</td>
<td>The self study materials were easy to understand</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>17.</td>
<td>The self study materials helped me understand the classroom portfolio process</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PD</td>
<td>18.</td>
<td>I understood the criteria required for the classroom portfolio</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
## Administrator Support

*Please rate (circle) the following as they apply to your experience with the Classroom Portfolio*

<table>
<thead>
<tr>
<th></th>
<th>1 Definitely does not apply</th>
<th>2 Does not really apply</th>
<th>3 Applies Somewhat</th>
<th>4 Definitely Applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS 1</td>
<td>I felt supported by my administrator during the classroom portfolio process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 2</td>
<td>I went to my administrator for help during the classroom portfolio process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 3</td>
<td>My administrator let each teacher decide how to compile the classroom portfolio</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 4</td>
<td>I needed more freedom during the classroom portfolio process, to do it my own way</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 5</td>
<td>My administrator was knowledgeable about the classroom portfolio process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 6</td>
<td>If I went to my administrator for help, I felt she would give me the correct answer</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 7</td>
<td>My administrator respected my ideas and opinions during the classroom portfolio process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 8</td>
<td>My administrator provided me with a manageable timeline to complete the process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 9</td>
<td>I felt that my administrator put me on the spot during staff meetings about the classroom portfolio process</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 10</td>
<td>I felt like my administrator appreciated the work that I completed</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 11</td>
<td>I used planning time to work on the classroom portfolio if this does not apply to you, please skip to #16**</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 12</td>
<td>I needed more planning time to work on the classroom portfolio</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 13</td>
<td>I felt behind on other work because I spent my planning time working on the classroom portfolio</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 14</td>
<td>I worked on the classroom portfolio at home</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 15</td>
<td>I preferred to work on the classroom portfolio during work hours</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 16</td>
<td>I preferred to work on the classroom portfolio at my program</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*69*
Tell us about yourself…

Please check the box that applies to you

Age: ______

Ethnicity

☐ Caucasian
☐ African American
☐ Hispanic
☐ Asian
☐ American Indian
☐ Other

Job Title

☐ Lead Teacher
☐ Co-teacher
☐ Assistant Teacher (Teacher Assistant)
☐ Floater

Education (please indicate highest level)

☐ Some High School
☐ High School Graduate or GED
☐ Some College
☐ CDA
☐ Associate’s Degree
☐ Bachelor’s Degree
☐ Master’s Degree
☐ Doctorate Degree

How many years ago did you complete the highest level of education indicated above?

☐ This year
☐ 1-3 years ago
☐ 4-6 years ago
☐ 7-9 years ago
☐ 10+ years ago

How long have you been teaching?

☐ Less than 1 year
☐ 1-3 years
☐ 4-6 years
☐ 7-10 years
☐ 10-15 years
☐ More than 15 years

How long have you been teaching at your current program?
☐ Less than 1 year
☐ 1-3 years
☐ 4-6 years
☐ 7-10 years
☐ More than 10 years

**How long do you intend to stay at your current program?**
☐ Less than 6 months
☐ 6 months to 1 year
☐ At least another year
☐ For the next few years
☐ I don’t have any plans to leave

**Is your program currently NAEYC Accredited?**
☐ Yes
☐ No
☐ I’m not sure

**Have you been through the NAEYC Accreditation process before (at current or past program)?**
☐ Yes
☐ No
☐ I’m not sure

Thank you for completing this survey!
### Appendix E: Participant Demographics

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>14.3%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>74.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High School or GED</td>
<td>5.7%</td>
</tr>
<tr>
<td>Some College</td>
<td>5.7%</td>
</tr>
<tr>
<td>CDA</td>
<td>11.4%</td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>8.6%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>48.6%</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years Since Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>This Year</td>
<td>8.6%</td>
</tr>
<tr>
<td>1-3 Years</td>
<td>11.4%</td>
</tr>
<tr>
<td>4-6 Years</td>
<td>28.6%</td>
</tr>
<tr>
<td>7-9 Years</td>
<td>20.0%</td>
</tr>
<tr>
<td>10 + Years</td>
<td>31.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Teacher</td>
<td>65.7%</td>
</tr>
<tr>
<td>Co-Teacher</td>
<td>28.6%</td>
</tr>
<tr>
<td>Assistant Teacher</td>
<td>5.7%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th># Years Teaching</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>2.9%</td>
</tr>
<tr>
<td>1-3 Years</td>
<td>11.4%</td>
</tr>
<tr>
<td>4-6 Years</td>
<td>17.1%</td>
</tr>
<tr>
<td>7-10 Years</td>
<td>22.9%</td>
</tr>
<tr>
<td>10-15 Years</td>
<td>14.3%</td>
</tr>
<tr>
<td>15+ Years</td>
<td>31.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th># Years at Current Program</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>8.6%</td>
</tr>
<tr>
<td>1-3 Years</td>
<td>34.3%</td>
</tr>
<tr>
<td>4-6 Years</td>
<td>28.6%</td>
</tr>
<tr>
<td>7-10 Years</td>
<td>8.6%</td>
</tr>
<tr>
<td>10+ Years</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Previous Experience with NAEYC Accreditation</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>62.9%</td>
</tr>
<tr>
<td>No</td>
<td>34.3%</td>
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REFERENCES


