

Running head: Quality TRAINING PROGRAMS IN EARLY CHILDHOOD EDUCATION

Quality Training Programs in Early Childhood Education

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Abstract

The effect that higher education has on the quality of a childcare setting is currently unknown. Early et al. (2007) suggest that higher education may not be affecting the quality of care in a childcare setting because the educators are not being provided with practical training or support within their Early Childhood Education (ECE) preparation courses. The purpose of this qualitative research study was to examine the 16 mandatory courses within the Brock University Bachelor of Early Childhood Education (BECE) program to determine if, in fact, the courses align with the National Association for the Education of Young Children (NAEYC) (2009) Program Standards. The researcher conducted a qualitative content analysis to ascertain the results of the study. To begin, course outlines were obtained from previous courses the researcher engaged in. Each course outline was reviewed in detail so that the researcher could become familiar with the assignments, lecture topics, and learning objectives within each course. Once each course outline was reviewed, the researcher created a list of the topics that were used to establish categories for coding. The themes that emerged from this process included theorists, program models, families, and knowledge of the ECE field. In addition, life-long learning, teaching specific subjects, and inclusion were also themes that were derived from the data. Within each category, the topics were scrutinized to determine the specific NAEYC Program Standard that the topic supported. A frequency chart was then created for each course to identify how many times each topic adhered to a specific standard. The results of the study concluded that the BECE program at Brock University aligned with all of the NAEYC program Standards. Consequently, Early Childhood Educators can have confidence in the quality of Brock University's BECE program.

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CHAPTER ONE

While observing children in a high-quality early childhood care environment, it is evident that many children are learning new skills and strengthening their developmental domains. The *physical domain* of development may increase while the children are walking from one activity to another, while the *social domain* of development may be strengthened through interactions with other children. The *cognitive domain* of development may be strengthened as the children learn new information, and the *language domain* of development may be increased through reading a book, telling a story, or writing a list on a piece of paper. Each domain of development may be strengthened as the Early Childhood Educator (ECE) in the childcare setting converses with each child, asking questions and then posing dilemmas for the child to solve. When the ECE begins to be involved within the children's learning, the child can surpass his or her zone of proximal development. According to Vygotski (as cited in Van Oers & Duijkers, 2013), the *zone of proximal development* is the difference between what a student can do independently without assistance and what they can do when assistance is provided. This is merely one example of how high-quality early childhood care environments can facilitate children's development of their different learning domains.

All children should be provided with the opportunity to attend a high-quality childcare program. Some researchers suggest that being immersed in a quality learning environment at a young age provides long-term positive benefits. The benefits associated with high-quality early childhood care include higher academic scores in reading, mathematics, and social sciences, higher academic scores throughout adolescence, and higher adult wages (Cortázar, 2015; Dearing, McCartney, & Taylor, 2009). Evidence

indicates that not one direct predictor guarantees a successful quality childcare; however, different contributing factors, such as adequate funding, low child-to-teacher ratios, and staff training and qualifications often contribute to a high-quality childcare environment (Goelman, Forer, Kershaw, Doherty, Lero, & LaGrange, 2006).

Early Childhood Educators (ECEs) cannot control the finances within their childcare centre, nor the ratio of students to staff within each classroom; however, they can exercise autonomy by directing the level of training and qualifications they each obtain. When an ECE engages in different workshops, training, or further education, he or she is able to learn enhanced strategies to implement in the classroom. Before engaging in a training program, however, it is imperative that each training facility undergoes an extensive review to determine the quality of the content that is being delivered to each student. If the ECEs are not being provided with comprehensive training, it will most likely be difficult for them to transfer the knowledge they learn to the early childhood environment and, as a result, the children in their care.

Purpose of the Study

The purpose of this study was to examine the 16 mandatory courses within the Brock University Bachelor of Early Childhood Education (BECE) program to determine if, in fact, the courses align with the National Association for the Education of Young Children (NAEYC) (2009) Program Standards. The results of the current study may confirm alignment with NAEYC Standards. On the other hand, results may assist future program directors in identifying gaps within the BECE program, according to the NAEYC quality Standards. Finally, this study may influence future program directors to note the content that needs to be implemented in order to ensure that the BECE program

is offering the highest possible education for future early childcare professionals.

Analyzing the BECE program may also promote the BECE program to future educators, as it could reveal that Brock University, as an institution, strives to provide each educator with the most comprehensive training.

Questions Under Investigation

The current study analyzed 16 different courses within the BECE program. It focused on the content of each course and the way in which each topic aligned with NAEYC (2009) Program Standards to create a quality program. The research was guided by the following research questions:

1. How does each course align with the NAEYC (2009) Program Standards?
2. What courses need to be included in the BECE program to make certain that the program is functioning at the highest level?
3. Are there any courses that can be eliminated from the BECE program?

Importance of the Study

According to Biersteker, Dawes, Hendricks, and Tredoux (2016), minimal studies have examined Early Childhood Education training programs to determine the quality of education future practitioners are receiving. Thus, it is necessary for each training program to be analyzed to determine the quality of education each Early Childhood Educator is receiving, so that each may function at the highest possible level in their field. This is of utmost importance, as engaging in a high-quality childcare program facilitated by trained professionals promotes children's academic and social abilities (Gormley, Gayer, Phillips, & Dawson, 2005). I propose an analysis of the BECE program at Brock University to determine the program's alignment with NAEYC Standards, to

discover any possible discrepancies within each course, and to provide recommendations for future course content. With possible recommendations, the BECE program at Brock University will function at the highest possible level according to NAEYC (2009) Program Standards.

Analyzing the courses within the BECE program is of great interest to me because I am currently an educator who strives to provide the highest quality childcare for each child I interact with. During my undergraduate degree, I often questioned the content that I was learning because I discovered that the content within the BECE courses often overlapped with one another; thus, I sensed that my learning may be incomplete. Conducting an analysis on each course using the NAEYC (2009) Program Standards may assist in revealing the similarities and differences that each course offers in terms of learning outcomes. If several courses adhere to merely one or two standards, then it may be recommended that these courses be revised and that new courses implemented into the program.

Scope and Limitations

The topic under investigation addresses the importance of providing a quality training institution for future Early Childhood Educators (ECEs). The study analyzed each course within the BECE program to determine the overall alignment of the program according to the NAEYC (2009) Program Standards. Multiple universities offer an Early Childhood Education program; however, I chose to specifically analyze the Early Childhood Education program at Brock University. Some limitations may arise due to the small sample size. By focusing on a small sample size consisting of all courses merely Brock University's BECE program, the results may differ if compared to multiple

universities' Early Childhood Education programs. It is, therefore, important to note that the results of this study are not an accurate representation of all BECE University programs. I specifically chose to analyze one University so that program directors at Brock University may benefit from the findings of this study.

The study was carried out using a content analysis. The results of this study may be slightly subjective, as the study consisted of one single coder. Having a single coder often leaves information up to interpretation. For example, as the researcher, I may view a portion of the area under investigation as being inconclusive, while another individual viewing the same item may not agree. As a researcher, however, I used the six NAEYC (2009) Program Standards as a tool to guide my investigation. The six Program Standards aided me in analyzing and presenting the data with more credibility.

Conclusion

Future educators should have access to the highest quality of training to make certain that all professionals in a childcare centre are functioning at the highest possible level. The research in the current study focuses on the extent to which each course in the BECE program at Brock University aligns with the NAEYC (2009) Program Standards. The suggested changes, should they be implemented, may enhance the BECE program at Brock University. The suggested recommendations may include the modification, removal, or implementation of specific course content based on the findings of this study. For example, if the content of several courses is found to adhere solely to one standard, it may be beneficial to eliminate one course and add an additional course that focuses on a standard that may not be covered extensively enough in the existing BECE program.

The following four chapters in this paper will illustrate the importance of providing a high-quality training program for future educators. Chapter Two will delve into prior research that has already been conducted on the quality of care and training of Early Childhood Educators. More specifically, the literature review examines studies conducted by Atilas, Jones, and Anderson (2013), Degotardi (2010), Early et al. (2006), Early et al. (2007), and Goelman et al. (2006), which taken together, outline the effects of higher education on the quality of a childcare setting.

Chapter Three will discuss the methodology used to conduct the current study. The methodology section will include an overview of the research design, detailing the ways in which the data was analyzed and collected, and will then describe the chosen approach utilized to respond to the research questions of this study. In addition, Chapter Three will outline the sampling options used, the data collection procedures, and the scope and limitations of the study.

Chapter Four will outline the results of the study, providing both a written and visual display of the data. Finally, Chapter Five will discuss the results of the study in more detail, and will make inferences based on the findings of the study. It will then suggest recommendations that the BECE program can implement to make certain that the program is functioning at the highest level.

CHAPTER TWO

School boards across Ontario have implemented Full-Day Early Learning Kindergarten (FDLK). Each program must be staffed a Registered Early Childhood Educator (RECE) and a certified teacher (Vanderlee, Youmans, Peters, & Eastabrook, 2012). Every RECE must hold a diploma, degree, or equivalent from an Ontario institution and belong to the College of Early Childhood Educators. Since the implementation of the FDLK program, more universities are beginning to offer degree programs in Early Childhood Education. Research has indicated that higher-educated practitioners can have a positive effect on the childcare program within which they work. For example, Howes, James, and Ritchie (2003) found that educators with a Bachelor's degree implemented more literacy-based activities into the classroom and were far more responsive to the children than educators who did not hold a Bachelor's degree. Similarly, Burchinal, Cryer, Clifford, and Howes (2002) discovered that educators with a Bachelor's degree operated a better quality childcare program, were more sensitive to the children present in the classroom, and scored higher on the environmental rating scale than educators who did not hold a Bachelor's degree.

The purpose of this literature review is to reflect upon the effect that higher education has on the quality of care in early childcare settings. More specifically, this paper will discuss the importance of childcare, and will delve into the composition of a quality childcare program, focusing on two direct predictors. It will then review several studies – Atilas, Jones, and Anderson (2013), Degotardi (2010), Early et al. (2006), Early et al. (2007), and Goelman et al. (2006) – that collectively reflect upon the effect that higher education has on the quality of childcare. Finally, this paper will provide an

explanation for conducting the current study in regards to examining training programs for ECEs.

Aspects of a Quality Childcare

According to Gormley, Gayer, Phillips, and Dawson (2005), children who attend a quality childcare program are more likely to develop better academic and social skills than children who attend a lower quality childcare. Additionally, Keys et al. (2013) noted that there was a direct link between attending a high-quality childcare setting and the development of language and mathematic abilities. High-quality childcare not only benefits children in the short-term, but also has a lasting effect on children later in life. Dearing, McCartney, and Taylor (2009) suggest that children who engage in a high-quality childcare are more likely to earn higher wages in adulthood and achieve higher academic scores in both mathematics and literacy throughout adolescence. To illustrate further, in 2008, Bauchmüller, Gørtz, & Rasmussen (2014) analyzed 30,444 Grade 9 students who attended preschool in 1998. Each student was tracked using an identification number that linked to their specific administrative records. The findings yielded a positive correlation between primary school success and attending a high-quality childcare setting.

Quality childcare can be defined in multiple ways across different cultural contexts. In general, however, *high-quality childcare* consists of “low teacher-child ratios, staff qualifications, teaching experience and stability, health and safety, and the physical setting” (Rao & Sun, 2015, p. 213). In addition, the “psychological environment, curriculum, learning and teaching approaches, teacher-child interactions, programme management, and community integration” (Association for Childhood Education

International, 2006, as cited in Rao & Sun, 2015, p. 213) are also included in the factors that contribute to high-quality childcare. Finally, Goelman et al. (2006) discovered that there were two main predictors of a quality childcare: the first predictor included the number of adults in the room, while the second predictor included the level of education that the childcare provider had obtained. The remainder of this paper will explore these two predictors that constitute a high-quality childcare program more deeply.

Before expanding on the two direct predictors that compose quality childcare, we must first review the ways in which quality childcare is measured. Scholars often utilize the Early Childhood Environment Rating Scale (ECERS) or the Infant/Toddler Environment Rating Scale (ITERS) to assess the quality of a childcare (Anders et al., 2012; Grammatikopoulos, Gregoriadis, Tsigilis, & Zachopoulou, 2014; Keys et al., 2013; La Paro, Williamson, & Hatfield, 2014; Schilder & Leavell, 2015). The rating scale contains 43 items that are divided into seven sections: *space and furnishings* (8 items), *personal care routines* (6 items), *language-reasoning* (4 items), *activities* (10 items), *interaction* (5 items), *program structure* (4 items), and *parents and staff* (6 items) (La Paro et al., 2014, p. 881). The administrator rates each item on a scale of 1 to 7. An item is given a score of 1 if it is deemed inadequate, whereas the item would be assigned a 7 if the aspects of the item were met with excellence. Each ECERS/ITERS booklet comes with a detailed explanation of the ways in which the rating scale can be administered and the scoring regulations behind each subscale. It appears to be user friendly, which makes it serviceable for both the parents and the educators using the assessment tool.

Low Ratios as a Predictor of Quality Childcare

According to Goelman et al. (2006), the first direct predictor of achieving quality childcare is to make certain that the child-teacher ratio is low. In fact, Anders et al. (2012) suggest that young children develop a higher understanding of numeracy skills when attending a program that has higher teacher-child ratios. The correlation between low ratios and higher academic achievement may be attributed to the time teachers have to interact with each student. For instance, low ratios allow the educator to provide quality support to each student, as the educator is more likely to be provided with opportunities to interact and engage with the student on a one-to-one basis (Blatchford, Bassett, Goldstein, & Martin, 2003). The educator can also develop a deep relationship with the children's parents so that he or she can provide guidance for a home-based environment. For example, if a child excels in simple addition, the educator may choose to provide the child with more complicated equations. The educator can then provide the parents with a detailed account of the topics learned in school, so that the child can continue to master each skill at home.

In a low-ratio classroom, the educator has the opportunity to monitor each child more diligently to make certain that they are learning to their full potential. It is important to note that an educator may still monitor and observe each child in a higher-ratio classroom; however, it becomes more difficult and time-consuming. In fact, Blatchford et al. (2003) suggest that educators in a high-ratio classroom may choose to develop a deeper relationship with their students by working one-on-one with the student during his or her lunch break.

Effects of Teachers' Higher Education on Childcare

Goelman et al. (2006) suggest that the second direct predictor of quality childcare is level of education that the childcare provider had obtained. Goelman et al. (2006) carried out one of the largest studies in Canada in regards to measuring quality childcare. The study analyzed 326 classrooms in 239 different early childhood centres across Canada using both the ITERS and the ECERS. In addition, each staff member, as well as the program director, was asked to fill out a questionnaire in regards to remuneration, the quality of the work environment, and the overall well-being of each employee. The results revealed that in both the infant/toddler and the preschool classrooms, the two direct predictors of quality included staff-children ratios and the level of training each educator had obtained. More specifically, the more training the educator had achieved, the higher knowledge and skills he or she had to contribute to the classroom environment. Additionally, low child-teacher ratios affected the quality of the childcare setting; in partiuarl, it was found that the caliber of care increased with every supplementary adult that attended the classroom. Thus, the quality improved as the number of adults in the room increased, enabling the staff to converse with one another and recommend strategies to overcome different challenges that may surface within the classroom environment (Goelman et al., 2006).

The results of Goelman et al.'s (2006) study appear to be relevant; however, it is imperative that the threats to validity are considered within each study. Threats to validity include any limitations that are present within the study that may significantly control the outcomes of the findings. With Goelman et al. (2006), even though both the childcare providers' levels of education and the child-teacher ratios were the two main predictors

of quality childcare, the authors did suggest that childcare fees were also an indirect predictor of quality of care. For instance, the higher the childcare fees, the higher the quality of care the centre provided. Evidently, higher fees allowed each childcare centre to employ more staff with better qualifications (Goelman et al., 2006). It appears, then, that in order to have more staff with higher qualifications, childcares must raise the cost for participation. One may question if the fees charged at a centre have a more direct effect upon the quality of care than teacher-child ratios and the level of qualifications of the staff. To explore this further, a future study could examine two childcare centres – one with extremely high rates, but staff who obtained a College level degree, and another childcare centre that had very low fees, but had educators who obtained graduate degrees. It may be predicted that the centre with the higher rates may experience a better quality of care, as a higher disposable income may allow the centre to provide more resources and attract families from a higher socioeconomic class.

Similar to Goelman et al. (2006), Degotardi (2010) examines the elements that created quality childcare, with an emphasis on adult-infant interactions within a play context. The study consisted of 24 female participants who worked in an infant room within a childcare centre. Some of the participants were from different cultural backgrounds and had differing academic qualifications. Seven of the Early Childhood Educators (ECEs) possessed a University degree, ten held a two-year diploma in ECE, and seven did not have any formal qualifications in ECE.

The study was carried out throughout two separate interactions. Each ECE was asked to complete a questionnaire that indicated his or her experience working with infants, his or her qualifications, the number of staff that he or she worked with, and the

age of the particular infant that he or she chose to work with (Degotardi, 2010). The ECE was then videotaped as he or she interacted with one infant. Three separate interactions were filmed for 90 minutes: the first interaction consisted of a play episode, the second entailed a dressing period, and the third involved mealtime. Once each interaction was filmed for 90 minutes, stage one of the study was complete. One week later, the second visit occurred. Each participant was asked to explain and interpret the contents of three 90 minute videos that exemplified different behaviours with infants. The results indicated that there was a direct link between the level of qualifications the ECE had acquired and the complexity of the interaction with the infant. For instance, the higher the level of education that the ECE had obtained, the more sensitive and thought-provoking the interaction appeared to be. In addition, during the second visit, the higher the qualifications the ECE held, the more complex the interpretation of the 90 minute video appeared to be (Degotardi, 2010).

Although it appears that higher qualifications contribute to more complex interactions between a caregiver and an infant, the threats to validity that occur within the study must be accounted for. During the selection process, the caregivers were provided with the opportunity to choose the infants that they wanted to interact with. Knowing the infant prior to the implementation of the study would be beneficial, as the caregiver could direct the play episode toward the child's interests. It would be interesting, however, to note the results if the caregivers had no prior information before interacting with the infant. In addition, Degotardi (2010) suggests that education may not be the only factor that effects the positive interaction between an infant and an ECE. For example, Degotardi (2010) explains that an ECE's intelligence and socioeconomic status may be

related to the complexity of their interactions with an infant. Degotardi (2010) suggests, then, that people who obtain an education are more intelligent and are from a higher socioeconomic group than people who do not have formal education.

Atiles et al. (2013) also discovered that more highly trained staff contributed to the quality of care within a classroom setting. This study included 29 pre-Kindergarten to Grade 3 teachers who engaged in a 40 hour professional development course that took place over the summer months. The study aimed to assess the effects that a professional development workshop would have on a teacher's pedagogy in relation to the science curriculum. In addition, it examined the emphasis each educator placed upon science education both before and after the professional development course.

The results of the study indicated that professional development workshops positively impact educators' knowledge of science education. In addition, educators who participated in the professional development workshop placed a higher value upon science education. Atiles et al. (2013) also discovered that educators benefitted most from the professional development workshop when the presenter focused on practical ways that science education may be implemented in the classroom and could also be integrated into multiple subjects. In particular, integrating science into the classroom aids the students and the teachers; teachers are often focused on meeting requirements for a test, so they may not teach science in an effective way. However, integrating science into multiple subjects allows the students to learn more science content in a cross-disciplinary manner rather than simply what is needed for a test.

Atiles et al. (2013) suggest that professional development workshops improve science education. Although this study does not discuss the effects higher education has

on the quality of care in a childcare setting, it does discuss the effects that training has on the quality of education delivered. Curriculum advisors for future University courses in Education may benefit from the results of this study, in particular. Future curriculum advisors may also consider implementing courses into the Teacher Education program that educates teachers on specific ways to implement subjects into the classroom. For example, a language course may be implemented into the teacher education program that teaches specific ways that literacy can be taught in the classroom. Furthermore, the language course may wish to suggest ways to integrate literacy into and across all subjects. For example, literacy may be implemented into mathematics education by asking the students to write down how many jellybeans are in a container. The children will be provided with the opportunity to write down their predictions and the reasons why they chose a particular number. The educator may then wish to encourage the students to write a story about the jellybeans. Specifically, the students may wish to write how jellybeans are made or how many flavours of jellybeans exist.

In sum, Goelman et al. (2006), Degotardi (2010), and Atilas et al. (2013) discussed the benefits that training and higher education had on the quality of childcare. Higher education appeared to produce more knowledgeable staff and provided them with a higher skill set to implement into classroom practice. Additionally, educators who obtained higher education training were more receptive to infants and interpreted play-interaction with more complexity. Finally, professional development workshops also increased the quality of education delivered, as they provided the staff with practical tools to implement science education into the classroom. Even though it is evident that higher

qualifications can have a positive effect on the quality of care, it is still important to examine other points of view.

Early et al. (2006) discovered that an educator's level of education did not have significant effects on the quality of childcare provision. The study examined over 800 children across 237 different pre-Kindergarten classrooms through observations, child assessments, and teacher questionnaires. Even though the results indicated that the level of educators' qualifications did not contribute to the overall quality of care, it is interesting to note that the educators who possessed a Bachelor's degree scored higher on the teaching and interaction subscale of the ECERS. In addition, children who had teachers who held a Bachelor's degree were found to be more proficient in their math abilities. Rating higher on the ECERS rating scale and being more confident and adept in the subject of mathematics may not appear to directly affect the overall quality of care; however, it could possibly have provided the students with the opportunity to gain a love for mathematics – which could, in turn, positively affect their future goals and aspirations.

Moreover, Atilas et al. (2013) suggested that educators were more proficient in teaching science education when they engaged in a professional development course. Here, one may predict that the educators who held a Bachelor's degree may have had the opportunity to engage in a mathematics course (Early et al., 2006). The bachelor course in question may have taught strategies that could have been implemented into the classroom so that the educator could be more confident when teaching mathematics. Overall, students would benefit from learning from an educator who was confident in teaching mathematics because if an educator experiences a fear of math, then the children may have a higher chance of developing math anxiety (Maloney & Beilock, 2012).

Similarly, Early et al. (2007) analyzed seven different research articles to discover the effects that an educator's level of qualifications had on the overall quality of the classroom and on the children's academic success. Early et al. (2007) also noted the effects that a specific type of major had on the overall classroom environment. The researchers wanted to determine whether an educator who held a Bachelor's degree in science had a better classroom environment than an educator who held a Bachelor's degree in child development. Each of the seven articles examined the educator's level of training, classroom quality, and performed assessments of the student's academic progression of four-year-old children. Consequently, four of the seven studies did not find a link between the level of qualifications and quality of care provided; one study found that educators who held a Bachelor's degree tended to have a lower quality classroom, and the final two studies indicated that educators who held a Bachelor's degree had a higher quality classroom (Early et al., 2007). The results therefore indicated that overall, there were no significant differences of the quality of care provided between those educators with a Bachelor's degree and those who did not hold a Bachelor's degree.

It is interesting to note that Early et al. (2007) disagree with the results of this study. Despite the evidence indicating that there is not a direct link between an educator's level of qualifications and the quality of care provided, Early et al. (2007) propose that education should still hold significance in an educator's career. They suggest that higher education may not affect the quality of care provision because the educators are not being provided with the practical training or support within their Early Childhood Education preparation courses.

Gaps in Literature

It is evident from the literature that a low teacher-child ratio has a direct effect on the quality of childcare provided in childcare settings. The effects that higher education has on the quality of childcare, however, remain inconclusive. In order to accurately determine the effect that higher education has on the quality of childcare, it is important to first examine the Early Childhood Education programs wherein practitioners are being trained. Examining College and University training programs will provide implications for future program directors, so that each program can be carried out with the highest proficiency. According to Biersteker, Dawes, Hendricks, and Tredoux (2016), minimal studies have examined Early Childhood Education training programs to determine the quality of education that future practitioners are receiving. It is essential that each Early Childhood Education program be evaluated before being offered and assessed periodically so that ECEs can be trained to implement a high-quality childcare program. When the ECE is knowledgeable and has the resources to implement a child-centered curriculum, the childcare program then has the opportunity to function at the highest level, thus increasing the childcare program's overall quality.

Analyzing training programs is important because reviewing each ECE program can have a significant influence on the ECE field at large. For instance, Early and Winston (2001) found that educators with a Bachelor's degree were less likely to work with infants and toddlers and be more likely seek employment with elementary-aged children. They attributed the results to the fact that minimal course content in the educators' programs of study focused on infant and toddler interactions in the Bachelor

program, whereas College courses dedicated a substantial amount of time to teaching future educators about infants and toddlers.

Theoretical Framework

The National Association for the Education of Young Children's (NAEYC) Standards for Early Professional Preparation Program (2009) is a document that specifies program standards for ECE programs in the United States, noting the knowledge and skills students should acquire in the early professional preparation program. The document separates the knowledge and skills into six main standards:

STANDARD ONE: Deep Knowledge of Child Development

- Ability to create developmentally appropriate learning environments
- Ability to create an environment that is healthy, compassionate, respectful, and challenging to each child

STANDARD TWO: Understanding of the Importance of Family Involvement

- Understanding diverse family characteristics
- Including each family and the community into the children's learning through respectful, reciprocal relationships

STANDARD THREE: Importance of Observation

- Understanding and knowledge of multiple assessment tools to promote positive outcomes for each child
- Including families and community partners in assessment strategies.

STANDARD FOUR: Knowledge of Multiple Ways to Connect with Children and Families

- Creating positive relationships with families as the foundation of working with

children

- Knowledge of developmentally appropriate teaching/learning strategies.
- Reflection on practice

STANDARD FIVE: Create a Developmentally-Appropriate Curriculum

- Knowledge of multiple inquiry tools to create curriculum
- Utilizes multiple resources to create a meaningful learning environment for each child

STANDARD SIX: Understanding the Field of ECE

- Knowledge of the ethics and standards of practice
- Work collaboratively with others
- Becoming a life-long learner

The following study assesses each course in Brock University's BECE program to determine this program's alignment with these six standards. The more standards the course includes, the more comprehensive the course will be. If, overall, the preparation programs do not include all six standards, the ECEs may enter the field with gaps in their knowledge and skills. For example, if an educator is enrolled in a Bachelor program, but the program is not teaching new content beyond the knowledge gained at the College level, the educator may not be able to implement innovative strategies into the classroom environment. One may then question the value of further education if the student is not enhancing their own professional knowledge and skills.

In conclusion, determining the effects that higher education has on the quality of care is difficult. Atilas et al. (2013), Degotardi (2010), and Goelman et al. (2006) found that higher qualified educators often provided a higher quality childcare experience. In

contrast, however, Early et al. (2006, 2007) did not find that advanced qualifications had any significant affects on the quality of care provided by educators. In order to properly determine the effects that higher education has on the quality of care provided in early childhood care settings, further research must examine the quality of education teachers are receiving in the early education preparation programs.

CHAPTER THREE

The purpose of this study was to examine the 16 mandatory courses within the Brock University Bachelor of Early Childhood Education (BECE) program to determine if, in fact, the courses align with the NAEYC (2009) Program Standards. This study was guided by the following three questions:

- How does each course uphold the NAEYC (2009) Program Standards?
- What additional courses need to be included in the BECE program to make certain the program is functioning at the highest level?
- Are there any courses that can be eliminated from the BECE program?

To answer these three questions, a qualitative content analysis was carried out.

According to Newmann (2007), a *content analysis* is a research method used to compare the content of multiple texts by analyzing documents and ascertaining the content in an alternate form than it was originally intended. In this study, I will be comparing the NAEYC (2009) Program Standards to the course outlines and assignments present in the Brock University BECE program to ascertain alignment between the NAEYC (2009) Program Standards and the BECE program.

O'Reilly, Ronzoni, and Dogra (2013) suggested that when a content analysis is performed, “you need to establish categories for coding and then count the number of instances in which they are used in the text or image” (p. 222). In this study, I will be compiling a list of weekly topics as presented in each course outline. The list will then be used to establish categories for coding. Once each course topic has been coded and the categories are determined, I will use a frequency chart to count the number of instances in which each category aligns with the NAEYC (2009) Program Standards.

Sample and Population/Site and Participant(s)

This study aimed to determine the ways in which the courses at Brock University in the BECE program parallel NAEYC (2009) Program Standards. Human participants were not involved in this study in any way. Instead, the data used focused on course outlines within the Brock University BECE program and the NAEYC (2009) Program Standards. To carry out this research, both the convenient and purposeful sampling methods were employed. Kemper, Dtringfield, and Teddlie (2003) describe *convenient sampling* as a method used when the sample size is chosen based on the ease of access to the researcher. *Purposeful sampling*, however, occurs when the selection process is chosen for a specific intention instead of at random (Teddie & Yu, 2007).

During the selection process, I decided to use the convenient sampling method when choosing to analyze the Brock University BECE program because I engaged in the program myself during my undergraduate degree. Participating in each course enabled me to have access to each course outline, documentation I would not have access to had I analyzed an alternative University BECE program. It was thus convenient for me as a researcher to access the data needed to carry out this study.

Purposeful sampling was also utilized in the selection process of this research. While completing my undergraduate degree, I noted that some aspects of one course would often overlap with the content from another course. The findings from this study will aid in determining any aspects of each course that may be overlapping with others or missing, with the hope that the Brock University program can function at the highest level possible of excellence.

Data Collection Procedures

The data were collected over the course of a seven-day period. On October 31, 2016, I accessed the Brock University BECE program guide online to note the exact courses that were included within the program. In order to graduate, students in the Brock University BECE program are required to take 19 courses: 16 major courses and 3 non-major courses. For the purpose of this paper, it appeared redundant to analyze the three non-major courses, as each student may choose a different non-major course to study. Additionally, the content from the non-major courses are not related to the Brock University BECE program in any way; rather, the courses range across a wide variety of disciplines.

Using Microsoft Excel, I created a chart of the 16 major courses that were included in the Brock University BECE program of studies. I did not want to involve human participants within my study, so I decided to use the course outlines that I had gathered over the course of my undergraduate degree. On an Apple computer, I used the “Finder” application and typed in each course. I was able to find the following 11 course outlines using this method: *Indigenous Culture and Early Childhood Education*; *The Process of Teaching*; *Early Childhood Education I*; *Early Childhood Education II*; *Research, Ethics & Care in ECE*; *Internship I*; *ECE Honours Thesis*; *Families, Schools & Literacy*; *Observation & Evaluation ECE*; *Mathematics in the Early Years*; and *Global Education*.

The other five course outlines were slightly more difficult to obtain, as I did not have an electronic copy readily available. To find the remaining course outlines, I reviewed my transcript and noted the year in which I completed each course. Each year, I

filed all my notes from each class into one binder and labelled it with the year completed and the courses that are included within the binder. I then took the binder and put it into storage for future access. On November 4, 2016, I had access to my storage unit and was able to retrieve the course outlines from the remaining five courses. The five courses included: *Inclusive Programming in ECE*; *Internship II*; *Cognition & Learning*; *Research Methods in Education*; and *Literacy in the Early Years*.

Data Analysis Procedures

Before I carried out the content analysis, I read each course outline in detail to familiarize myself with each assignment, lecture topic, and learning objectives. Each course outline presented a weekly schedule, outlining specific topics that were focused on within the class lectures. I created a list of all weekly topics that were discussed in each course. The list was used to establish the categories for coding. Once each course outline had been reviewed, I examined each topic to determine the specific standards from the NAEYC (2009) Program Standards which the topic supported.

The NAEYC (2009) presents the Program Standards for ECEs in the United States. The document provides a set of principles that recommend the knowledge and skills students should acquire in the early professional preparation program. I used these six standards to analyze the course topics. Standard One suggests that each student should acquire a deep knowledge of child development. Standard Two states that students should understand the importance of family involvement. Standard Three suggests that students should understand the importance of appropriate assessment tools and approaches to promote positive outcomes for each child. Standard Four states that students should be knowledgeable about the variety of ways to connect with children and families. Standard

Five advocates for students being able to create a developmentally-appropriate curriculum. Finally, Standard Six emphasizes the importance of students demonstrating an understanding of the field of ECE.

Once each course had been examined, I used a frequency chart to count the number of instances that each topic was included within the course outline. A frequency chart aided me in determining which courses adhered to the Program Standards and which courses may require revising. Additionally, the frequency chart provided a visual representation of the course topics that were overlapping or missing within the BECE program.

Scope and Limitations

The findings from this study may be sustainable; however, it is imperative that the threats to validity are considered within each study. *Threats to validity* include any limitations that are present within the study that may significantly control the outcomes of the findings. First, this study does not involve human participants, thus limiting the research that is conducted. For instance, the data was collected via course outlines, providing a guideline of the content discussed in each course. The results of this study may have differed, however, had interviews been conducted to ascertain the exact content that students learned from engaging in the course. Additionally, I may have a personal bias because I am a graduate from Brock University's BECE program. To eliminate this bias, however, I used the six NAEYC (2009) Program Standards as a tool to guide my investigation. Finally, the data could be slightly out-dated as I am using the course outlines that I gathered from my undergraduate degree. I began the Brock University

BECE program in 2012 and graduated from the program in 2015. The findings may, therefore, be different had I analyzed the 2016 versions of each course outline.

CHAPTER FOUR

The research objective of this study is to determine the level at which the 16 mandatory courses within the Brock University Bachelor of Early Childhood Education (BECE) program uphold the Program Standards of the NAEYC (2009). This study is guided by the following research questions:

1. How does each course align with the NAEYC (2009) Program Standards?
2. What courses need to be included in the BECE program to ensure the program is functioning at the highest level?
3. Are there any courses that can be eliminated from the BECE program?

The answers to these questions were ascertained through a qualitative content analysis. The researcher analyzed 16 course outlines from the Brock University Bachelor of Early Childhood Education program. To begin, a list of all of the topics in each course were noted in an Excel document. For the purpose of this paper, *topics* can be defined as the areas of focus each course emphasized. Most of the topics were discussed in the weekly overview of each course outline; however, some of the topics were discussed in the assignment section of the course outline. Altogether, 164 topics were discussed throughout and across the 16 BECE course outlines. During the categorization process, it became evident that the topics could be fractionalized into seven main themes: *theorists, program models, families, knowledge of the ECE field, life-long learning, teaching specific subjects, and inclusion.*

This chapter will be organized into sixteen main sections, identified by the sixteen main courses in the BECE program. Within each section, each topic will be categorized into the seven main themes that appeared within the content analysis. Appendix A

provides a detailed description of each theme and each topic that is incorporated within each category. Each section will delve into the examination and analysis of the topics discussed within each course. Each topic will then be evaluated in relation to the NAEYC (2009) Program Standards and earmarked with the specific standard it incorporates. Each section will provide a visual chart for the reader's convenience. For example, if a course incorporates family engagement, the course would display Standards Two and Four of the NAEYC (2009) Program Standards in its associated visual. These two standards depict family engagement because the student would be provided with the opportunity to develop an understanding of the importance of family involvement, and would also be gaining knowledge of multiple ways to connect with children and families in a childcare setting.

Indigenous Culture and Early Childhood Education

The purpose of the *Indigenous Culture and ECE* (ABST 2F96) course is to familiarize students with the contemporary challenges that affect the Aboriginal community in Canada. All the topics discussed within ABST 2F96 focused on two main themes: *Diversity in the Classroom* and *Becoming a Life-Long Learner in the Classroom*. Table 1 provides details of each topic in relation to the NAEYC (2009) Program Standards. The topics that were categorized into diversity included white privilege, Indigenous knowledge into Early Childhood Education programs, residential schools, the medicine wheel, healing, and resilience in the Aboriginal community. Additionally, topics such as the community, literature and children in the Aboriginal community, traditional morals, values, beliefs, spirituality, and bridging the worlds were categorized into diversity. Finally, Aboriginal Head Start programs, holistic education meets native

education, parenting styles, strengthening women, celebrating women, honouring elders, and Aboriginal art were categorized into the diversity section. Each of the topics discussed in the Aboriginal course represented Standard Two of the NAEYC (2009) Program Standards.

Life-Long Learner in the Classroom

Indigenous Culture and ECE (ABST 2F96) also examined the topic of reflection which adhered to Standards Two and Six of the NAEYC (2009) Program Standards.

Table 1

ABST 2F96 Topics in Relation to the NAEYC (2009) Program Standards.

ABST 2F96	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Families							
<i>Diversity in the classroom</i>							
White privilege		X					1
Indigenous knowledge		X					1
Residential schools		X					1
The medicine wheel		X					1
Healing and resilience		X					1
Literature and children		x					1
Traditional morals, values, and beliefs		x					1
Spirituality		x					1
Bridging the worlds		x					1
Aboriginal head start programs		x					1
Holistic education		x					1
Parenting styles		x					1
Strengthening women		x					1
Celebrating women		x					1
Honouring elders		x					1
Aboriginal art		x					1
Communities		x					1
Life-Long Learner							
<i>Life-long learner in the classroom</i>							
Reflection		x				x	2

The Process of Teaching

The purpose of the *Process of Teaching Course* (EDUC 3F01) is to explore the process of teaching and the events that occur when teaching happens. This course examined 16 topics that were coded into two main themes: *Theorists* and *Knowledge in the Field of ECE*. There was one topic that was categorized into theorists, and 15 topics coded into the knowledge in the ECE field. Of the 15 topics coded into the *Knowledge of ECE Field* theme, one topic was categorized into the sub-category of “life-long learner,” whereas 14 topics were categorized into the “knowledge in the classroom” sub-category. Table 2 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Theorists

The Process of Teaching (EDUC 3F01) course discussed Bloom’s taxonomy, categorized under *Theorists*. Bloom’s taxonomy incorporates Standards Two, Four, and Five of the NAEYC (2009) Program Standards. In addition, the students were also provided with the opportunity to reflect upon their practice. Reflection was categorized into *Life-Long Learner* in the classroom and displayed Standards Two and Six.

Knowledge in the ECE Field: Knowledge in the Classroom

The Process of Teaching (EDUC 3F01) course focused on topics such as 21st century education, perceptions of teaching, the power of story, tributes to teaching, personal /practical knowledge, teach who you are, self-knowledge, the first years as a teacher, and technology in the classroom, which upheld Standard Six of the NAEYC (2009) Program Standards. The course also focused on teaching styles, which adheres to Standard Four of the NAEYC (2009) Program Standards, and care in education, which

upholds Standards One, Two, Three, Five, and Six. Inquiry-based approaches, which adhered to Standards One, Three, Five, and Six, and the culture of fear, which adhered to Standard Four, were also discussed. In addition, culturally responsive teaching, which falls under Standards One, Two, Four, Five, and Six, and care in education, which adheres to Standards One, Two, Three, Five, and Six, were examined. In addition, the image of the learner, which adhered to Standards Two and Six, was also discussed. Finally, creative-based pedagogy, which upholds Standards One and Six of the NAEYC (2009) Program Standards, were also among the topics that were discussed throughout EDUC 3F01.

Table 2

EDUC 3F01 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 3F01	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Theorists							
Blooms Taxonomy		X		X	x		3
Knowledge of ECE field							
<i>Knowledge in the Classroom</i>							
21 st century education						x	1
First years as a teacher						x	1
Technology						x	1
Teaching styles				X			1
Culturally responsive teaching	x	X		X	x	x	5
Creative based pedagogy	x					x	2
Care in education	x	X	x		x	x	5
Perceptions of teaching						x	1
Inquiry based approaches	x		x		x	x	4
Culture of fear				x			1
The Power of story: Tributes to teaching						x	1
Personal /Practical knowledge: Teach Who You Are 6						x	1
Self-Knowledge						x	1
Image of a Learner	x					x	2
<i>Life-long learner in the classroom</i>							
Reflection		x				x	2

Cognition and Learning

The purpose of *Cognition and Learning* (EDUC 3F02) was to provide students with the opportunity to learn the ways in which the environment affects the cognitive growth of the learner. The course analyzed 35 different topics that were coded into three main themes: *Theorists*, *Families*, and *Knowledge in the ECE Field*. There were two topics that were coded into *Theorists*, one topic into the *Families* theme, and 32 topics into the *Knowledge of the ECE Field* theme. There were seven topics that were coded into the sub-category of “Human Diversity,” seven courses that were coded into the “Thinking, Learning, and Memory” sub-category, and six topics that were coded into the “Motivation in Children” sub-category. Finally, there were 12 topics that were coded under the “Learning in the Classroom” sub-category of *Knowledge of the ECE Field theme*. Table 3 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Theorists

Cognition and Learning (EDUC 3F02) portrayed two of the eight topics, including Piaget and Vygotsky, which incorporates Standards One and Five of the NAEYC (2009) Program Standards.

Family Involvement

Cognition and Learning (EDUC 3F02) discussed one of the eleven topics that were categorized under the theme of *family involvement*. Socio-economic status of families was discussed, which displays Standard Four of the NAEYC (2009) Program Standards.

Table 3

EDUC 3F02 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 3F02	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Theorists							
Paiget	x				x		2
Vygotsky	x				x		2
SES				x			1
Knowledge of the ECE Field							
<i>Human Diversity</i>							
Moral development	x					x	2
Psychosocial development	x					x	2
Socioemotional development	x					x	2
Gender						x	1
Differing learning styles	x			x		x	3
Language Diversity	x			x	x	x	4
Culture and ethnicity	x			x			2
<i>Thinking, Learning, and Memory</i>							
Behavioural approaches	x		x			x	3
Classical and operant conditioning						x	1
Social learning theory	x					x	1
Concept formation	x						1
Reasoning in children	x						1
Problem solving	x						1
Working memory	x						1
<i>Motivation in Children</i>							
Intrinsic and extrinsic motivation	x						1
Theories of motivation	x						1

Developing rules	x				1
Constructivism	x				1
Classroom management	x			x	2
Student centered learning	x		x	x	3
<hr/>					
<i>Learning in the Classroom</i>					
<hr/>					
Standardized testing				x	1
Phonemes				x	1
Decoding				x	1
Semantics				x	1
Reading comprehension				x	1
Schema theory				x	1
Metacognition				x	1
Writing development				x	1
Scientific thinking and reasoning				x	1
Mathematical development				x	1
Fostering learning strategies				x	1
Cooperative learning	x			x	2

Knowledge in the Field: Knowledge in the Classroom

Cognition and Learning (EDUC3F02) also discussed topics relating to human diversity including *moral development*, *psychosocial development*, and *socioemotional development*, which adhere to Standards One and Six of the NAEYC (2009) Program Standards. In addition, gender, which upholds Standard Six, differing learning styles, which displays Standards One, Four, and Six, language diversity, which exhibits Standards One, Four, Five, and Six, were discussed. Finally, culture and ethnicity, which uphold Standards One and Four of the NAEYC (2009) Program Standards, were analyzed throughout the course EDUC 3F02.

Thinking, Learning, and Memory. “Thinking, Learning, and Memory” was categorized under the *knowledge in the ECE field* theme. There were seven topics that were coded into this sub-theme. *Cognition and Learning* (EDUC 3F02) examined all seven of these topics, which include behavioural approaches, which adhered to Standards One, Three and Six. In addition, the course focused on classical and operant conditioning and social learning theory, which upheld Standard Six of the NAEYC (2009) Program Standards. Finally, EDUC 3F02 analyzed topics relating to concept formation, reasoning in children, problem solving, and working memory, which displayed Standard One of the NAEYC (2009) Program Standards.

Motivation in Children

“Motivation in Children” was another sub-category under the *Knowledge in the ECE Field* theme. There were six topics that were coded into this sub-category. *Cognition and Learning* (EDUC 3F02) analyzed all six topics that were categorized into the sub-category of “Motivation in Children.” Intrinsic and extrinsic motivation, theories of motivation, developing rules, and constructivism all adhered to Standard One of the NAEYC (2009) Program Standards. In addition, classroom management, which upheld Standards One and Six, as well as teacher- and student-centered learning, which displayed Standards One, Four, and Five, were also discussed throughout the *Cognition and Learning* course.

Learning in the Classroom. “Learning in the classroom” was also a sub-category under the *Knowledge in the ECE Field* theme. There were 15 topics included in this sub-category. *Cognition and Learning* (EDUC 3F02) examined 12 of the 15 topics. The topics included standardized testing, phonemes, decoding, semantics, reading

comprehension, schema theory, metacognition, writing development, scientific thinking and reasoning, mathematical development, and fostering learning strategies. All of these topics display Standard Five of the NAEYC (2009) Program Standards. Finally, EDUC 3F02 discussed the concept of co-operative learning, incorporating Standards One and Five of the NAEYC (2009) Program Standards.

Early Childhood Education I

The purpose of the *Early Childhood Education One* (EDUC 3P50) course was to provide students with the opportunity to gain a better understanding of children and to value the process of an activity, rather than the product. In addition, this course examined the process of creating a caring environment for all children. EDUC 3P50 focused on 21 different topics that were categorized into four main themes. The theme of *Theorists* and the theme of *Program Models* included eight different topics each. The theme of *Families* included two topics under the sub-category of “Family Involvement,” and the theme of “Knowledge of the ECE Field” included three topics. Table 4 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Theorists

Early Childhood Education I (EDUC 3P50) analyzed eight out of the nine course topics relating to theorists. The eight topics included Vygotsky, Piaget, Erikson, Maslow, Kohlberg, Skinner, and Gardener, which incorporate Standards One and Five of the NAEYC (2009) Program Standards. In addition, Bruner was discussed, which incorporated Standards One, Two, and Five of the NAEYC (2009) Program Standards.

Program Models

Early Childhood Education I (EDUC 3P50) discussed all eight of the program models. When each program model was analyzed, it became evident that the Montessori program model displayed Standards One, Three, Five, and Six of the NAEYC (2009) Program Standards. In addition, the Reggio Emilia approach incorporated Standards One, Two, Three, Five, and Six. Both the Waldorf program model and the High Scope model portrayed Standards One and Five. The Aboriginal Head Start program displayed Standards One and Two, whereas the International Early Childhood Education program and the Summer Hill program displayed Standard Five. Finally, the concept of care model incorporated Standards Four and Six of the NAEYC (2009) Program Standards.

Families-Family Involvement

Early Childhood Education I (EDUC 3P50) discussed two of the eleven topics that were coded into the “Family Involvement” sub-category. The two topics included building family relationships, which incorporated Standards Two and Four of the NAEYC (2009) Program Standards. The course also discussed family system theory, which displayed Standard Two of the NAEYC (2009) Program Standards.

Knowledge in the ECE Field

EDUC 3P50 discussed topics such as administration and teaching beliefs, which both demonstrate Standard Six. In addition, topics such as quality in the ECE program and principles of child development that fell under Standard One of the NAEYC (2009) Program Standards were also taught throughout the course.

Table 4

EDUC 3P50 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 3P50	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Theorists							
Vygotsky	x				x		2
Paiget	x				x		2
Erikson	x				x		2
Kohlberg	x				x		2
Maslow	x				x		2
Skinner	x				x		2
Gardener	x				x		2
Bruner	x	x			x		3
Program Models							
Montessori	x		x		x		3
Reggio Emilia	x	x	x		x	x	5
Waldorf	x				x		2
High Scope	x				x		2
Aboriginal Head Start	x	x					2
International ECE						x	1
Summerhill						x	1
Concept of care				x		x	2
Families							
<i>Family Involvement</i>							
Building Family Relationships		x		x			2
Family system theory		x					2
Knowledge of the ECE Field							
Administration and teaching beliefs						x	1
Quality in the ECE	x						1
Principles of child development	x						1

Early Childhood Education II

The purpose of *Early Childhood Education II* (EDUC 3P52) is to provide students with the opportunity to complete independent learning activities, to encourage collaboration between students, and to familiarize students with the inquiry-based learning framework. *Early Childhood Education II* examined 14 courses that were coded into three main themes. There were three topics that were coded into the *Program Models* theme, seven courses that were categorized under the *Life-Long Learner* theme, and four courses that were categorized under the *Teaching Specific Subjects* theme. Table 5 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Program Models

Early Childhood Education II (EDUC 3P52) examined topics relating to *Program Models*. When each topic was analyzed within EDUC 3P52, it became evident that the Montessori model was discussed, displaying Standards One, Three, Five, and Six of the NAEYC (2009) Program Standards. In addition, the Reggio Emilia approach was taught, which incorporated Standards One, Two, Three, Five, and Six. Finally, the High Scope model was examined, which portrayed Standards One and Five.

Life-Long Learner

Early Childhood Education II (EDUC 3P52) analyzed topics such as reflection, incorporating Standards Two and Six, and play-course overview, climate for play, and teacher role, thus incorporating Standards One, Three, Four, Five and Six of the NAEYC (2009) Program Standards. Additionally, inquiry-based learning, which adheres to Standards One, Five, and Six, and the teacher's role, which upheld Standard Six of the NAEYC (2009) Program Standards, were analyzed. Finally, EDUC 3P52 also discussed

experimental learning, which incorporated Standards One, Three, Four, and Five of the NAEYC (2009) Program Standards.

Teaching Specific Subjects

Early Childhood Education II (EDUC 3P52) also discussed topics such as science and technology, art, drama and music, thus incorporating Standard Five of the NAEYC (2009) Program Standards. *Early Childhood Education II* then examined the language of emotions in children, which displayed Standards One, Three, Five, and Six of the NAEYC (2009) Program Standards.

Table 5

EDUC 3P52 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 3P52	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Program Models							
Montessori	x		x		x		3
Reggio Emilia	x	x	x		x	x	5
High Scope	x				x		2
Life-Long Learner							
<i>Life-Long Learner in the Classroom</i>							
Reflection		x				x	2
Play-course overview	x		x	x	x	x	5
Climate for play	x		x	x	x	x	5
Teacher Role	x		x	x	x	x	5
Experimental learning	x		x	x	x		4
Teachers role						x	1
Inquiry based learning (IBL)	x				x	x	3
Teaching specific subjects							
Science and technology					x		1
Art					x		1
Drama and music					x		1
Language of emotions	X		x		x	x	4

Research, Ethics, and Care in ECE

The purpose of *Research, Ethics, and Care in ECE* (EDUC 3P53) was to provide students with the opportunity to learn different approaches for conducting research with children. The students were also provided with the opportunity to explore research that relates to the Code of Ethics and Standards of Practice in Early Childhood Education. There were eight different topics that could be coded into two major themes. The theme *Knowledge of the Early Childhood Education Field* incorporated seven of the eight topics. Finally, the theme of *Life-Long Learner* incorporated one topic. Table 6 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Knowledge of the Early Childhood Education Field

“Knowledge in the Classroom” was one of the sub-categories that was categorized under the *Knowledge of the Early Childhood Education Field* topic. Within this sub-category, 20 topics were discussed. *Research, Ethics, and Care in ECE* (EDUC 3P53) discussed 7 of the 20 topics. The topics that were examined within EDUC 3P53 included ethical practice, codes of ethics, ethical judgment, policies that impact ethics and care, research on/with children, Children’s Charter of Rights, and applying ethics to a specific scenario, which fell under Standard Six of the NAEYC (2009) Program Standards.

Life-Long Learner

“Life-long Learner in the Classroom” was also a sub-category that was coded into the *Knowledge of the Early Childhood Education Field* theme. Within this sub-category, 13 topics were discussed. *Research, Ethics, and Care in ECE* (EDUC 3P53) incorporated

one topic that included professionalism, which displayed Standard Six of the NAEYC (2009) Program Standards.

Table 6

EDUC 3P53 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 3P53	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Knowledge of the ECE Field							
<i>Knowledge in the Classroom</i>							
Ethical practice						x	1
Codes of ethics						x	1
Ethical judgment						x	1
Policies						x	1
Research on/with children						x	1
Children's charter of rights						x	1
Applying ethics						x	1
Life-Long Learner							
<i>Life-Long Learner in the Classroom</i>							
Professionalism						x	1

Internship I

The purpose of *Internship I* (EDUC 3P85) was to provide students with the opportunity to incorporate theory into practice. Each student was required to attend an internship and reflect on the experience. There were four topics that were categorized into one main theme: *Life-Long Learner*. It is important to note that EDUC 3P85 was an online course, and each topic was derived from the assignments. During the internship experience, students were provided with multiple learning opportunities. For the purpose of this paper, only the topics identified in the course outlines were analyzed. Table 7 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Life-Long Learner in the Classroom

“Life-long Learner in the Classroom” was one of the sub-categories that was coded into the *Life-Long Learner* theme. Within this sub-category, 13 topics were discussed. *Internship I* (EDUC 3P85) analyzed 5 of the 13 topics. The topics included, professionalism and the Code of Ethics and standards of practice, thus incorporating Standard Six, reflection, which displayed Standard Two and Standard Six, and theory to practice, which adhered to Standard One, Two, Three, Four, Five, and Six of the NAEYC (2009) Program Standards.

Table 7

EDUC 3P85 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 3P85	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Life-Long Learner							
Professionalism						x	1
Reflection		x				x	2
Theory to practice	x	x	x	x	x	x	6
Code of ethics, standards of practice						x	1

ECE Honours Thesis

The purpose of *ECE Honours Thesis* (EDUC 4P50) was to provide students with the opportunity to conduct and carryout a major research project. There were eight topics that were coded within one major theme: *Life-Long Learner*. There were seven topics that were coded into the “Research Methods” sub-category of the *Life-Long Learner* theme, and one topic that was coded into the “Life-Long Learner in the Classroom” sub-category. Table 8 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Life-Long Learner

“Research Methods” is a sub-category that was coded under the *Life-Long Learner* theme. Within this sub-category, 14 topics were discussed. *ECE Honours Thesis* (EDUC 4P50) analyzed 7 of the 14 topics. The topics included qualitative versus quantitative research, developing a thesis statement, time management skills when writing a thesis, introduction and rational, literature reviews, research methodology, and ethics clearance. All of these topics displayed Standard Six of the NAEYC (2009) Program Standards.

Life-Long Learner in the Classroom. Lastly, EDUC 4P50 provided the students with the opportunity to interact with their peers, which incorporates Standard Six.

Table 8

EDUC 4P50 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 4P50	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Life-Long Learner							
<i>Research Methods</i>							
Qualitative versus quantitative research						x	1
Developing a thesis statement						x	1
Time management skills						x	1
Introduction and rational						x	1
Literature review						x	1
Research methodology						x	1
Ethics clearance						x	1
<i>Life-long Learner in the Classroom</i>							
Peer interactions						x	1

Family, School, and Literacy

The purpose of *Family School, and Literacy* (EDUC 3P40) was to provide students with the opportunity to learn the importance of family and community collaboration within the classroom environment. This course examined 11 different topics that were coded into two major themes. There were nine courses that were coded under “Family Involvement”, a sub-category within the *Families* theme. Additionally, one topic was discussed that related to “Diversity in the Classroom,” another sub-category within the *Families* theme. Finally, one topic was coded into the *Theorists* theme. Table 9 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Families

The *Family, School, and Literacy* course (EDUC 3P40) displayed 8 of the 11 topics discussed within the “Family Involvement” sub-category. The topics within this course that discussed “Family Involvement” included parenting styles, family engagement, family involvement in literacy and school, and approaches for engaging parents in the classroom. In addition, the topics of communication with families, developing family-school relationships, and family-based program visits were all included within the “Family Involvement” sub-category. Thus, Standards Two and Four of the NAEYC (2009) Program Standards were incorporated in this course. Finally, learning environments where children learn best was discussed within this course, therefore revealing Standards One and Five of the NAEYC (2009) Program Standards as being present.

Diversity in the Classroom. There were 21 topics that fell under the sub-category of “Diversity in the Classroom.” As a course, *Family, School, and Literacy* (EDUC 3P40) discussed one topic related to culturally diverse families. The topics discussed culturally and linguistically diverse families within the childcare setting, which incorporated Standards Two and Four of the NAEYC (2009) Program Standards.

Life-Long Learner in the Classroom. *Family, School, and Literacy* (EDUC 3P40) also examined the topic of reflection, which adhered to Standards Two and Six of the NAEYC (2009) Program Standards.

Theorists

Finally, EDUC 3P40 also discussed Epstein’s theory, which adhered to Standards One, Two, Four, Five, and Six of the NAEYC (2009) Program Standards.

Table 9

EDUC 3P40 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 3P40	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Families							
<i>Family Involvement</i>							
Parenting styles		x		x			2
Family engagement		x		x			2
Family involvement in literacy		x		x			2
Approaches for engaging parents		x		x			2
Communication with families		x		x			2
Developing family-school relationships		x		x			2
Family based program visits		x		x			2
Learning environments	x				x		2
<i>Diversity in the Classroom</i>							
Culturally and linguistically diverse families		x		x			2
<i>Life-Long Learner in the Classroom</i>							
Reflection		x				x	2
Theorists							
Epstein's theory	x	x		x	x	x	5

Observation and Evaluation in ECE

Observation and Evaluation in ECE (EDUC 4P04) provides students with the opportunity to explore different assessment tools and various observation models. The course examines 11 topics that were coded into three main themes. There were three topics that were coded into the *Knowledge of the ECE Field* theme and seven courses that were coded into the *Life-Long Learner* theme. Finally, one topic was coded into the *Families* theme. Table 10 provides details of each topic in relation to the NAEYC (2009) Program Standards

Knowledge of the Early Childhood Education Field

Observation and Evaluation in ECE (EDUC 4P04) discussed three topics that related to the sub-category of “Learning in the Classroom.” These topics included assessment policies in Ontario, assessment tools, and program evaluation tools in the early years, which upheld Standard Six of the NAEYC (2009) Program Standards.

Family Involvement

EDUC 4P04 examined the ways in which educators communicated with children and families, a topic that upholds Standards Two and Four of the NAEYC (2009) Program Standards.

Life-Long Learner in the Classroom

Finally, *Observation and Evaluation in ECE* (EDUC 4P04) analyzed topics relating to observation techniques and rubrics, which incorporated Standard Three of the NAEYC (2009) Program Standards, the KWLM assessment tool, which adhered to Standards One, Three, and Five, and anecdotal records, rating scales, running records,

and checklists, which displayed Standard Three of the NAEYC (2009) Program Standards.

Table 10

EDUC 2F96 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 4P04	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Knowledge of the ECE Field							
<i>Learning in the Classroom</i>							
Assessment policies						x	1
Evaluation tools						x	1
Assessment tools						x	1
Life-Long Learner							
<i>Life-long Learner in the Classroom</i>							
Observation techniques			x				1
KWLM assessment tool	x	x			x		3
Anecdotal records			x				1
Running records			x				1
Rating scales			x				1
Checklist			x				1
Rubrics			x				1
Families							
Family involvement							
Communicating with families		x		x			2

Mathematics in the Early Years

The purpose of *Mathematics in the Early Years* (EDUC 4P14) was to provide students with the opportunity to develop new pedagogical techniques when implementing mathematics into the early years classroom. There were 14 topics that were discussed in this course, that were coded into one main sub-category of “Teaching Math,” which is a sub-category of the main theme of *Teaching Specific Subjects*. Table 11 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Teaching Specific Subjects

There were 14 topics that were coded into the “Teaching Math” sub-category. The course *Mathematics in the Early Years* (EDUC 4P14) discussed topics relating to assessment, matching, classification, and comparing, which displayed Standards One, Four, and Five of the NAEYC (2009) Program Standards. In addition, EDUC 4P14 analyzed topics such as serration, developing number sense, place value systems, data analysis with graphing and probability and early algebra relating to patterns, functions and shapes, which adhered to Standards One, Four, and Five of the NAEYC (2009) Program Standards. Students were also provided with the opportunity to learn the ways in which mathematics can be taught to children through interactive online game. Finally, topics such as problem-solving, geometry, and measurement which adhered to Standards One, Four, and Five of the NAEYC (2009) Program Standards were also discussed.

Table 11

EDUC 4P14 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 4P14	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Teaching Specific Subjects							
<i>Teaching Math</i>							
Assessment	x			x	x		3
Matching	x			x	x		3
Classification	x			x	x		3
Comparing	x			x	x		3
Serration	x			x	x		3
Developing number sense	x			x	x		3
Place value systems	x			x	x		3
Data analysis and probability	x			x	x		3
Early algebra	x			x	x		3
Functions and shapes	x			x	x		3
Online games	x			x	x		3
Problem solving	x			x	x		3
Geometry	x			x	x		3
Measurement	x			x	x		3

Research Methods in Education

The purpose of *Research Methods in Education* (EDUC 4P80) was to provide students with the opportunity to explore different research design models and to analyze qualitative and quantitative research. There were seven topics that were examined within this course, that were coded into one theme: *Life-Long Learner*. Table 12 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Life-Long Learner

Within the “Research Methods” sub-category, 14 topics were discussed. *Research Methods in Education* (EDUC 4P80) analyzed 7 of the 14 topics. The topics included

qualitative versus quantitative research, developing a thesis statement, time management skills when writing a thesis, introduction and rationale, literature reviews, research methodology, and ethics clearance. All of these topics displayed Standard Six of the NAEYC (2009) Program Standards.

Table 12

EDUC 4P80 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 4P80	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Life-Long Learner							
<i>Research Methods</i>							
Qualitative designs						x	1
Quantitative methods						x	1
Research ethics						x	1
Recruitment						x	1
Research population						x	1
Research integrity						x	1
Applying research skills						x	1

Literacy in the Early Years

Literacy in the Early Years (EDUC 4P24) provides students with the opportunity to explore fairy tales, poetry, picture books, alphabets, and primers. In addition, students learned to make sense of the world through literature. There were 11 topics that were examined throughout *Literacy in the Early Years* that were coded into two main themes. The *Teaching Specific Subjects* theme incorporated ten topics, while the *Theorist* theme incorporated one topic. Table 13 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Teaching Specific Subjects

The “Teaching in the Classroom” sub-category focused on 13 topics. *Literacy in the Classroom* (EDUC 4P24) analyzed 10 of the 13 topics. The course discussed sociocultural influences, which incorporates Standards Two and Four. In addition, EDUC 4P24 examined topics relating to language development and language delays, which adhere to Standard Five of the NAEYC (2009) Program Standards. The course also discussed Aboriginal contexts and multi-language families, thus adhering to Standards One, Two, and Four. Furthermore, topics such as literacy through technology and emergent literacy were analyzed, displaying Standards One and Five of the NAEYC (2009) Program Standards. Finally, EDUC 4P24 provided the students in the BECE program with the opportunity to learn about literacy programs, environments that promote literacy, and literacy development, adhering to Standards One, Four, and Five of the NAEYC (2009) Program Standards.

Theorists

Finally, the students in EDUC 4P24 were provided with the opportunity to learn about Cambourne’s Conditions of Literacy Learning, adhering to Standards One and Five of the NAEYC (2009) Program Standards.

Table 13

EDUC 4P24 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 4P24	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Teaching Specific Subjects							
<i>Teaching in the Classroom</i>							
Language development					x		1
Language delays					x		1
Aboriginal context	x	x		x			3
Multi-language families	x	x		x			3
Literacy through technology	x				x		2
Emergent literacy	x				x		2
Literacy programs	x			x	x		3
Literacy development	x			x	x		3
Environments for literacy	x			x	x		3
Theorists							
Cambourne's conditions	x				x		2

Global Education

Global Education (EDUC 4P35) provided students with the opportunity to learn global perspectives by linking local and global concepts together. There were 13 topics that were analyzed within the *Global Education* course. The 13 topics were coded into three main themes. There was one topic that was coded into *Life-Long Learner*, one topic that was coded into *Teaching a Specific Subject*, and 11 topics that were coded into the *Knowledge of the ECE Field* theme. Within the *Knowledge of the ECE Field* theme, one topic was coded into the “Knowledge in the Classroom” sub-category, while ten topics

were coded into the “Human Diversity” sub-category. Table 14 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Life-Long Learner

Global Education (EDUC 4P35) discussed topics such as reflection, which adhered to Standards Two and Six, and group collaboration, which displayed Standard Six of the NAEYC (2009) Program Standards. These topics were coded under the sub-category of “Life-Long Learner in the Classroom.”

Teaching Specific Subjects

The “Teaching in the Classroom” sub-category focused on thirteen topics. *Global Education* (EDUC 4P35) discussed one topic, how to create a lesson plan, which adhered to Standard Six of the NAEYC (2009) Program Standards.

Knowledge of the Early Childhood Education Field

Global Education also examined the topic of human rights, which falls under Standard Six of the NAEYC (2009) Program Standards.

Human Diversity. Topics discussed within *Global Education* that were categorized under the “Human Diversity” sub-category included citizenship, equity, and diversity, which exhibited Standard Two of the NAEYC (2009) Program Standards. The course also examined topics such as rights and responsibilities, gender, educational issues, and social justice, which exemplified Standard Six of the NAEYC (2009) Program Standards. In addition, peace and ecology, displaying Standards Two and Six, were also analyzed. Finally, mass media, which portrayed Standard Four, and the environment, which adhered to Standards One, Three, Five, and Six of the NAEYC (2009) Program Standards were discussed through EDUC 4P35.

Table 14

EDUC 4P35 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 4P35	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Knowledge of the ECE Field							
<i>Knowledge in the Classroom</i>							
Human rights <i>Human Diversity</i>						x	1
Citizenship and equity		x					1
Diversity		x					1
Rights and responsibilities						x	1
Gender						x	1
Educational Issues						x	1
Social Justice						x	1
Peace and Ecology		x				x	2
Mass media				x			1
The environment	x		x		x	x	4
Teaching Specific Subjects							
<i>Teaching in the Classroom</i>							
Creating a lesson plan						x	1
Life-Long Learner							
<i>Life-Long Learner in the Classroom</i>							
Reflection		x				x	2
Group collaboration						x	1

Inclusive Programming in ECE

Inclusive Programming in ECE (EDUC 4P52) provides students with the opportunity to develop strategies needed to adapt the classroom environment to meet the needs of all children and their families. There were seven topics that were coded into the theme of *Inclusion*. Table 15 provides details of each topic in relation to the NAEYC (2009) Program Standards

Inclusion

There were seven topics that were coded into the theme of *Inclusion*. *Inclusive Programming in ECE* (EDUC 4P52) provided the students with the opportunity to learn topics relating to adapting and accommodating the classroom environment, peer-mediated instruction, and peers and students with disabilities, which displays Standards One, Four, and Five. The course also defined inclusion, discussed issues in the childcare setting, discussed elements of inclusion and the five-point scale, all of which adhered to Standards One, Four, and Five of the NAEYC (2009) Program Standards.

Table 15

EDUC 4P52 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 4P52	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Inclusion							
Adapting and accommodating the classroom environment	x			x	x		
Peer mediated instruction	x			x	x		
Peers and students with disabilities	x			x	x		3
Elements of inclusion	x			x	x		3
The five point scale	x			x	x		3

Internship II

The purpose of *Internship II* (EDUC 4P85) was to provide students with the opportunity to incorporate theory into practice. Each student was required to attend an internship and reflect on the experience. There were four topics that were categorized into one main theme: *Life-Long Learner*. It is important to note that EDUC 4P85 was an online course and that each topic was derived from the assignments. During the internship experience, students were provided with multiple learning opportunities. For the purpose of this paper, only the topics identified in the course outlines were analyzed. Table 16 provides details of each topic in relation to the NAEYC (2009) Program Standards.

Life-Long Learner

Internship II (EDUC 4P85) discussed topics such as professionalism, incorporating Standard Six, reflection, which displayed Standards Two and Six, peer interactions, which incorporated Standard Six, and theory to practice, which correlated with Standards One, Two, Three, Four, Five, and Six of the NAEYC (2009) Program Standards.

Table 16

EDUC 4P85 Topics in Relation to the NAEYC (2009) Program Standards

EDUC 4P85	Standard One	Standard Two	Standard Three	Standard Four	Standard Five	Standard Six	Total
Life-Long Learner							
Professionalism						x	1
Reflection		x				x	2
Peer interactions						x	1
Theory to practice	x	x	x	x	x	x	6

In conclusion, this data describes the ways in which each course aligns with the NAEYC (2009) Program Standards. It is evident that many courses uphold Standards Five and Six of the NAEYC (2009) Program Standards. For instance, there were 77 topics that adhered to Standard Five and 82 topics that adhered to Standard Six. This means that students in the BECE program were provided with immense opportunities to create a developmentally-appropriate curriculum and gain an understanding of the ECE field. In contrast, however, minimal topics adhered to Standard three, the importance of observation, and only 21 topics discussed the importance of observation. It is necessary that more topics relating to the importance of observation be implemented into each subject, as observation techniques are so vital within the ECE field. Chapter Five will discuss and analyze this data further and make recommendations to further develop and enhance the BECE curriculum.

CHAPTER FIVE

Access to quality childcare can provide positive learning opportunities for young children. Some benefits to attending a quality childcare program at an early age include higher academic scores, seeking further education after high school, and earning higher wages later in life (Cortázar, 2015; Dearing, McCartney, & Taylor, 2009). There are multiple factors that contribute to the development of a high-quality childcare program such as funding, low child-to-teacher ratios, and staff training and qualifications (Goelman et al., 2006). Early Childhood Educators are unable to control the level of funding their future classroom will be granted, nor are they able to control the number of staff who are present in the classroom. The prospective ECE does, however, have the opportunity to choose from many different training programs to further their own education, thus ensuring that they can implement the best possible program for each child. Before engaging in a training program, however, it is imperative that each training facility undergoes an extensive review to determine the quality of the content that is being delivered to each student. If the Early Childhood Educators are not being provided with quality training, then it will most likely be difficult for them to transfer the knowledge they learn into the early childhood environment and, consequently, with the children.

The purpose of this study was to analyze Brock University's BECE program to determine the quality of the educational content that is being delivered to each student. This study focused on the 16 mandatory courses that each student must engage in before graduating from the program. Each course was examined based on the topics that were taught in that course. Each topic was then evaluated in relation to the NAEYC (2009)

Program Standards. In order to undertake this investigation, a qualitative content analysis was carried out. The remainder of this chapter will summarize the results of the study, the inferences made, and the implications for practice and future research.

Data Collection

The data for this study was gathered through a qualitative content analysis. During the data collection process, 16 course outlines from the BECE program at Brock University were obtained from previous courses the researcher engaged in personally as an undergraduate. Each course outline was then reviewed in detail so that the researcher could become familiar with the assignments, lecture topics, and learning objectives within each course. Once each course outline was reviewed, the researcher created a list of the topics that were used to establish categories for coding. The themes that emerged from this process included *Theorists*, *Program Models*, *Families*, *Knowledge of the ECE Field*, *Life-Long Learning*, *Teaching Specific Subjects*, and *Inclusion*. Within each theme, the topics of study were assessed to determine the specific NAEYC (2009) Program Standard that the topic supports. A frequency chart was then created for each course to identify how many times each topic adhered to a specific standard.

Aligning with Literature

Goelman et al. (2006), Degotardi (2010), and Atilas et al. (2013) discussed ways in which higher education contributes to a higher quality childcare program. Each study discovered that there was a direct correlation between the level of education each staff member had and the quality of the childcare setting. For instance, the more training the staff members acquired, the higher the quality of the program. In contrast, however, Early et al. (2006) suggested that an educator's level of education did not have significant

effects on the quality of a childcare. Similarly, Early et al. (2007) analyzed seven different research articles to discover the effects that an educator's qualifications had on the overall quality of the classroom and on the children's academic success.

Conclusively, four of the seven studies did not find a link between the educators' level of qualifications and quality of care, while one study found that educators who held a Bachelor's degree tended to have a lower quality classroom, and the final two studies indicated that educators who held a Bachelor's degree had a higher quality classroom (Early et al., 2007).

It is evident, then, that the effect higher education has on the quality of a childcare setting is unknown. Early et al. (2007) suggests that higher education may not be affecting the quality of care delivered in an early education setting because the educators are not being provided with the practical training or support within their Early Childhood Education preparation courses. The purpose of this study, then, was to examine one specific training program to determine the ways in which the program aligned with the NAEYC (2009) Program Standards.

Contrary to Early et al. (2007), it became apparent throughout this study that Early Childhood Educators were being provided with quality practical training in Brock University's BECE program. More specifically, The BECE program at Brock University aligns with all the NAEYC (2009) Quality Standards. Students who graduate from the BECE program are thus provided with the opportunity to acquire Standard One, a deep knowledge of child development, in 83 topics through 12 different courses. The students are also provided with the opportunity to develop Standard Two, the importance of family involvement, which is discussed in 50 topics throughout 10 different courses.

Standard Three, assessments tools and approaches to promote positive outcomes for each child, is also discussed in 21 topics throughout 8 different courses. Students are also taught to connect with families, representative of Standard Four, in 52 topics throughout 12 different courses. Students can also create a developmentally-appropriate curriculum, which encompasses Standard Five, a skill that is focused on in 77 topics throughout 12 different courses. Finally, students are provided with the opportunity to understand the field of ECE, which is Standard Six, in 82 different topics throughout 13 different courses.

The findings from this study make it evident that the Brock University's BECE program prepares each student thoroughly for the field of Early Childhood Education. Before this study was carried out, future educators were unable to determine the quality of the training program they were going to engage in, a result of the lack of studies that have examined Early Childhood Education training programs (Biersteker, Dawes, Hendricks, & Tredoux, 2016). Now, future educators can attend Brock University's BECE program knowing that each topic in the program has been analyzed and compared to the NAEYC (2009) Program Standards and has been found to align. Future studies may choose to examine multiple ECE training programs from different universities, to provide a more comprehensive picture of the post-secondary programs offering early childhood training to future practitioners – and, in addition, their efficacy.

Discussion

The topics within each course were coded into seven main themes, and were then earmarked with the specific standard it incorporated. There were two courses that focused on *Theorists*, two courses that focused on *Program Models*, and five courses that

discussed *Families*. In addition, 11 courses provided the students with the opportunity to gain *Knowledge of the ECE Field*, 10 courses that focused on *Life-Long Learning*, and 4 courses that focused on *Teaching Specific Subjects*. Finally, one course focused on the topic of *Inclusion*.

The first question in this study aimed to determine the way in which the courses in the BECE program at Brock University aligned with the NAEYC (2009) Program Standards. Throughout this study, it became evident that not all of the courses in the BECE program aligned with the NAEYC (2009) Program Standards. *Indigenous Culture and Early Childhood Education*, for instance, only aligned with Standard Two and Standard Six of the NAEYC (2009) Program Standards. Furthermore, *Research Methods in Education and Research, Ethics, and Care in ECE* upheld only Standard Six of the NAEYC (2009) Program Standards. In contrast, however, courses such as *The Process of Teaching*, *Early Childhood Education I*, and *Early Childhood Education II* aligned with all six of the NAEYC (2009) Program Standards.

When analyzing a training program, it is important to review the program as a whole. When a course focuses on merely one standard, it provides the students with multiple opportunities to gain insight on that specific standard. For example, the *Indigenous Culture in Early Childhood Education* course only aligned with Standard Two and Six of the NAEYC (2009) Program Standards. Throughout this course, however, 17 different topics related to understanding the importance of family involvement. Students were provided with multiple opportunities, then, to understand families and family involvement in the childcare setting. Overall, 83 topics related to a deep knowledge of child development, 50 topics related to the importance of family involvement, and 21

topics related to assessment tools and approaches. In addition, 52 topics discussed connecting with families, 77 topics examined developmentally-appropriate curriculum and 82 topics provided an understanding of the field of ECE. It is therefore evident that the Brock University BECE program aligns with all six of the NAEYC (2009) Program Standards comprehensively.

The findings of this study indicate that multiple topics in this program of study relate to Standard One, Standard Five, and Standard Six of the NAEYC (2009) Program Standards more consistently. As a result, students are provided with many opportunities to develop a deep knowledge of child development, gain an understanding of a developmentally-appropriate curriculum, and achieve an understanding of the ECE field. Minimal courses, however, discuss Standard Three relating to assessment tools and approaches. In order to make certain that the BECE program at Brock University is functioning at the highest level possible, course topics can expand further on assessment tools and approaches. It is important to note that 21 topics discussed assessment tools and approaches; therefore, students in the BECE program have been provided with the opportunity to learn these skills – just not in as fulsome of a way as the other standards.

Recommendations

The second question this study aimed to answer was to determine if there were any courses that needed to be included in Brock University's BECE program to make certain it was functioning at the highest possible level. Before answering this question, each topic within each course in the Brock University BECE program was evaluated. The findings of this study indicate that while overall, the BECE program is of a high quality, some recommendations may be implemented to further enhance the program. Throughout

this study, it quickly became evident that courses relating to science, music, drama, and art fell short. Early Childhood Education II did discuss these topics within the course; however, it may be beneficial to enhance these topics of study to include strategies and portfolios that the students will have to refer to in a practical way when in their early childhood environments. It is imperative that educators discover strategies to implement science into the classroom in such a way that makes science exciting for children. Many educators have developed a fear of science, which can unfortunately be transmitted to the children (Liu, 2016). When the educator has gained instructional skills and practical examples of the way in which science can be presented, they then become more confident and are less likely to model the fear of science to their students (Liu, 2016).

The final question concerning this study was to determine if any courses in the BECE program could be eliminated. During the coding process, it became evident that two courses focused on very similar material. The courses were structured the same way and did not appear to build on or scaffold from each another. Having two courses that focus on the exact same topics appeared to be redundant at first glance; however, upon noting the name of the courses, it became apparent that each course was incredibly valuable. The courses were Internship I and Internship II. These two courses provide students with the opportunity to implement theory into practice. Although the content is the same, each student will gain new information from each different internship experience. The students will also be provided with the opportunity to build upon their experiences. Internship I is based in the first year of the program; here, the students are provided with the opportunity to engage in any type of childcare centre. They may, however, choose to gain experience in the childcare setting as an ECE. Internship II is

based in the second year; here, students may choose to build on their Internship I experience by volunteering as a supervisor in the centre where they completed their first internship. It is vital that the students gain as much experience as possible before stepping out into the field. This makes it evident that it may be beneficial for Brock University to implement a course that requires the students to attend an internship experience in each semester. This way, the students can gain a better knowledge base, create relationships with different childcare centres, and implement theory into practice more consistently.

Implications for Further Research

This study examined 16 courses throughout the BECE program. It would be interesting to examine every University's BECE program in Ontario to determine the ways in which each training program aligned with the NAEYC (2009) Program Standards. Additionally, it would be interesting to observe each graduate from the Brock University BECE program in the childcare field. Observing the graduates in the field would help to determine the correlation between a high-quality childcare setting and the level of education the staff members have obtained. Finally, this study did not include any human participants. It would be interesting to interview and survey the students in the BECE program to note the acquisition and depth of knowledge that they developed throughout the course. The courses in the program provide students with the opportunity to delve into and learn each topic; however, the students may not grasp each concept. If the content is not comprehended thoroughly, the student will not be able to implement the theory into practice.

Conclusion

Childcare settings should strive to deliver the highest quality program possible. Quality childcare programs are beneficial to all children. For instance, children who attend high quality childcares are more likely to remain in school, attend higher education, and have higher academic scores (Cortázar, 2015; Dearing, McCartney, & Taylor, 2009). Some researchers suggest that a direct correlation between high-quality childcare programs and the level of training each staff member has acquired exists (Goelman et al., 2006; Degotardi, 2010; Atilas et al., 2013). Other researchers, however, have noted that the level of staff training does not always guarantee a higher quality program (Early et al., 2007). In order to accurately discover the effects higher education has on the quality of a childcare, it is imperative that researchers examine each Early Childhood Education training program.

It is evident that the Brock University BECE program aligns with all six NAEYC (2009) Program Standards. The students who graduate from this program are provided with the opportunity to acquire both the knowledge and practical skills needed to implement a quality program. Further research is needed in order to determine the effects higher education has on the quality of a childcare environment. Analyzing each training program will aid in discovering any discrepancies in the educational curricula, and will provide insight for future curriculum advances.

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