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The growth of online resources for lesson planning in education is becoming readily apparent, however, there is not much information about whether these resources are used in early childhood educational contexts. This exploratory mixed-methods study sought insight on preservice teachers, faculty, and current in-service teachers' perspectives regarding the use of online resources for lesson planning. Preservice teachers in a Birth to Kindergarten practicum course completed a survey. Preservice teachers and faculty from the same university and in-service teachers from a private childcare center were interviewed about this topic. Survey data was analyzed using descriptive statistics and interview data used an inductive thematic analysis approach. Survey data showed that the majority of preservice teachers reported using online resources from a variety of sources, support from their teacher preparation program is important, preservice teachers have confidence in evaluating online resources, and will use online resources for lesson planning in the future. Findings from the interview data revealed six main themes. Preservice teachers, faculty, and in-service teachers had two main themes each, in addition to subthemes that will be discussed. From these perspectives, early childhood educators and teacher preparation programs could begin thinking about ways to discuss and evaluate online resources for lesson planning that supports preservice teachers and teachers' professional development.

ONLINE RESOURCES FOR LESSON PLANNING: PERSPECTIVES OF STUDENTS,

FACULTY, AND TEACHERS

by

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DEDICATION

To my one and only true love, Jesus Christ. I could have not done this without you, and I thank you for everything. This is for your glory God, my Jehovah Shalom, Jehovah Jireh, Jehovah Rapha, Jehovah-Raah, Jehovah Nissi, Adonai, Yahweh, El Shaddai. Padre, Hijo, y Espiritu Santo, todo esto es para ti.

This thesis written by Amy J. Mejia Robles has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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CHAPTER I: INTRODUCTION

Early childhood teacher preparation programs prepare preservice teachers in becoming effective educators that support children's development and learning. One crucial component incorporated into teacher preparation programs is supporting preservice teachers in the development of lesson plans to facilitate children's development and learning. Lesson planning is a process teachers use to plan out activities and instructions to ensure that children get their appropriate educational and developmental needs met during their time in the classroom (Masterson, 2021). The development of lesson plans should be tailored to the individual children's needs and there has been an increasing emphasis on implementing a constructivist approach to teaching (Hedges, 2000; Masterson, 2021). Moving away from traditional passive learning where children are given information, the constructivist approach emphasizes that children are actively engaged in their learning (Hedges, 2000). In addition, The National Association for the Education of Young Children (NAEYC) recommended that early childhood educators prepare curriculums that are inclusive and representative to the children in the classroom (NAEYC, 2020). Although curriculums are not necessarily lesson plans, this standard of inclusivity and representation should also be applied to lesson plans. It is expected that teacher preparation programs discuss with preservice teachers about the importance of creating lessons that are actively engaging for children, are developmentally appropriate and are based on children's interests and needs.

In the process of creating lesson plans, research is limited in the resources used in developing lesson plans for an early childhood context. Specifically, advancements in technology and the Internet have made online educational resources readily available to preservice and in-service teachers. It is easier than ever to share and obtain information from a

variety of online resources and having online resources available in a matter of minutes can expand and extend children's opportunities for learning and potential efficiency in lesson planning. According to NAEYC (2009), early childhood preservice teachers in teacher preparation programs should develop a standard set of skills and competencies along with them being actively engaged learners. It is mentioned that preservice teachers "learn to identify and use professional resources" (NAEYC, 2009). However, it is unclear what role online resources may play in early childhood preservice and in-service teachers lesson planning. Additionally, it is unknown if early childhood education (ECE) faculty in teacher preparation programs allow and/or support the use of online resources for lesson planning. It could be useful for ECE teacher preparation programs to help preservice teachers identify reliable online resources and provide guidance on how to evaluate online resources.

The research on the use of online resources for lesson planning is limited in early childhood education, therefore this current study was exploratory. The focus was to provide insight on preservice teachers, faculty, and current in-service teachers perceptions on the use of online resources for lesson planning and what is needed for preservice teachers to critically evaluate online resources for their own lesson planning. This study gathered information from three varied perspectives (i.e., preservice teachers, faculty, and in-service teachers) to understand the perceptions and use of online resources in a teacher preparation program and in the current workforce for lesson planning to provide possible recommendations for evaluating these online resources. First, this study investigated whether preservice teachers use online resources for lesson planning, whether they feel they can evaluate developmentally appropriate online resources, what supports do they feel they need in evaluating online resources, and their perception of future use of online resources. Second, this study investigated whether faculty in a

teacher preparation program allow the use of online resources, how they evaluate online resources (if they use them), and what they recommend for preservice teachers when using online resources for lesson planning. Finally, this study investigated whether current in-service teachers use online resources for lesson planning, how they evaluate online resources, and what they recommend for preservice teachers. Throughout the paper, preservice teachers will also be referred to as students.

CHAPTER II: THEORETICAL FRAMEWORK

This study sought to understand the use of online resources for lesson planning and the support needed to evaluate and use online resources appropriately. Preservice teachers' experiences in their teacher preparation program provide various interactions with faculty, cooperating teachers in field experiences, and with information provided through the Internet. The theoretical framework for this study used an adaptive version of Bronfenbrenner's bioecological theory for human development and PPCT model: Neo-ecological theory (Navarro & Tudge, 2023). Understanding the experiences of individuals and their interactions in an early childhood context, whether in the university, ECE classroom, and/or at home can shape their perceptions on the use of online resources. In using this adaptive theory, the results of this exploratory study will be explored through the potential influences and interactions across ecological systems that influenced the different perspectives of participants on this topic.

Bronfenbrenner's Bioecological Theory and PPCT Model

Bronfenbrenner's bioecological theory describes the many components of interactions that influence an individual's development (Bronfenbrenner & Morris, 2006). In using this theory properly, the framework of this study consists of interpreting the results using the Process-Person-Context-Time (PPCT) Model (Navarro et al., 2022). As described before, recently a new adaptation of Bronfenbrenner's theory has been proposed to include technology when studying human development (Navarro & Tudge, 2023). With the increasing use of technology, it is important to examine the role technology has in everyday life to understand its' impact on development. Specifically, focused on early childhood teacher education, it is crucial to examine the role of online resources on the professional development of ECE preservice

teachers and how multiple levels of interaction can influence their professional development in lesson planning.

Neo-ecological Theory

Due to the rapid changes in our technologically advanced society, including technology in understanding development is a must (Navarro & Tudge, 2023). Navarro and Tudge (2023) stated that "interactions with technology are no longer individual and unidirectional, but complex, bidirectional, and dynamic." In context of this study, the previous quote might refer to the way ECE preservice teachers and in-service teachers possibly use online resources is considered as interactions between the individual and technology. The framework of this study using Navarro and Tudge's (2023) neo-ecological theory as suggested by the authors will be explained in the next sections.

Proximal Processes

The PPCT model explains proximal processes as the close relationship and/or interactions an individual has with their surroundings (Bronfenbrenner & Morris, 2006). According to the neo-ecological theory, there are two microsystems: virtual microsystem and physical microsystem. In the neo-ecological model, proximal processes are not always in the virtual microsystem (the online environment) and a modification of the bioecological theory shifts from originally having two forms of proximal processes to three forms in the neo-ecological theory: symbolic, relational, and complex (Navarro & Tudge, 2023). Symbolic describes the interactions with "objects and/or symbols," relational is the interactions with other individuals, and complex is the interaction combining both symbolic and relational over time in which the processes become more "complex" (Navarro & Tudge, 2023). In this study, the interactions preservice teachers had with online resources and within their teacher preparation

program was investigated in relation to lesson planning. Additionally, in-service teachers were interviewed regarding whether they use online resources for lesson planning. Examining proximal processes using this theory can be explained by understanding the perceptions of the participants. For example, preservice teachers are learning from faculty about developing lesson plans and throughout time, preservice teachers will be building their skills needed for lesson planning. These skills are fostered through their experiences within their teacher preparation program and could also be fostered through their exploration of using online resources and support for using these resources in their lesson planning. These interactions can be considered complex proximal processes in which both the interaction with online resources and faculty promote their skills in lesson planning over time.

Personal Characteristics

The second component of the PPCT Model is personal characteristics. This component describes how an individual can influence and be influenced in their surroundings (Bronfenbrenner & Morris, 2006). The neo-ecological theory keeps this part of the PPCT model relatively the same (Navarro & Tudge, 2023). Personal characteristics could possibly be used to explain how certain preservice and in-service teachers might use online resources while others might not. Additionally, faculty perceptions on the use of online resources could be explained by personal characteristics as well. Since this study obtained data from a variety of participants, it would not be possible to identify all the factors that influence the use of online resources and understand the perceptions of every individual; however, person characteristics such as age range and years of experience from each group's perspectives will be briefly examined.

Context consists of an individual's surroundings which has influence on development and it has been known that research has heavily focused on this part of the PPCT model (Navarro et al., 2022). Often, the bioecological theory focuses "context" in terms of physical surroundings and according to Navarro and Tudge (2023), previous research has tried to explain where technology fits into the bioecological model. In the proposal for Bronfenbrenner's theory adaptation, the authors further explained that it was still not clear into how technology could be applied in research using the bioecological model and proposed three "modifications to the microsystem" (Navarro & Tudge, 2023). The first is that the microsystem can be physical and virtual, secondly, a person can be in both microsystems at the same time, and lastly, a person opens and closes a virtual microsystem depending on their involvement of the microsystems (Navarro & Tudge, 2023). Part of this study investigated whether preservice teachers and in-service teachers use online resources for lesson planning. The virtual microsystem could possibly explain the way participants interact with the virtual environment in searching for activities and lessons.

According to Navarro and Tudge (2023), the current mesosystem of the bioecological theory is the same for the neo-ecological theory. The mesosystem includes the interaction of two microsystems whether they are in a physical or virtual setting. For example, if preservice teachers use online resources, they are interacting with virtual microsystems and at the same time obtaining knowledge/skills for lesson planning from faculty in their teacher preparation program. In other words, the interaction between the virtual microsystem (the Internet) and the physical microsystem (classroom) could be influencing the professional development of preservice teachers. In this study, faculty reported their perceptions of using online resources for lesson

planning and recommended how their students should evaluate online resources. After the mesosystem, the neo-ecological theory described that the exosystem consists of "two or more microsystems" combined, in which one does not contain the person but influences the way that person interacts in their current physical or virtual microsystem (Navarro & Tudge, 2023). For this study, the exosystem could possibly explain the type of resources preservice teachers are using, in that the Internet includes online resources from a variety of sources. For example, the creators of online resources or the policy makers of teacher preparation programs do not come in direct contact with preservice teachers but are influencing them in the way information is or is not provided through online resources. The ECE workforce shares online resources, in-service teachers interact with preservice teachers and based on what is available online at this time, it influences preservice teachers' current interaction with the Internet.

Lastly, the macrosystem is important to the neo-ecological theory in which it consists of the combination of all other systems that reflects societies' cultures (Navarro & Tudge, 2023). In the United States, technology use is everywhere, especially in the university setting. Being able to research and use the Internet is a skill needed in many professions and technological competency is encouraged. Overall, for this study, the macrosystem broadly shows why this topic on using online resources appropriately is important for our society in fostering the future early childhood educators.

Time

Lastly, time is spread out into three parts: microtime, mesotime, and macrotime (Bronfenbrenner & Morris, 2006). Microtime is described as the time, whether continuous or discontinuous, in a current state of the proximal processes (Bronfenbrenner & Morris, 2006). In the neo-ecological theory, an individual is spending time using technology and interacting with

technological devices that can lead to disruption of other close interactions (Navarro & Tudge, 2023). Microtime can be interpreted as the time preservice teachers or in-service teachers have in looking up activities or lesson plans online. Next, mesotime is the repeating over time of the proximal processes which can influence an individual's development (Bronfenbrenner & Morris, 2006). In-service teachers' process of lesson planning could be an example of this time, in which their process of preparation could be similar across time in forming their professional development. Last, macrotime is described as the historical changes over time, for example, the many innovations of technology that are apparent in our society over the past decade. Possible variation in participants' responses could be seen through this time depending on their age, whether they grew up with or without technology. Noticeably, this study is not longitudinal and therefore, changes in time were not examined, however, results could possibly be understood using the concept of time.

This theoretical framework is appropriate for this study because it engages the influences of using online resources in early childhood education and what preservice teachers, faculty, and in-service teachers perceive regarding the use of these resources in lesson planning. Teacher preparation programs are preparing preservice teachers, and it is important to understand how the interactions preservice teachers have in the virtual environment are influencing lesson plans which are implemented into classrooms and their development of an effective early childhood teacher. The following section will discuss the literature regarding teacher preparation programs and lesson planning with online usage and resources in early childhood education.

CHAPTER III: LITERATURE REVIEW

Recent literature has demonstrated an increase in usage of the Internet for instructional planning across educational contexts (Ramirez et al., 2017; Schroeder et al., 2019; Shelton & Archambault, 2022). Despite, the increase of using online resources for instructional planning, much literature has focused preservice teachers' technological skills in terms of adding technology into classroom instruction (Wang et al., 2018). In other words, research has focused on technology being used in the classroom rather than investigating whether technology, specifically online resources, are used by teachers for classroom preparation. Importantly, planning activities (i.e., lesson planning) is a critical element of early childhood education. Although there are many curriculum guides and strategies used for planning, teacher preparation program practices should support observation-based planning and building on the interests and abilities of the children in the classroom (O'Sullivan & Ring, 2021). Further research is required to examine the use of online resources for lesson planning, the process of making decisions around online resources for lesson planning and if teacher preparation programs are guiding future teachers into critically thinking about the resources available (Sawyer & Myers, 2018). The following literature review includes the role of teacher preparation programs in fostering professional development, research regarding early childhood lesson planning, online resources across a variety of educational contexts, and lastly, early childhood education research focused on preservice teachers' and technology.

Role of Teacher Preparation Programs

During early childhood, many developmental processes are happening, and high-quality care and education is needed for promoting positive development (NAEYC, 2009). Early childhood education has strived to be intentional in providing adequate care and developmentally

appropriate education within the classroom. However, there is still an urgent need for the growth and continuation of providing quality early childhood care and teacher education to ensure well trained teachers in classrooms for young children (UNICEF, 2019). There are multiple pathways for ECE teachers, yet institutions of higher education (IHE) continue to serve a primary role in the education of teachers for young children (NAEYC, 2020). Since much research has shown the importance of early childhood and its impact on later development, the field of early childhood education has strived into making sure that teacher preparation programs develop teacher candidates that understand developmentally appropriate practices to foster positive child development (NAEYC, 2020). The goals of teacher preparation programs should be aligned with state and national standards of what is important for early childhood educators (NAEYC, 2020). Along with learning about developmentally appropriate practices, teacher preparation programs prepare their students to develop a wide range of skills regarding teaching and care including planning lessons to support children's development and growth. Yet, there is little empirical research on the role of teacher preparation programs in fostering lesson planning skills in preservice teachers.

Fostering Effective ECE Teachers

Teacher preparation programs have emphasized their focus on promoting professional development for their students in becoming teachers (Baum & King, 2006; Vartuli et al., 2016). Professional development is defined as the process of learning through experiences to obtain "knowledge, skills, practices, and dispositions" needed to grow in one's professional field (Buysse et al., 2009; NAEYC, 2020). Especially this study focused on exploring online resource usage in lesson planning. Research has emphasized that lesson planning should support a

preservice teacher's professional development in making choices based on context and background knowledge (Ruznyak and Walton, 2011).

Despite the emphasis on promoting professional development in ECE there are many challenges that teacher preparation programs are dealing with (Early & Winton, 2001; Han et al., 2020). There are challenges regarding the lack of faculty members, field experiences, content courses, addressing diversity, and transferring institutional credits (Early & Winton, 2001; Horm et al., 2013). In addressing these challenges, it is important to understand the variety of contexts of teacher preparation programs (Sumrall et al., 2017). One particular context that has gotten a lot of attention in recent years is the digital context. For this paper, the digital context consists of the use of the Internet to seek information. In understanding this context, there is an increase of research revolving around technology's impact on all forms of education (Kaminskienė et al., 2022; Zhang & Alsan, 2021). One study examined the literature on preservice teachers' professional development regarding technological skills (Wang et al., 2018). The article described that preservice teachers need assistance in fostering their technological skills and how to incorporate technological skills with content knowledge (Wang et al., 2018). This could be important in examining how preservice teachers incorporate technological skills in lesson planning.

Lesson Planning in Early Childhood Education

The skill of lesson planning is part of preservice teachers' professional development (Rusznyak & Walton, 2011). Like curriculums, lesson plans are meant to be carefully crafted to children's interests and needs and maintain organization in the classroom setting (NAEYC, 2020). Lesson plans must reflect developmentally appropriate practices and be representative of children in a classroom (NAEYC, 2020). The remainder of this literature review will explore the

guidelines to lesson planning in ECE, the research on preservice teachers regarding lesson

planning, and finally, the use of online resources to seek information for lesson plans.

NAEYC: Transforming Teaching

Recently NAEYC has released a book, *Transforming Teaching: Creating Lesson Plans for Child Centered Learning in Preschool*, that provides a framework for early childhood

teachers to use in implementing NAEYC standards in their lesson plan process (Masterson,

2021). This book provides examples of lesson plans, strategies for instructional preparation,

resources for professional development, and emphasis on developmentally appropriate practices

to promote children's learning and development (Masterson, 2021). It is important to note that

this book is directed for teachers who are teaching preschool children; however, much of the

guidance could be applied to lesson planning for younger children. As Masterson (2021)

described that lesson plans have to be based on the children. In terms of what they are interested

in, their personal characteristics, and their developmental and educational needs.

Lesson Plan Guidelines

Specific guidelines regarding lesson planning depends on the context of the teacher

preparation program (NAEYC, 2020). Lesson plans that are well-written and demonstrated an

understanding of children's developmental needs into preparing instruction, engaged children in

the learning process (Ebbeck et al., 2018). Additionally, there are recent studies on the inclusion

of Universal Design for Learning (UDL) into lesson planning and results from these studies have

shown a better understanding of developing lesson plans that are inclusive and student-centered

(Lee & Griffin, 2021; MCGuire-Schwartz & Arndt, 2007). When comparing the 2010 NAEYC

Professional Preparation Standards and the 2020 NAEYC Professional Standards and

Competencies for Early Childhood Educators, there are modifications revolving around

developmentally appropriate practices (NAEYC, 2020). Earlier standards described maintaining developmentally appropriate practices, however, recent standards expand into creating "culturally and linguistically relevant, anti-bias, and evidence-based teaching approaches that reflect the principles of universal design for learning" (NAEYC, 2020, p. 10). The change in NAEYC standards can also promote ECE teachers to change lesson plans to meet these requirements to support all children's learning. However, research is still needed to investigate how teacher preparation programs provide preservice teachers with supports on creating lesson plans.

Preservice Teachers' Lesson Plans

Preservice teachers are in the process of learning how to develop lesson plans and teacher preparation programs are supporting preservice teachers in fostering the skills needed for lesson planning. According to Zaragoza et al (2023), the process of lesson planning needs to support professional development for preservice teachers. The authors emphasized the importance of putting into practice the skills learned in teacher preparation programs to make lesson plans, however, they state that there is not much research specific to lesson planning (Zaragoza et al., 2023). In ensuring the development of optimal lesson plans, Zaragoza et al. (2023) propose that preservice teachers reflect and make predictions into how their lesson plan will be carried out while visioning the children's learning outcomes. Similarly, Rusznyak and Walton (2011) described the difference of their previous guideline for lesson planning to a new guideline that emphasized pedagogical content knowledge. Pedagogical content knowledge is described as the ability to incorporate skills and material learned into the appropriate educational context (Rusznyak & Walton, 2011). Both articles mentioned above, described lesson planning as being part of preservice teachers' professional development and that critical thinking to plan and expect classroom experiences is required for optimal instructional preparation. It is important to

remember that lesson planning is ongoing in early childhood classrooms. Lessons need to be planned for multiple activities/centers for each day.

One mixed-methods study examined the influence individualized lesson plans had on children's socio-emotional learning (Haslip & Terry, 2023). Haslip and Terry (2023) found that individualized lesson plans that directly allowed children to act, instead of passively learn, how to "practice a behavior or skill" were implemented better than those that just told children what to do. This finding can reflect the importance stated previously about how lesson plans should be aimed to specific children's developmental needs and interests.

Although research demonstrating the "theory into practice" is limited, it can be implied that what is taught regarding lesson plans in teacher preparation programs can be carried out with preservice teachers into their own practice with developing lesson plans (König et al., 2020). This section on preservice teachers' lesson planning includes research from a general educational context and in early childhood education, there are not many detailed studies regarding preservice teachers' and lesson planning. According to Gilken et al.'s study (2023), infants and toddler teacher education is lacking in research and in practice. This study collected data through a document analysis from 67 early childhood education programs and from faculty self-reports regarding the incorporation of infant and toddler courses, content, and field experiences in their early childhood education programs (Gilken et al., 2023). It was found that teacher preparation programs did not focus their coursework on infants and toddlers, community colleges provided coursework on infant and toddlers compared to four-year institutions, and there is a lack of faculty who are experts in the ECE field, specifically for infants and toddlers (Gilken et al., 2023). It could be beneficial to gain insight into ECE preservice teachers' perceptions on lesson planning.

Use of Online Resources for Lesson Planning

Previous research has demonstrated the importance of lesson planning in providing a meaningful framework for classroom instruction in early childhood education. Although little is known about how teacher preparation programs implement NAEYC standards and skills needed for preservice teachers in ECE in the development of lesson plans, it is important to consider the role online resources have. According to Sawyer and Myers (2018), online resources along with help from faculty, other students, and teacher mentors provided guidance into lesson planning. Online resources are defined as the information found on the Internet that help developing lesson plans, this can include activity ideas or fully written lesson plans (Sawyer & Myers, 2018). This is the definition that will be used to guide this current study. According to Sawyer and Myers (2018), preservice teachers felt more comfortable using online resources than reaching out to faculty or teacher mentors for help. Since there are unlimited online resources, it would be beneficial to further investigate the roles of ECE faculty, current in-service teachers on the process of lesson planning as well as whether ECE preservice teachers are using online resources for lesson planning. This next section will discuss literature surrounding technology in early childhood leading to the final section about general literature on online resources.

Technology in Early Childhood Education

Societies are saturated with technologies and there is easier access to information through the Internet. In particular, this increase in technology has emphasized the importance of using technology for instructional preparation and teaching in early childhood classrooms (Bourbour, 2023; NAEYC, 2008). Additionally, research has focused on children' use of technology and its impact on their development and learning (Konca, 2022; Madigan et al., 2019; Mertala, 2019; Wang & Hoot, 2006). Detailed research regarding teachers' technology use for instructional

preparation is lacking in early childhood education. The following will discuss the current

research on preservice teachers' use and perceptions of technology, and online resources in an

early childhood context.

Preservice Teachers' Digital Competency

Preservice teachers enrolled in a teacher preparation program learn to develop their skills

and professional knowledge into becoming teachers. One of the skills that preservice teachers are

expected to acquire is digital competency. Digital competency is defined and measured in a

variety of ways in early childhood education research, and it can be defined as "a vital

combination of knowledge, abilities, and attitudes required for effective and responsible use of

digital tools and technologies in the modern world" (Su & Yang, 2023, p. 1). According to a

curriculum analysis conducted in Norway, formal documents of teacher preparation programs in

early childhood education were obtained and findings demonstrated that most documents

mentioned the importance of digital competency (Undheim & Ploog, 2023). However, it was

noted throughout the article that the term "digital competency" and the use of digital tools were

not elaborated, making it unclear how these programs assisted preservice teachers in fostering

their digital competency (Undheim & Ploog, 2023). With unclear descriptions of how to

implement the use of technology for preservice teachers to become competent users, how

preservice teachers approach digital tools is varied. Despite the limited guidance of how teacher

preparation programs should support the development of digital competency, some studies have

mentioned that preservice teachers have taken a class involving technology. However, the

content and learning goals in these courses are not provided to fully understand how these

courses support the development of digital competency (Luo et al., 2021; Mertala, 2019). It

seems that current teacher preparation programs might describe technology use and digital

competency as important, however, there is not enough research on how these competencies are included in programs.

Preservice Teachers' Perceptions

In addition to the studies on preservice teachers' digital competency, there are a growing number of studies on preservice teachers' perceptions of using technologies. However, one thing to note is that these studies focus more on children's outcomes than teachers' use of technology. For example, one study examined ECE preservice teachers' perceptions on children using technology and how it should be integrated into ECE (Mertala, 2019). Findings demonstrated that preservice teachers' perceptions of technology in ECE depended on many factors, such as the context and the children's age (Mertala, 2019). Preservice teachers were more favorable towards technology integration with older children that are, or are closer to the preschool age, and the children that did not have much technology at home (Mertala, 2019). This study emphasized that preservice teachers considered the different situations and experiences of children in forming their perceptions of whether technology integration was appropriate in different ECE settings. Rather than providing a distinctive division of perceiving technology as positive or negative, Mertala's (2019) study demonstrated that many factors contribute to integrating technology. This could help understand if preservice teachers using online resources for lesson planning also consider many factors into using the Internet. NAEYC's (2008) article on technology and media use in ECE stated that technology integration can be beneficial when used appropriately. However, it might be challenging for preservice teachers to know what it means to integrate technology appropriately (Dong & Mertala, 2021). Exploring how preservice teachers and/or in-service teachers use technology not only in the classroom, but in preparation for the classroom helps to examine the quality of experiences of young children in classrooms.

Two studies found that preservice teachers' have positive views of integrating technology in their future classrooms (Alkhayat et al., 2020; Luo et al., 2021). This could be assumed because technology is everywhere and is often used as a tool. Positive perceptions of online resources usage could be portrayed as well in the current study. Despite the positive perceptions of technology, one issue mentioned frequently is not having enough support in learning how to maximize the use of technology (Blackwell et al., 2014; Mou & Kao, 2021). A study in Kuwaiti, investigated early childhood preservice teacher's perceptions on using technology when they become teachers (Alkhayat et al., 2020). This study demonstrated that preservice teachers reported that it would be useful to use technology to teach, communicate, and share ideas with others (Alkhayat et al., 2020). However, this study found that preservice teachers were not confident in their use of technology and needed guidance in using them in the early childhood classrooms (Alkhayat et al., 2020). It could be that there is a need for teacher preparation programs to assist preservice teachers in using technology appropriately.

Technological Tools: Online Resources

There are a vast variety of resources for preservice teachers, whether they are provided directly through their teacher preparation program, through their work and/or field experiences from in-service teachers or administration, and/or through the Internet (Luo et al., 2021). Due to growing use of the Internet, more than ever are university students seeking information through online sources (Ashour, 2020). However, it is unclear what type of online resources early childhood students are using for their coursework and professional development. Further, the quality of these online resources is unknown, and it is unclear whether students are seeking online resources that are reliable. Therefore, it could be useful for teacher preparation programs to support preservice teachers to identify reliable and appropriate online resources both at the

pre-service and in-service levels. Specifically, in instructional preparation, online resources could provide additional support and guidance related to expanding children's learning and development through lesson plans.

Based on the current literature, a few articles have provided insight regarding the use of online resources in education. According to Shelton and Archambault (2022), there are many online resources out there and it is crucial to examine them in all educational contexts. Specifically, while in a teacher preparation program, the authors encouraged discussions about examining carefully the contents of many online resource websites to ensure that what is being used as an instructional tool is appropriate for the children in the classroom (Shelton & Archambault, 2022). One earlier study about online resources in education, examined teachers' use of online resources and found that teachers used online resources mainly to look for ideas that helped their teaching (Moore & Chae, 2007). Similarly, another study examined preservice and in-service teachers' use of Pinterest and this study found that teachers used Pinterest mainly to get ideas and evaluated the online resource based on how it aligned with prior teaching knowledge (Schroeder et al., 2019). However, findings revealed that not many teachers described how their use of Pinterest was supporting the needs of "culturally and linguistically diverse learners" (Schroeder et al., 2019). Further research is needed to understand the role online resources have in lesson planning in early childhood education.

The Current Study

The purpose of this study was to explore perceptions from multiple/varied perspectives regarding the use, process of evaluation, and recommendations of online resources for lesson planning in early childhood education. The main aims for this study are examined using three groups of participants with experience regarding lesson planning for young children. First,

preservice teachers completed a survey and were interviewed about their use online resources for lesson planning, whether they feel they can evaluate developmentally appropriate online resources available for lesson planning, what supports they need in evaluating online resources, and their perception of future use of online resources for lesson planning. Second, faculty in an ECE teacher preparation program were interviewed about whether they allow the use of online resources, their evaluation of online resources for lesson planning, and what they recommend for preservice teachers when using online resources for lesson planning. Finally, current in-service ECE teachers were interviewed about their lesson planning process, their use of online resources for lesson planning, their evaluation of online resources, and their recommendations for preservice teachers for using online resources for lesson planning.

CHAPTER IV: METHODS

Participants

The final sample of this mixed methods study included 21 participants, including nine preservice teachers, six faculty members, and six in-service teachers. Preservice teachers were students currently enrolled in an early childhood teacher preparation program at a four-year institution of higher education, early childhood faculty were from the same four-year institution and in-service teachers were currently working in early childhood education classrooms at one local private childcare center.

Specifically, participating preservice teachers were currently enrolled in their second practicum course: Birth Through Kindergarten Practicum II. The practicum course provided field experiences in a preschool or kindergarten age classroom and included coursework on observation learning and planning. Preservice teachers in this course were required to spend a total of 6 hours per week in a classroom setting over a 12-week period. Students from this course were recruited because of their current work in planning and implementing lessons/learning experiences in classrooms. The age range for preservice participants was 25-51 years (mean=37.2), 33.3% indicated their race and/or ethnicity as African American/Black (n=3), 33.3% Caucasian/White (n=3), 22.2% Latino/Hispanic (n=2) and one student identified their race and/or ethnicity as Human. All preservice teacher participants identified as female. Faculty participants were recruited from the department of Human Development and Family Studies, Early Childhood Education and Development major, who have taught courses in the ECE teacher preparation program that included lesson planning. It is important to note that faculty in this department have a philosophy that classroom preparation and instruction is based on observations of the children. The faculty age ranged from 50-75 years (mean=58.4; one faculty member

wished not to report their age). All faculty identified as White or Caucasian and female. Lastly, in-service teacher participants were from a local private childcare center. In-service teachers taught in classrooms with children that ranged from toddler classrooms to prekindergarten age. The age range for in-service participants was 23-58 years (mean=39.8), 50% indicated their race and/or ethnicity as Caucasian/White (n=3), 33.3% Latino/Guatemalan American (n=2), and 16.6% identified as Asian (n=1). All in-service teacher participants identified as female.

Procedures

Institutional Review

This study received the university's Institutional Review Board (IRB) approval to recruit from the three groups: students, faculty, and teachers. IRB approval to start the recruitment of students and faculty was received in January 2024. The IRB requested recruitment approval letters from the childcare centers where the primary investigator would recruit the teachers. Therefore, students and faculty information were added first to the IRB initial application submitted to begin recruitment of those two groups of participants. Once the letter from the center was obtained, an IRB modification was submitted for the in-service teachers. The modification was approved by the IRB in mid-February 2024. Participant recruitment will be described below in separate sections for each group.

Preservice Teacher Recruitment

To gather both quantitative data related to frequency and qualitative data to go more in depth about participants use of online resources and recommendations, the current study used both survey and interview data collection.

Survey Distribution

The primary investigator emailed the Birth Through Kindergarten Practicum II course instructors with information regarding the study and requesting assistance in distributing the survey to the practicum preservice teachers. Preservice teachers (N=45) received an email from their course instructor that contained an introduction of the primary investigator, a detailed information sheet of the study, and the link to the Qualtrics survey. The primary investigator sent the course instructors a prompt for reminder emails that were sent out once every three days to remind their students that the survey was available. A total of three reminders were sent out to students about the survey. Interested students could read the information sheet/consent embedded in the Qualtrics survey and proceed to complete the full survey. As an incentive to complete the survey, students had the option of entering a drawing for a gift card of $50 by completing the Microsoft form linked in the survey.

Interview Recruitment

To recruit students for the interview, an item was added towards the end of the survey asking whether the student was interested in participating in a follow-up interview. Since the survey was anonymous, the interview follow-up item consisted of an external link that directed students to a Microsoft Form. The Microsoft Form allowed the student interested in the interview to enter their name and email address to contact them with further information. The primary investigator emailed the study information and the interview information sheet to each student individually using the email address they provided in the Form. Students who were interested in participating in the study (N= 5) responded to the email by contacting the primary investigator. The primary investigator scheduled the Microsoft Teams interview and sent the calendar

confirmation to the participant. All participants received an incentive of $10 for completing the interview.

Faculty Interview Recruitment

From the university's website, a list of the Early Childhood Development and Education faculty was obtained. Further, the principal investigator looked at the course catalog for the early childhood development and education major to seek courses that possibly contained a lesson plan component to recruit faculty and understand if the current teacher preparation program allows and supports the use of online resources for developing lesson plans. Eight faculty who had taught a course including lesson planning were contacted through their email provided on the university's website with information about the study and were asked if they were interested in participating. Six faculty responded and the primary investigator scheduled the Microsoft Teams interview to faculty that indicated interest and sent the calendar confirmation to the participant.

In-service Teacher Interview Recruitment

As mentioned previously, letters of approval for recruitment were obtained from two early childhood education centers. After obtaining IRB approval to recruit from these centers, the center director of each center was contacted about the initial visit. Recruitment only from the private childcare center was conducted due to time constraints for the recruitment process. The primary investigator went to the private childcare center to begin recruitment of in-service teachers (N=24). Teachers were provided with general information about the study, and emails were obtained for those interested in participating. The information sheet for in-service teachers and study information was emailed to those interested in the study (N=14). Six teachers responded and indicated interest in participation were scheduled for the Teams interview. All participants received an incentive of $10 for completing the interview.

Measures

Using previous literature as a guide, the survey and interview questions for the current study were designed to reflect the overall aim of gathering information from pre-service teachers, faculty, and in-service teachers about the use of online resources for lesson planning. The survey and interview were piloted with one person from each participant group to receive feedback on the understanding of the survey items and interview questions.

Preservice Teacher Survey and Interview

Online Resources for Lesson Planning Survey

A Qualtrics survey was created to assess preservice teachers' self-reports on demographic information and their use around online resources in lesson planning. The survey consisted of four parts and total of 16 questions: demographics, online resources for lesson planning, interview follow-up, and the drawing entry. The demographic section included 8-items measuring preservice teachers' background information with five items being open-ended regarding age, race, ethnicity, gender, year in program, experience in childcare. The remaining three items were "Yes or No" questions around childcare employment, preferred age group of children, and plans for teaching after graduation. The section regarding online resources for lesson planning included 7-items that assessed the use of online resources, the types of online resources used, confidence in online resource usage, importance of guidance from teacher preparation programs on the use of online resources, supports needed in evaluating online resources, and future use of online resources. Two items in this section were open-ended to understand what types of online resources students used and for students to explain the support they need from their program in evaluating online resources for lesson planning. The remaining five items in this section consisted of "Yes or No" items and rating items. Lastly, the follow-up

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section and drawing entry section were included in the survey as external links for students

interested in the interview portion of the study and entering a drawing for an incentive.

Preservice Teacher Interview

A 14-item semi-structured interview was conducted by the primary investigator with the

preservice teachers using Microsoft Teams and its' live transcription. These interviews expanded

on the previous survey questions and gave voice to preservice teachers on this topic. The purpose

of the interview was to obtain more in-depth information about the use of online resources in

lesson plans and support needed from teacher preparation programs. The items for the interview

included the same demographic questions asked in the survey and then items regarding the

student's process of completing a lesson plan assignment, use of online resources for lesson

planning, process of finding and evaluating online resources, confidence in online resources

evaluation, importance of teacher preparation program to help students evaluate online resources,

benefits and disadvantages of online resource usage, and recommendations for program support

on resources evaluation. Interviews took an average of 11 minutes to complete.

Faculty Interview

An 11-item semi-structured interview was conducted using Microsoft Teams and its' live

transcription with faculty focused on their perceptions around students' use of online resources

for lesson planning. Additionally, this study sought recommendations from faculty about how to

evaluate online resources. Obtaining the faculty perspective was crucial to understanding this

topic, as they are the individuals that have direct interactions with preservice teachers and guide

their learning of how to lesson plan.

The first three items of the interview were demographic questions regarding the faculty's

age, race and/or ethnicity, gender, years teaching in ECE, and years teaching around lesson

planning in ECE. The remaining eight items were questions on the extent the faculty member allowed students to use online resources for coursework on lesson planning, evaluation and guidance of online resources, importance of including guidance for students in the program, benefits, and disadvantages of using online resources for lesson planning, and recommendations to students in the evaluation of online resources. Faculty interviews took an average of almost 16 minutes to complete.

In-service Teacher Interview

Lastly, interviews were conducted with current in-service teachers to understand their process of lesson planning and use of online resources. An 11-item semi-structured interview was conducted through Microsoft Teams and its' live transcription to gain perspectives from teachers currently part of the ECE workforce. Four demographic questions were asked regarding teachers' age, race and/or ethnicity, gender, years in current workplace, years of teaching in ECE, and current classroom age group. The next seven items focused on whether the teacher developed their own lesson plans and if lesson planning is required by their workplace, their lesson planning process, whether they used online resources in their lesson planning, how they evaluated online resources and if they modified the resources, the benefits and disadvantages of using online resources, and recommendations to students for evaluation of online resources for lesson planning. In-service teacher interviews took an average of 11 minutes to complete.

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Data Analysis

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Mixed-Methods Approach

This is an exploratory study using a mixed method design. To provide a context of the frequency of whether students used online resources for lesson planning, a survey was completed by pre-service teachers participating in the study.

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To capture varied perspectives on the use of and recommendations for online resources for lesson planning from preservice teachers, faculty, and in-service teachers, this study used primarily semi-structured interviews. Additionally, the demographic items from the study were not included in the analyses but used to set the context of the study.

Quantitative Analysis

The purpose of conducting a quantitative analysis using the survey data was to obtain demographic information and data on preservice teachers' use of online resources for lesson planning coursework along with other related items described previously. SPSS statistical software was used to analyze the survey data to provide descriptive statistics and frequency tables. Descriptive statistics provided mean, standard deviation, and ranges for the closed-ended items from the survey data. From the descriptive data, frequency tables were generated to provide a description of the sample and show percentages of responses across the survey questions.

Qualitative Analysis

The majority of the data collected from this study are qualitative. An inductive thematic approach which focuses on the data as the main source of generating themes was used to analyze the interview data. Using this guidance of Braun and Clarke (2006), the qualitative analysis process is described below; for clarity, the analysis is provided in a step-by-step manner using Braun and Clarke (2006) phases. However, as stated in their article as in this research study, the process of analysis was not linear, and it was a cycle of going back and forth between phases.

Phase 1: Familiarizing Yourself with Your Data

Interview data was analyzed in the order of: Faculty, in-service teachers, and preservice teachers. After collecting all data from each group, the raw data was uploaded to a secure storage system that was available only to the researcher team. Raw data consisted of the Microsoft live

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transcripts from the video/audio recordings. First, the Microsoft Team recordings were listened to by the primary investigator and interview transcripts were read. During this initial review of raw data, no changes were made to the data set (interview transcripts). Second, identifiable names of the participants in the data set were exchanged with pseudonyms. Third, the primary investigator read an individual transcript while listening to the corresponding recording and fixed grammar and mistranscriptions for each data set. Lastly, the primary investigator finished transcription verification by going through the data set once more and correcting any missed errors, punctuation in the transcripts and listening to the full audio recording to confirm matching with the transcripts.

Phase 2: Generating Initial Codes

Transcripts were shared with a second graduate student to obtain inter-rater reliability. To generate initial codes, the primary investigator and the second coder first read the full transcripts separately and made note of any thoughts, ideas, or things that stood out to them using individual Microsoft Excel sheets. The excel sheet consisted of the columns labelled: Code, Explanation, and Quotes. Transcripts were re-read, and initial codes were added to the individual excel file under the column labelled "Code." If any code was thought to be possibly a sub code, "sub" was added next to the code. The reasoning for the initial code was added under the "Explanation" column in the excel file and quotes that corresponded to the initial codes were added under the "Quotes" column. Weekly meetings of the primary researcher and second coder were held to discuss the initial codes and to evaluate the codes that would be kept in the second phase of coding. The second phase of coding was done with both researchers refining the code explanation and sorting again the quotes that were thought to fit with each code.

Phase 3: Searching for Themes

The codes were grouped on the similarities/patterns in quotes based on each individual researcher's perceptions. Each researcher identified the patterns by highlighting similar codes with the same color on the excel sheet. Each color represented a possible category for the group of codes. After finishing sorting and collating the codes into a colored category, initial themes were developed by each researcher. Initial themes were longer broad phrases/sentences that captured the uniqueness of the category. Within the same excel file, in a different excel sheet the researchers labelled the columns: Theme, Explanation, and Category. Initial themes were added under the "Theme" column, the reasoning for the theme was added under "Explanation" and the corresponding/related colored category was added under "Category." In the weekly meeting, each researcher shared their initial themes, reached a consensus of initial themes, and discussed plans to move to the next phase.

Phase 4: Reviewing Themes

The initial themes were then examined again by both researchers together to check if the codes and quotes within each category matched the explanation of the theme. This process allowed for verification that the quotes were representative of each theme. Then, the entire data set (interview transcripts together) were examined broadly to make sure that they related to the themes. The examination of all the transcripts included highlighting parts of each transcript that corresponded to the themes.

Phase 5: Defining and Naming Themes

The process of defining and naming themes was completed by the primary investigator. Each theme was analyzed further by going backwards and examining every detail from category, quotes, codes, and explanations to make sure that themes were representing the data. The

descriptions of themes and names were refined during this process by aligning the definition and names of the themes to the overall focus of the study on perceptions of online resources for lesson planning.

Phase 6: Producing the Report

Finally, the themes were used to provide the following results.

Positionality Statement

Before reporting the results and discussion of findings, I believe it is important to discuss my personal characteristics and prior experiences that has influenced this whole study. Additionally, I will report below the characteristics of the second research that contributed to the analyses of the qualitative data.

The primary investigator is a 24-year-old, Latina, master's student in the department of Human Development and Family Studies. My prior experiences included working in an ECE setting for six years, majoring in the same department during my undergraduate years, and working as a teaching assistant in one course that included planning. I also have been informed by my interactions with my mom who has been an ECE teacher for over 20 years. Currently, my research interests around preservice teachers' professional development have guided this study and discussions with faculty in the same department also could have influenced the way the discussion section was written. I had prior knowledge that this teacher preparation program focused on observation-based learning which could have influenced what I expected in the results. Additionally, being a teacher assistantship (TA) for one of the courses I recruited from, I got exposed to the type of training the preservice teachers in this program go through. In recruiting in-service teachers, the private childcare center was my previous workplace before entering in graduate school. This childcare center allowed great flexibility in the activities that

are included in lesson planning as long as they are child appropriate and follow state guidelines. Therefore, I have already came with prior knowledge about the requirements about lesson planning in that setting. For this reason, recruitment from another childcare center based in the university was proposed to get another center's perspective, however, time constraints prevented recruitment. In regard to my previous experiences working in an ECE setting, I did not receive any teacher preparation training. When I was a lead teacher for a toddler class, I heavily used online resources in my lesson planning, specifically when thinking about art activities. My experiences led to my interest in investigating on this topic. I began this study with the positive perspective that online resources should be used in teacher training programs to help students develop their lesson planning skills. However, after the interviews and going through the semester as a TA I observed a different perspective and my perspective shifted. I now believe that online resources for lesson planning can be useful, but they should be modified, credible, and align with standards.

The second researcher is a White, PhD student part of the same department as the primary investigator. The second researcher was a former public preschool teacher for at-risk children, and her classroom experiences prioritized a strengths-based approach to working with families from diverse backgrounds. She was also informed by her relationship as a mother to three children who each interfaced in different ways with early intervention services. Her research interests include child language and cognitive development in classroom settings and teacher training. Additionally, the second researcher used to attend the same teacher preparation program as the current preservice teachers.

CHAPTER V: RESULTS

This study provided data about the perceptions of preservice teachers, ECE faculty, and in-service teachers about the use of online resources in lesson planning in an early childhood education context and recommendations for evaluation of online resources. A mixed methods approach was used to gather survey and interview responses from preservice teachers and interview responses from both ECE faculty and in-service ECE teachers. Responses to the substantive questions of survey items are provided first and then qualitative analysis and themes related to the research questions are provided by groups in the following sections. The main aims of the study are presented by each group described below in separate sections.

Preservice Teacher Survey Results

First, for preservice teachers, this study sought to explore from the survey and interviews: 1) whether preservice teachers use online resources for lesson planning, 2) whether they feel they can evaluate developmentally appropriate online resources, 3) what supports do they feel they need in evaluating online resources, and 4) their perception of future use of online resources.

Demographics Descriptive Statistics

Preservice teachers reported their age, race and/or ethnicity, gender, year in program, experience in childcare, childcare employment, preferred age group, and plans for teaching after graduation. Table 1 shown below displays the frequency/percentage of responses for the items: gender, race and/or ethnicity, childcare employment outside of practicum, preferred age group, and plans to teach after graduation. All nine participants reported age in years and ages and ranged from 25 to 51. For race and/or ethnicity, responses included "African American" (n=2), "Black" (n=1), "Caucasian" (n=1), "White" (n=2), "Latino" (n=1), "Hispanic Latino" (n=1), and "Human" (n=1). Participants reported to the year in their current teacher preparation program in

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different manners, "Senior" (n=4), "Junior" (n=2), "2021" (n=1), "3rd" (n=1), and "Started Spring 2022 Total of 2 years" (n=1). The years of experience are varied as well from 3 years and 5 months to 25 years. Respectively, the students reported, 3, 5, 8, 11, 12, 15, 17, 19, and 25 years of experience working with children in a childcare setting. Only one out of nine students reported "No", that they do not currently work in a childcare setting apart from their program's required practicum (Yes=1, No=2; mean=1.11; SD=.333). Additionally, only one out of the nine reported "No", that they do not have a preference for the age group of children they would like to work with (Yes=1, No=2; mean=1.11; SD=.333). Those that did have a preference reported the age group of children as, "3" (n=1), "4-year-olds" (n=1), "4-5" (n=1), "Kindergarten" (n=1), and "preschool" "Preschool ages" (n=2). Lastly, two out of the nine students reported "No" for the item asking if they have plans to teach after graduation (Yes=1, No=2; mean=1.22; SD=.441).

Table 1. Survey Demographics Frequencies

Sample Characteristics n=9	*%*
Gender	
Female	100
Race/Ethnicity	
Black/African American	33.3
White/Caucasian	33.3
Latino/Hispanic	22.2
Other	11.1
Currently work in childcare outside of placement	
Yes	88.9

No	11.1
Preferred Age Group	
Infants	11.1
3-year-olds	11.1
4-5 years olds	33.3
Pre-K	22.2
Kindergarten	11.1
Plans to teach after graduation	
Yes	77.8
No	22.2

Online Resources for Lesson Planning

After the demographic section of the survey, there were five close-ended items shown below in Table 2 and two open-ended items for students to respond to. Only one student reported not using online resources when completing a lesson plan assignment. The results to the second closed-ended item varied, five of the students reported needing support for evaluating online resources while four students reported not needing support from program. In rating their confidence in evaluating online resources for lesson planning (1-5; Never to Always), students reported the last two highest ratings. Six students reported "Often", and three students reported "Always" when rating their confidence in evaluating developmentally appropriate online resources. Similarly, in the next rating question about the importance of program helping students identifying online resources, the two highest rating were chosen by students (1-5; Not at all

important to Extremely Important). Eight students reported "Extremely Important", and one student reported "Very Important". Lastly, students reported that it is likely that they will use online resources in the future. Rating (1-5; Extremely unlikely to Extremely likely), seven students reported "Extremely likely" and two reported "Somewhat likely".

Table 2. Online Resources for Lesson Planning Descriptives

Closed-ended items	Mean	Range	SD
Do you use online resources (besides what is provided from your program/course) when completing an assignment regarding lesson plans?	1.11	1-2	.333
Do you think you would need support from your program into evaluating online resources?	1.44	1-2	.527
Rate how often you feel confident in evaluating whether online resources are developmentally appropriate for including in your lesson plans? (Evaluating is the process of identifying valid, helpful, and developmentally appropriate online resources).	4.33	4-5	.500
Rate how important it is for teacher preparation programs to help students identify valid, helpful, and developmentally appropriate online resources for lesson planning?	4.89	4-5	.333

Rate how likely in the future you think you will use online resources for

developing lesson plans?   4.78   4-5   .441

For the first open-ended question: "What online resources have you used to write lesson

plans (for example, ChatGPT, AI, Pinterest, Facebook, Teachers pay teachers etc.)?" There were

eight responses. There were two online resources that were frequent across participant responses;

six students reported using Pinterest and five students reported using Teacher Pay Teachers. The

other online resources mentioned by each student were: Child Care Lounge, IXL.com, NAEYC,

Facebook, Instagram, Google, Fun Learning for Kids, and Teaching Strategies. For the second

open-ended item "Please explain what supports you would need from your program in evaluating

online resources for lesson planning." There were four responses. Two of the four responses

mentioned having a list of resources: "List of Recommended Resources and List of ones to

avoid" and "Possibly a list of other resources other teachers are using". One student responded,

"Making sure the websites and resources are from a legit source". Lastly, one student answered,

"How to work around behavioral issues" which may be related to overall support needed rather

than evaluating online resources specifically.

Overall, the survey provided information from the student perspective on using online

resources for lesson planning; the next section discussed the results from the interviews of three

of these students who completed the survey. The purpose of the interview was to have preservice

teachers' express further their perceptions regarding online resources in lesson planning.

Qualitative Results from Interview Data

Using the inductive thematic approach, six main themes were found across the interviews. For preservice teachers, there were two main themes that emerged directly from the data: "Online resources in coursework and practicum/teaching experiences" and "Guidance provided by teaching training faculty is needed." For faculty, there were two main themes that emerged directly from the data: "The goal is to create a high-quality lesson plan" and "Preservice teachers have different experiences." For in-service teachers, there were two main themes that emerged directly from the data: "Lesson plan must meet the children's needs and interests" and "Ways to form a lesson plan."

<div align="center">Preservice Teacher Interview Results</div>

From the inductive thematic analysis, two main themes emerged that reflected the patterns found across the interview responses of the three preservice participants. The first main theme is that preservice teachers incorporate online resources in coursework and practicum/teaching experiences. This first theme has one subtheme: Online resources are a great tool. The second main theme is that guidance and requirements related to the use of online resources are needed from faculty. Two subthemes within this theme are: 1) Confidence in evaluating online resources for lesson planning and 2) online resources might not be age appropriate.

Using Online Resources in Coursework and Practicum/Teaching Experiences

Online resource usage was prevalent/evident in all students' responses during the interviews. Two of the students mentioned the use of online resources in the first interview question about their process for completing a lesson plan assignment or developing a lesson plan. While one student described their use of online resources for lesson planning in the second

interview question about their use of online resources and whether they believe the resources are useful.

Narissa, a 38-year-old, White, female student described her lesson planning process involving many components including the use of online resources:

> Okay, well usually I look at the children's interest, umm, what they're interested in the class and then I- we have a, we have a template that we use at my center, but I go through the materials in our classroom and kind of go off of that. And then when it comes to- like the arts and crafts, I do use Pinterest, teachers pay teacher, I- I do use the Internet quite a bit, umm to do lesson plans so yeah. So between the children's interest and I guess you know, the Internet and stuff on that self, I end up doing- is that the question- is that is that what you're asking?

Emily who is a 44-year-old, Black, female student also described using the Internet to research for elements that match her lesson plan's topic:

> First, finding out what the children are interested in, and then researching just different topics that are- like if they're interested in trucks, so different things that could go along with trucks or you know, transportation or the parts of a truck, different jobs that are associated with trucks. And I'm thinking about this for Fours, right. And so then I would research online, to see... I'm just do a Google search because you can find pretty much anything on Google and just see different... like I said, different things that would go with that theme and just put it into my lesson plan...

All students described the first step of lesson planning is to think about the children's interests. Relatedly, one student (Monica, a 38-year-old, Latino, female) mentioned her lesson plan process included children's interests but described a different next step: "Umm well, like the first couple

of things I do is I try to see what the kids wanna do, what they're interested in. I look at NC Foundations and then I usually try to find something of interest." In responding to the next interview question about whether online resources are used and useful for lesson planning, Monica stated that she does use online resources: "Umm, I think they're useful. Umm. And I do use it. Cause of- I mean I've also used like YouTube and Pinterest and from time to time I've asked on social media like about ideas and things too."

The subtheme of this then describes student's perception of online resources for lesson planning. Overall, students' perception of using online resources is positive and the subtheme reflected specific positive aspects that students mentioned throughout their interview.

Subtheme: Online Resources: A Great Tool

Students described that online resources for lesson planning have allowed multiple teaching methods, as well as diverse range of resources, activities, and is overall convenient. Online resources were described as helping with creativity and forming part or the whole lesson plan. Narissa expressed highly favoring online resources and mentioned throughout her interview, the benefits of using them:

> I think that they help a lot because so many people, like other teachers, umm, you know, they- they've already did it and so it just makes things so much easier, because I feel like sometimes that we almost get like a writer's block and you run out of ideas. So it's like- I I've been in there 17 years [in workplace], I feel like if I didn't have that, I feel like I don't think that I could come up with as much creative things to do that would interest the- the children you know, as much I feel like it would be the same stuff and then when I go on there [Internet], I'm finding all kinds of fun stuff to do with them. So it's just- I think it's great and I really do, I think it's great.

When asking Narissa a follow-up question about what she thought about using the full lesson plans online, she stated:

> I mean, yeah, because I've actually got some ideas of- okay for like, ideas to help them [children], you know, learn to write their names or to learn fun ways of letters and new songs and stuff like that so umm new games to play outside, you know, to get their gross motor skills going and stuff. So yeah, I think that all around it's really good to do the whole, you know, lesson plan, yeah.

Additionally, Narissa specifically mentioned online resources help with alleviating burnout because "it just makes it [lesson planning] easier."

Similar to Narissa, Emily described online resources as convenient when discussing the benefits:

> For one, it is very convenient. It is super, super convenient. Before, when you had to look through books, it was very time consuming and you had to look through, go through multiple avenues to find the information that you wanted. Now you can sit down and you, like I said, you can Google or you can just type in exactly what you want and that information or some of that information is going to pop up and it's up to you what you do with it and what you pull from it. So that that's the main, it is very convenient, and we need convenience.

Additionally, Monica explained that online resources allowed exploration of multiple ways of teaching:

> I think there's a lot of resources. Umm. Umm, it's one of the pros you can see umm a lot of information or different ways to do something, like one, umm, subject like you can learn how to teach it in different ways.

Guidance Provided by Teaching Training Faculty is Needed

All students mentioned the importance of needing guidance from faculty in response to questions about evaluating and examining online resources. Narissa recommended that teacher preparation programs incorporated the evaluation of online resources:

To somehow just, I guess, to incorporate it in the [program], you know, at some point And, and you know, just show the- you know, the students, I guess. Yeah, I guess, I guess we are the students... umm resources, like give them activities to do with them and you know maybe, maybe you know, because I didn't know any of the cons, so maybe you know, do a research project on it. Let's find out if it's good. Let's find out if it's bad. Like do something because I think everybody uses them. I think even the professors use them, so let's find out if they're good or bad. I'm like, let's do something.

In responding to why is it important for teacher preparation programs to teach about online resources to help with lesson planning, Narissa stated:

I think because a lot of teachers or a lot of new, new teachers- like it took me a long time before I ever- I had to find out about it on my own through other teachers, you know, and it made a world of difference. It made a lot of things a lot easier and I feel like my classroom at that time, umm it made it so much easier for them [the children] to learn because they were more interested, I was more interested.

Emily also mentioned that it is especially important for new teachers to have background information on identifying valid online resources:

I think it's important, especially I mean it's important for everybody, but I think it's especially important for, umm, individuals that are fresh in the field. I feel like they kind of need that background information or that help, you know, with resources so that they

can evaluate what is right and what is wrong or what is good or, or appropriate or

inappropriate for children.

Emily specifically stated towards the end of the interview "older teachers" need teacher

preparation programs to guide looking for online resources for convenience:

And then the older teachers, they need that convenience of going in there and making

things easy for us. Umm you know, because there are a lot of teachers that are older than

me and are not as computer savvy as I am.

Monica also described that guidance is important regarding online resource because:

... I mean, we wanna make sure that what they're [faculty] teaching is what we need to

know when we're in the classroom. Uh, and that it, umm, like it's backed up by research.

Like its stuff that it's real, just not something that is made up.

From this second theme, two subthemes were preservice teachers' confidence and age

appropriateness of online resources for lesson planning. Confidence falls under this second theme

because it reflects that these students vary in the way they feel about evaluating online resources

which is connected to the importance of preparing all students to feel that they are ready for the

workforce. The issues mentioned by the preservice teachers related to the second theme because

they described what could be discussed in their teacher preparation program.

Subtheme: Confidence in Evaluating Online Resources

This subtheme reflected students reported having a general confidence in evaluating

online resources for lesson planning themselves. Both Narissa and Emily described feeling highly

confident with being able to evaluate online resources for lesson planning: "I mean, yeah, I feel

pretty confident, yeah" (Narissa). "I, I feel fairly confident because I've been in the field for a

while, so I feel fairly confident in evaluating the validity of them, the structure of them, you

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know, I- I feel very confident" (Emily). Narissa continued later on in the interview describing how her use of online resources has boosted her confidence the more she used them:

> I felt more confident, so I think our confidence goes way up, because you know, there's somebody else that's done this, you know, and I don't know, I just- like I said before, I think when, when you try to do lesson planning without, with specifically not using like any online resources, it just- it makes it harder and I feel like you're gonna do the same thing over and over and over eventually.

On the other hand, Monica described that her confidence varies on the content being taught: "Me... it just depends, yeah, I guess like what we're trying to teach."

Subtheme: Online Resources Might Not be Age Appropriate

Guidance comes in part that preservice teachers need assistance to evaluate what could not be age-appropriate or misleading online. Appropriateness was brought up for all students in their responses about the disadvantages and what support/information they need from their program's faculty.

Narissa had a difficult time thinking about the cons of using online resources in lesson planning and said "it's all good", however, she mentioned: "Umm, I guess. Well... Maybe, maybe it's, maybe it's not- all those, all those activities might not be appropriate for your children. It might not... I don't know. That's a hard question." Meanwhile, Emily described that not researching online resources carefully could lead to misinformation:

> So if you are a newer teacher or a teacher who doesn't wanna put too much time into researching, then I think that you can be misled or I mean you can... First, you can copy something online that is totally incorrect or inappropriate, or you can be misled if you don't do the research to figure out if it's appropriate or not.

Later on, Emily was asked if she would like to say anything about the use of online resources for lesson planning and described how teachers need guidance:

> Like I said, I mean just going from the young teacher to the older teacher, we all need something. And so I feel like- like I said, the younger teachers, they need that guidance to... to know what's appropriate or, you know, not appropriate for their age group.

Monica had a similar response and added that an online resource could be chosen on cuteness rather than age appropriateness:

> I guess like depending on the teacher, maybe like do something that is not age appropriate, that is just, you know, like somebody may pick it because it's just cute or umm, they like it, but it's not age appropriate.

Next, the themes that emerged from the faculty interviews will be presented.

Faculty Interview Results

The faculty interview focused on 1) whether they allowed the use of online resources, 2) how they evaluated online resources (if they used them), and 3) what they recommended for preservice teachers when using online resources for lesson planning. From the inductive thematic analysis, two main themes emerged that reflected broadly the patterns found across the interview responses from faculty. The first main theme is that the goal is to create a high-quality lesson plan. This first theme has five subthemes: 1) A guiding framework is needed, 2) lesson plans must be observation-based and maintain DAP, 3) online resources must be modified, 4) online resources are a starting point, and 5) faculty differ in the way they allow online resources for lesson planning. The second main theme is preservice teachers have different experiences. One subtheme emerged, preservice teachers are engaging with online resources or will in the future.

The Goal is to Create a High-Quality Lesson Plan

Based on the responses of the faculty to the interview questions the main theme emerged by the emphasis made on creating a high-quality lesson plan that fits with the children in the classroom.

One faculty, Dr. Bryan discussed that evaluating online resources for lesson planning is crucial for students to learn since there are many online resources available:

> I just know there's just so much variety out there. Uh, that evaluation piece is so important to know how to be able to recognize what would be a high quality -because we in terms of putting them in placements, we try to make sure the placements are high quality because we want our students to be observing and learning high quality practices. And so I think that's what's tricky is in the online space, especially if we're not pointing them to certain things... they may be, you know, observing or picking up a lot of things that wouldn't be high quality.

Dr. Bryan mentioned that online resources for lesson planning need to reflect high quality practices. Similarly, Dr. Keyli recommended that students should have a strong skillset of evaluating resources in general to create a good lesson plan:

> I think they should have a solid foundation of what is developmentally appropriate practice and have a solid understanding of why we're planning the way we're planning. So using observations using children's developmental levels, understanding the goals of where they are to go next, and so once they become sort of savvy and critical consumers of just lesson planning in general, then I think they can transfer some of those skills to online resources or printed resources, or, you know, things that other coworkers have passed along to them. So that notion of "can I be a critical consumer and filter

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through my knowledge base regardless of where that information comes from" would be part of the goal that I would have for our students.

The next subthemes described faculty's perceptions regarding this overall goal.

Subtheme: A Guiding Framework is Needed

All faculty discussed the importance of helping students identify valid, helpful online resources. For example, Dr. Janice explained:

Yes, I think it is critical for students to learn to identify online resources that are indeed accurate and appropriate. There are a lot of online. -There, there is a lot of information online that's accessible that isn't appropriate, and I think helping students learn to evaluate for themselves and identify the ones that are appropriate from the ones that certainly are not, is an important lesson for us to teach. It's a skill that's important to instill.

Five faculty described that it is increasingly important to guide students due to the increasing number of online resources available. Dr. Frank stated:

I think it's extremely important that we help students identify all that information technology. It's rampant out there and I think that it's very important that we do that because there are so many sites out there that are not credible, that have misinformation and it's very easy for students to get misinformation about things. So that's why citing a source or anything in your lesson plan, where do you get these materials? And you're encouraged to use technology in every single lesson plan in one form or another. That's an Ed TPA guideline that they utilize some form of technology. So they have to have better citations for that information. Umm, but it is extremely important that they're using good resources. For example, I might refer a student to the early childhood, I forgot-

early childhood assistance program that does have good resources. Or, uh, anything from NAEYC- NAEYC or the early childhood inclusion site. So that's where I'll tell them. Or I frequently have them go to, Uh, there's a great site for children's special needs and inclusion to go to those sites to get resources to help as opposed to just something that I'm not familiar on because there are a lot of sites that, let's say, teachers put up that, okay, I do this, that and the next thing that may not be in the best interest of children or credible and that's why I say having a good citation is paramount and should be included in every lesson plan.

Relatedly, Dr. Keyli said:

I do think it would be good, especially now to start doing this in a more systematic way and probably more intentionally because of artificial intelligence and because of websites that are popping up that allow students to generate lessons that may not be linked to the specific child. I think it's probably increasingly important that we do focus on this in the, you know, more specific way. My fear is that with ChatGPT and other AI sort of technologies is that they may use those to develop plans that are not really connected back to the children.

Subtheme: Lesson Plans Must Be Observation-Based and Maintain DAP

Another important component stated by five faculty is the importance of lesson plans being based on the observation of the children and that align with the children's development. In describing whether online resources are allowed Dr. Isaac said:

So that's a really good question because our philosophy is observation-based. So we really [do] observation-based planning. So we really discourage students from using online resources unless it is a supplement to what, you know what they're doing, so we

really encourage them to base their planning on observations of the children and have it evolve and develop from the children's interests and their strengths.

In describing the disadvantages of using online resources for lesson planning, Dr. Janice provided questions/statements that should be thought about relating to observation-based lesson plans:

It's [online resources] more a cookie cutter and removes the intentional teaching bent from how we should be interacting with our children. It also removes the... In someone taking the initiative to get to know each child's assets, what are their personal assets? What are their cultural and family assets? What assets are there in the community that they might explore? You know, one child might live in a neighborhood where they could go to museums and parks and another one might not have that experience and that knowledge base. I just think it provides the opportunity to ensure that those personal things are being included that make every child a celebrated part of a classroom and every family, a celebrated part of a classroom.

Dr. Frank did not explicitly mention that lesson plans must be observation based, however, described how online resources could be used help support specific children's development:

And since we know that all children learn differently, umm, using technology, especially from some of our exceptional learners, might be a better way to develop a skill as opposed to other materials. So if you have a strong visual learner, it might be important to have additional things available. So yeah, with children, they exceptionalities, technology is probably more important and using augmentative communication systems and things like that. So that's one- I think any technology, specifically assistive technology, is very important and we encourage students to think about that in their lesson planning.

Subtheme: Online Resources Must Be Modified

Modification of online resources to include in lesson plans were mentioned by half of the faculty. Dr. Bryan recommended to preservice teachers to look at online resources and see how it aligns with a standard to think about how it relates to the children's development, interests, and needs:

> So I think they could really use something like Foundations to evaluate whether it's consistent with the things we're talking about in class in terms of like what you're wanting, you know, wanting a lesson to be to be effective and engaging. And then I think also that step of really thinking about how appropriate it is to the specific children and being able to articulate that and be able to talk about how you would make modifications.

Dr. Lissette mentioned that lesson plans must fit the specific children in the classroom and when discussing the disadvantages of using online resources for lesson planning, she described that not modifying an online resource does not work:

> I think that you would take... so, you'd find something on the Internet that said this is a great activity for four-year-olds, but those four-year-olds you know live in a different area. They have access to different resources, they have different backgrounds, and you try to take that entire lesson and just put it with your group of children without modifying it, without thinking about the children in your classroom. I think you're just gonna have activities that don't really work, and children aren't engaged. So I think it's thinking that the answers are on the Internet. I think the ideas might be there. I think some explanations might be there, but I don't think the full lesson plan is there for individual groups of children.

Dr. Isaac explained it is important to help students identify valid online resources to modify them: "You can use an idea from an online resource but recognizing that that idea needs to be modified to fit the needs of your children."

Subtheme: Online Resources Can Be Used as Starting Point

Four faculty expressed that online resources are used as a tool in beginning the lesson planning process or a way to start thinking about ideas to include in the lesson plan. In describing the evaluation of online resources, Dr. Bryan stated:

> So personally I think there could be an appropriate use, umm, as a starting point, or even as a learning tool to be able to evaluate different lesson plans that are generated or that are available online and so they could be a good learning tool like to have discussions around them or they could be a starting point. But I think in my mind that they're kind of limited to those uses versus able to fully replace the student developing their own lesson plan.

Dr. Keyli also mentioned online resources could be used to obtain new ideas:

> I think it can be a wonderful way to generate new ideas, so sometimes we get stuck. We have done, you know, as teachers, something the same every year, we kind of fall back on what's common or what we're comfortable with. What are, well, the ways that we've written lesson plans in the past or maybe the materials that we have in classrooms and so I love the idea of idea generation, creativity, the application of, you know, new materials, things that have just come out in the field.

Subtheme: Faculty Differ in the Way They Allow Online Resources for Lesson Planning

Faculty varied in their interviews about the way they perceived online resources. Some were more allowing of students using online resources than others. Particularly, Dr. Frank allowed the

use of online resources for lesson planning as long as there was a citation within the lesson plan assignment: "…they're absolutely free to use what they can to develop a lesson plan as long as um, they're not plagiarizing at all, and they say that they are using this information from whatever."

Additionally, Dr. Frank described the benefits of using online resources in lesson planning allows availability to support a variety of children's learning methods:

> So I think it's very important and helps students see that online resources can support your thinking, not take over your thinking, but support and augment your thinking. And since we know that all children learn differently, umm, using technology, especially from some of our exceptional learners, might be a better way to develop a skill as opposed to other materials. So if you have a strong visual learner, it might be important to have additional things available. So yeah, with children, they exceptionalities, technology is probably more important and using augmentative communication systems and things like that.

Dr. Keyli also allowed the use of online resources for lesson planning:

> In the past, I certainly have allowed students to use online resources. I haven't prohibited it. Because we emphasize planning around children's interests and based on their observations, we want students to come from the perspective of the child and their needs and sort of developmental level. I when we talk about lesson planning and generating ideas, I have said to students in the past, you know, you can look in books or you can look online for ideas. But don't start there. Start with the child they're interests and their developmental level, and then if you need to, you know, look for new ideas or find

something new online, that's fine. I just don't want them to start there and then work

backwards to the child.

On the other hand, Dr. Janice preferred students not using online resources: "…I do not allow a

great deal of support of online resources." For recommendations about online resources for

lesson planning, Dr. Janice said:

That's a tough one because I would tell them not to go there. I think that any online

resource that provides information to make whatever you teach multimodal and multi-

level and interdisciplinary stands to be a more solid, safe resource than ones that do not

provide the capability for those three things.

Similarly, Dr. Bryan and Dr. Isaac mentioned that students were not allowed or discouraged to

use online resources apart from what is provided in the courses for lesson planning. "…so they

have not been able to use outside resources, umm, for lesson planning beyond course materials

(Dr. Bryan)."

… we really discourage students from using online resources unless it as a supplement to

what, you know what they're doing, so we really encourage them to base their planning

on observations of the children and have it evolve and develop from the children's

interests and their strengths (Dr. Isaac).

Lastly, Dr. Lissette has described that there was no explicit rule for whether the students can or

cannot use online resources for lesson planning:

So I don't have anything in my syllabus that explicitly says you cannot, but I also don't

have anything in the syllabus that explicitly supports it. So my guess is that it happens,

but they also are giving guidance around lesson planning being observation-based. So

they need to know the children in the classroom to develop that lesson plan.

Preservice Teachers Have Different Experiences

Three faculty mentioned preservice teachers have varied experiences that influences the way they plan or use online resources. Preservice teachers may vary in how much field experiences they had, whether they have background knowledge on children's developmental levels, and how they could approach online resources. Dr. Lissette described that preservice teachers may come with different background knowledge for certain age groups:

> …so our programs birth through kindergarten, so birth through age five and I think students have different experiences with different groups. So they might know what really great activities for three year olds, but then they don't for an infant or five year old.

Additionally, Dr. Isaac mentioned that students might not have evaluated the online resources before using them:

> I think it's important because I think that there is, um, there's a lot of danger in students not understanding that a lesson plan taking from the web might not be developmentally appropriate. It might not be a good match for these particular children, so I guess yes, it is extremely important that they understand that.

In talking about benefits of using online resources for lesson planning, Dr. Frank also described how students could use online resources to help them use materials for specific age groups:

> It also there are some good video examples of how to implement the use of toys or any other materials that you can get online and those can help a student who may- let's say is not familiar with infant and toddler development, but is working with infant and toddlers. So how to implement using a lesson, using those materials, so that's really good.

Subtheme: Preservice Teachers are Engaging With Online Resources or Will in the Future

Faculty described how teachers are currently using or looking at online resources and probably will continue to in the future as more resources become available. Dr. Lissette explained that it is important for teacher preparation programs to help students identify valid, helpful online resources and mentioned that students are possibly already using online resources: "It probably is, because students are probably doing it and it would be helpful if they did it with guidance…" Dr. Keyli also mentioned the possible pressure of using online resources more in the future and the importance of having discussions with students now to prepare them for the workforce. I think as technology continues to improve, as there's more and more sort of pressure

> perhaps on the field to make use of online resources, I think if we can be more intentional
> about how we're teaching about it and the ways that we're giving assignments to students
> to practice and we're giving them feedback on the ways that they are using it. Then that
> will improve you know our own pedagogy and the ways that we're helping students to
> leave our programs and be successful in the field.

Towards the end of their interview, Dr. Bryan added that students might be using online resources provided by the teachers in their placement:

> I think just that, I'll just speak for myself as an instructor, I have more to you know, learn
> about in terms of what's out there and also getting a sense for what our teachers in the
> classroom are currently using. So in the settings that are students are in, I don't even
> know if we have a handle on how often those teachers might be using specific online
> resources. They might be recommending them to the students. They might say "this is a
> great website that I use" and so you know, is that true and is that a tool that they're
> passing on to our students that could be helpful? Should we be thinking about

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encouraging them to know about that tool and have it in their toolbox? But for the class not use it and instead go through the practice of developing something from the ground up. But yeah, and I guess one other thing is I think already... often students are not necessarily generating a brand new idea for a lesson plan. It may be something they've done in the past, something they've seen in another teacher do, something they read about, something they found as an idea on Instagram. Like, I don't think we really know how often that is already happening.

Lastly, the themes that emerged from the in-service teacher interview are presented.

In-service Teacher Interview Results

This study explored in-service ECE teachers' lesson planning process, their use of online resources for lesson planning, their evaluation of online resources, and their recommendations for preservice teachers for using online resources for lesson planning. From the interview questions, the inductive thematic analysis resulted in two main themes emerging directly from the data. The first main theme is in-service teachers' ways of forming a lesson plan. This main theme includes two subthemes: "Online resources are useful for lesson planning" and "In-service teachers varied consideration for including online resources in their lesson plans". The second main theme is that lesson plans must meet the children's needs and interests. One subtheme fell under this second theme: Online resources should be modified.

In-service Teachers' Ways of Developing Lesson Plans

The interviews reflected that in-service teachers have different experiences with forming a lesson plan. Coming from the same childcare center, the teachers described that weekly lesson plans are required by their workplace. Ms. Lucy, a 23-year-old, Guatemalan-American, female who teaches children 15 months to 22 months, described:

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So I do create our own lesson plans based off of my job, we are required to do a weekly

lesson plan and then we are required to do a monthly-like newsletter where we

incorporate new skills that we be working on with the children for that month. So yes,

more detailed lesson plans are required weekly and that are based on social, cognitive and

motor skills for the children.

From doing these weekly lesson plans, three teachers described basing their lesson plans on a

theme. Ms. Angie, a 43-year-old, White, female who teaches PreK said: "Usually I go with a

theme each week and so then I try to find activities that are gonna go along with whatever that

theme is, whether it be letters or some other fun idea that we have planned." Similarly, Ms. Judy

(58-year-old, White, female) who teaches toddlers ages three to five (currently four-year-olds)

described using a thematic and emerging approach in her lesson planning process:

Okay, so the first process is assessing the students and finding the goals for each

individual student, and I start with that as a base. I use their interest and also thematic and

calendar events to kind of draw everything in. Um I generally start with books on the

topic and then from literature, I go out into science, math, social, emotional, everything. I

generally start with one theme using books and then from there I network out into the rest

of what's needed.

Ms. Lucy described a different approach, specifically that her lesson plan process begins with

looking what is available in the classroom:

My process of making lesson plans is basically, what I have in the room and what

resources I have available to me. So a lot of our things, I think about motor skills as one

of the main things in our room, so I looked around to see what toys, what displays and

pictures that we have around the room to see what fits in the children's development.

Teachers varied in the first steps of their lesson planning process as shown above. However, in forming the lesson plan all teachers have stated that they used online resources. Ms. Celena, a 35-year-old, Asian, female who teaches ages zero to five stated: "We will use a lot of online resources because the activities should not be repeated oftenly, and we can, uh, like display the same idea in different kinds. So we will use most of the online resources."

Subtheme: Online Resources are Useful for Lesson Planning

Relatedly, teachers explained that online resources support their process of lesson planning due to the availability on the Internet. Ms. Evelyn, a 27-year-old, Latina, female who teaches toddler ages two to three mentioned that the benefits of using online resources for lesson planning is:

> Sometimes it's just more easier and simpler. I feel like sometimes we have a lot going on in our heads and a lot of planning to do that when we do online resources, it comes very- it gives really good tips, so I'm able to just look at something and if I like it use that as well.

Similarly, Ms. Grace (53-year-old, White, female, teaches PreK) described that online resources for lesson planning have:

> A lot of benefit, I mean, there's so much out there. I mean, it's like the possibilities are endless. This, I just feel like you could go on a website and find something quicker than looking through a book, but I know books are good as well. It's just a lot more... I can't think- it's more convenient, you know, to go online and find different resources.

Additionally, Ms. Judy described:

> There definitely are [benefits], because it's a- it's a broader format where you get other ideas in. I have an extensive library of teaching books that I usually use, but it's- it's one dimensional if you- if you understand what I mean, it's nice to look to see what other

people are doing and then adjusting it to your needs because you can pull ideas from all different places and I do. So I use umm Education.com for instance and Brightwheel and things like that to get ideas and I usually don't use their lesson plans per se, I just bits and pieces to put mine together [inaudible].

Subtheme: In-service Teachers Varied in Consideration for Including Online Resources in their Lesson Plans

Considerations included the outside work, time in the schedule, implementation of the online resource, if the teacher would enjoy doing the activities found online, attractiveness of the online resource, whether administrative staff approved of the resource, and whether it is a credible resource. Ms. Judy explained a disadvantage for using online resources in lesson planning is that this work is done outside of the classroom:

And also having to have Internet and whatever I mean, we can't- I can't work in the classroom because we cannot work with, you know, computer in the classroom. So I have to do all my research on my own time and get- gather all those materials and bring them with me anyways as- as it is now my workplace.

Related to time, Ms. Angie explained throughout her interview that including an online resource depends on if there is time in the schedule to do that activity, if it could be implemented with a group of children, and if it is enjoyable:

Is it something that is age-appropriate, fun that the- the children find fun and is it something that we can get done in the time that we have available in our schedule …A lot of the things can be found that are online are things that are a lot of adult-centered where the teacher or the adult is doing most of the activity, or it's something where it's easy to do with one child. So the drawback is trying to find something that a group can do, and

that the children can actually participate in, and that the children find fun, because one child doing an activity might be-find it – some activity fun, but not necessarily a group of children together all trying to do that activity …Read through the whole activity that you find, umm and see if you feel that it's something that makes sense. Do you feel that it would be age appropriate for whatever age group you're teaching, and would it be something that you would enjoy teaching? And can you explain it and how to do it so that the children can do it and can learn from it and enjoy it.

Ms. Celena described that it is important to consider that the online resource is attractive for children:

Umm so... it- as it is a childcare, it comes to think, to consider like, [if] it will be helpful for the kids, easy to understand, and very easy to make, and it should be attractive with different colors. Yeah, those things we mostly see if we do an activity with the craft or if we want to learn new colors or new things, then we will easily make use of online resources which are... which are attractive more.

Ms. Celena also mentioned that online resources might need to be shown to the administrative staff before including them:

So before using online resources, we need to take care like is [inaudible] or they things, are they harmful for the kids or if you want to display [something], is that we need to take some permissions from the school as well to display those resources? So we need to 1st display them to the management and then if they are okay with that material, then we can go ahead with the kids as well.

Furthermore, teachers described to include an online resource into a lesson plan, it should be credible. Ms. Lucy recommended that when preservice teachers use online resources to make sure it is from a "trusted source":

Like I said, really study what you're searching up online. Uh, a lot of things will be very broad. And what they say, uh, just double check your research. Double check with other people.. you show them the website that you're looking on like, hey, what do you think of this? Uhh and then just, one doesn't work out, take a different one. It's gonna take a couple of tries and but there's stuff out there that we're really help. Just do your homework and do your work in really looking into the websites and information you have.

Additionally, Ms. Evelyn recommended:

Umm definitely just check your resources. Check and see if it's credible and see that there's actually... like proof that their lesson- The lesson that they're doing is actually successful, like it does fit for kids. It's not just someone who has never been in a classroom before or has no idea how it goes. I think just definitely check your research, like the resources and see if it's actual- use- Useful, it's not just someone who's just inventing things.

Lesson Plans Must Meet Children's Needs and Interests

The second main theme emerged from all teachers mentioning how they examine the children's needs and interests for their particular classroom. When describing the online resource evaluation process, Ms. Lucy stated:

Umm, So what I mainly look for is the age group because if you just type in children, that's a very broad area. And so for my group specifically, mine are still considered

toddlers of course and so there's somethings they can and can't do. So while I'm doing research, I really make sure that it emphasizes toddlers. Umm say art or toddler activities, that way I know it's something that they can do on their own or something that I can work with them on.

Relatedly, Ms. Judy said:

Well, generally I look for something that's straightforward, age appropriate and goal appropriate. Umm, I look for, uh, my specific needs for the students and if I cannot find something online, I use other resources and apps to- to make what I need, like trace maker and things like that.

In giving recommendations to preservice teachers, Ms. Celena shared how it is important to know the children in the classroom first:

I can suggest them uhh initially, to go ahead with the known things or the easy things which they can do and then move to the tough things later. When they get to understand the kids more, with more time then you will know get to know what type of things they like or what are the things they know and then you can create the lesson plan after getting to know them after certain time. Like initially I, what I have faced this in the first month, I couldn't understand what they know and what are they up to. But after two months, then I came to know that they are now all the colors and things. So I thought maybe the other things which they don't know, I can introduce those things and make them familiar with those things also.

Subtheme: Online Resources Should Be Modified

In relation to the second main theme, this subtheme describes how online resources for lesson planning are modified to fit teacher or children's needs. In answering the interview question

about if teachers modify an online resource activity and/or lesson plan, all teachers responded that they do. According to Ms. Celena, modifications are based on the children's age group:

> Yeah, most of them we do, because it varies from age group to age group, right? So if I go for to 0 to 2 years old, then they may not understand octopus, they may understand a similar animal like cow or dog or something like that.

Ms. Grace explained that it depends if modifications are made to the online resource activities to remain on the classroom schedule:

> Sometimes, depending, you know, cause of the way our schedule falls, it might be modified, you know, because we only have a certain time to do this. You know, as far as in the morning, like morning snack, bathroom, children coming in and we have children come in all different times in the morning and we do rotations, as far as our, you know, our schedule, umm, but after we do our rotations, we do our art activity. We have 30 minutes to do art and that's after we do our learning like Lindsay does the writing, I do the counting and the numbers. Umm and I kind of piggyback off her, you know, because she's already got all the lesson plans done. But umm, sometimes I do have to modify just for time, uh timing purposes to stay on schedule.

At the end of the interview, Ms. Angie expressed her final thoughts about the topic:

> I guess my biggest thing is to look, look and learn and see, but don't always think that you have to do exactly what's there. Like I said, I take sometimes a couple of different ideas and mash them together and come up with my own idea. And it turns out, sometimes even better than the -one of the original ideas. So don't be afraid to use online resources, but also use it with your imagination.

CHAPTER VI: DISCUSSION

This exploratory study provided insight from a variety of perspectives about the use of online resources for lesson planning. From the results, this discussion section will first discuss major findings for each individual group of participants in order of the aims that were set at the beginning of this study. Next, similarities and differences from the qualitative data across the groups are discussed. Lastly, the strengths, limitations, and concluding thoughts will be presented. Throughout this section the future directions will be discussed within groups of participants and parts of the neo-ecological theory and the PPCT model will be referred to in understanding findings.

Aim for Preservice Teachers

Preservice teachers completed a survey and were interviewed about their use of online resources for lesson planning, whether they felt they could evaluate developmentally appropriate online resources available for lesson planning, what supports they needed in evaluating online resources, and their perception of future use of online resources for lesson planning.

Use of Online Resources for Lesson Planning

Based on the results, most preservice teacher reported using online resources for lesson planning. The online resources mentioned in the survey varied, but over half of the preservice teachers used Pinterest and Teachers Pay Teachers. These findings are similar to previous studies about online resources in education and the use of these resources can be linked to the growing number of online resources available (Moore & Chae, 2007; Sawyer & Myers, 2018; Shelton & Archambault, 2022). In general, Teacher Pay Teachers reported that over seven million educators used their resources and 85% of users are in the United States teaching Pre-K-12 (IXL Learning, 2024). This number does not account for all ECE preservice teachers or in-service

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teachers or lesson planning resources specifically, however, this site including many others could be used. Using the neo-ecological framework (Navarro & Tudge, 2023), this study demonstrated that preservice teachers are interacting with both the virtual and physical environments because they are using online resources in their lesson planning process which will later be implemented into the classroom. For example, a preservice teacher chose an activity found on Pinterest, examined and then modified the activity for the children when implementing it.

Evaluation of Online Resources

The evaluation of online resources was defined as the process of identifying valid, helpful, and developmentally appropriate online resources. Preservice teachers' survey responses indicated high levels of confidence in evaluating online resources for lesson planning. Using the neo-ecological theory, confidence might be related to person characteristics in which preservice teachers' individual perspectives about their ability to evaluate online resources could be due to their own prior professional knowledge about lesson planning or the specific content of the online resources. Since students are currently enrolled in a teacher preparation program and are developing their professional skills in lesson planning, it could be that evaluating online resources aligns with the development and evaluation of a lesson plan in general. However, due to the lack of research about what the evaluation process should be in terms of forming a lesson plan, further research is needed. Furthermore, it is important for research to be done on online resources for lesson planning because evidence-based research could guide potential use and examination of certain online resources. As O'Sullivan and Ring (2021) mentioned in their article about furthering the philosophical and research-based perspectives, it is important that what ECE educators are using for curriculums and teaching practices is backed up by research.

Supports Needed in Evaluation of Online Resources

Although students felt confident in evaluating online resources, results from the survey and interview found that most preservice teachers believe that support and guidance is important and needed in evaluating online resources for lesson planning. Wang et al., (2018) stated that it is important for faculty and teachers in the practicum or workplace of the student to guide and demonstrate how to use technology in the educational settings. This idea of guidance could be applied to the use of online resources for lesson planning. Over half of the students that took the survey described that they needed support in evaluating online resources for lesson planning yet reporting high levels of confidence. This difference in students who believed that they need support versus not needing support could be due to outside factors. Related to the neo-ecological theory, it might be possible for students to have different supports already in place in different physical environment and virtual environment or both, such as their practicum placements and/or on social media. Another possibility for these mixed results in support could be person characteristics, for example, a student might not need support because they might use online resources for ideas only rather than including them directly into the lesson plan. Those that did identify support needed in the survey varied in their responses of the type of support, however, the main point was to have guidance in choosing online resources. Similarly, interview responses reflected that guidance from the teacher preparation program is needed in distinguishing developmentally appropriate online resources from those that are not. There still needs to be further research on the types of supports needed for evaluating online resources, research has emphasized that lesson planning should support a preservice teacher's professional development in making choices based on context and background knowledge (Ruznyak and Walton, 2011).

Future research could assess rubrics used to evaluate resources and the implementation of lesson planning and analyze both child and teacher learning.

Future Use of Online Resources

Lastly, survey results showed that all students are likely to use online resources for lesson planning in the future. Although this study was not longitudinal, Navarro and Tudge's (2023) concepts of micro, meso, and macrotime can explain the possible use of online resources in the future. For microtime, this study showed that most students are currently engaging with online resources for lesson planning. Students reporting the possible continue use of online resources could influence the quality of lesson planning over time could fit into mesotime. Lastly, using the concept of macrotime, societal changes and the increased use of technology could lead into more preservice teachers using online resources for lesson planning. Interviews did not ask about preservice teachers' future use of online resources for lesson planning, however, future use can be possible based on the current use of online resources and implementation of AI technology. In the participants process of lesson planning, all reported using online resources in part of their lesson planning, whether it was to obtain activities and/or ideas. Importantly, as there are more online resources available, conducting more research on this topic is necessary to ensure that preservice teachers are using and evaluating online resources that are supporting the specific needs and interests of children in their classrooms.

Aim for Faculty

Faculty in an ECE teacher preparation program were interviewed about whether they allowed the use of online resources, their evaluation of online resources for lesson planning, and what they recommended for preservice teachers when using online resources for lesson planning.

Allowing Students' Use of Online Resources for Lesson Planning

Faculty responses varied in describing whether they allowed students to use online resources for lesson planning. Faculty ranged from discouraging to allowing students to use online resources which depended on many factors such as, how students are using online resources, if the resource was cited, if it was used as an idea that supported the lesson plan, and if the online resource supported the specific children's needs and interests based on observations. However, despite the variation in allowing online resources, overall faculty emphasized that online resources are not a replacement of students' thinking for developing a lesson plan which aligns with their philosophy of lesson planning from observations. The variation of these findings could be explained by person characteristics of faculty, in which the expectations of students' might differ based on faculty's experiences with students' using online resources in their lesson plans and prior knowledge of online resources. Since there has not been solid empirical evidence in early childhood education about online resources for lesson planning faculty might also be wary about students' engagement with these resources.

Evaluation of Online Resources

Some faculty described that evaluating online resources is something that often is not done for lesson planning. While some other faculty described their process of evaluating online resources starts with looking at where the student obtained their online resource(s). Evaluation of online resources aligned with the program's philosophy of being observation-based. The faculty emphasized that online resources used in lesson planning must meet the needs and learning goals of the children in the classroom. One faculty mentioned that what is evaluated is not the online resources used in the lesson plan but the lesson plan in general. This aligns with the emphasis that online resources are incorporated into lesson plans rather than replace a lesson plan.

Similarly, Shelton and Archambault (2022) stated the importance in faculty having discussions and encouraging students to evaluate the online resources used in lesson plans and where they come from. Faculty stated the importance of having more discussion and these discussions could be related to the increasing interactions between the virtual environment and physical environment. According to Navarro and Tudge (2023), proximal processes can be both in the physical microsystem and virtual microsystem at the same time which can influence development. Faculty evaluating online resources could be possible in the future and their involvement of consistent interactions between the two microsystems can foster professional development in lesson planning for preservice teachers.

Recommendations

Lastly, faculty had similar responses into the recommendations that they had for preservice teachers. Faculty recommended that preservice teachers use online resources as a supporting tool, that the online resources used aligns with developmentally appropriate practices of meeting children's developmental needs, interests, and background, that online resources must be modified to engage all children in the classroom. As mentioned before faculty have a strong philosophy on observation-based planning and similarly, Zaragoza et al. (2024) described that research has supported that observations must be made in addition to connecting prior professional knowledge when developing lesson plans. It is from this perspective that observations are crucial to informing what will happen in the classroom environment. Another important recommendation mentioned that encompasses what an online resource should be is what one faculty described as "multimodal and multi-level and interdisciplinary". In other words, online resources for lesson planning should promote different teaching and learning methods/strategies, target many levels of development, and incorporate knowledge in a variety of

ways. Related to multimodal, Grieshaber et al. (2021) explained that technology can be incorporated into the concept of multimodal learning and be used as a tool and/or another method for children to learn. Related to the neo-ecological theory, these recommendations might be examined by preservice teachers who target the different domains of specific children's development while having the bidirectional interactions with online resources.

Aim for In-service Teachers

Current in-service ECE teachers were interviewed about their lesson planning process, their use of online resources for lesson planning, their evaluation of online resources, and their recommendations for preservice teachers for using online resources for lesson planning.

Lesson Planning Process

In-service teachers from a private childcare center were interviewed and this study found that lesson planning depended on teacher preferences, children characteristics and the context of the classroom. While describing their lesson planning process, teachers were reflective of what the goals were for their particular classroom, whether it was to continue a weekly themed lesson, focus on certain skills for children, and/or what activities would engage the children's learning and development. Similar to other participants, in-service teachers' proximal processes, person characteristics, context, and time influenced their lesson planning. Understanding the lesson planning process of current in-service teachers could be helpful in informing the types of lesson planning methods, however, future research could seek further insight into the detailed process of lesson planning in different ECE contexts.

Use of Online Resources

Based on interview responses, all teachers have used online resources for their lesson plans. Teachers mentioned using online resources such as Pinterest, Preschool Express, Google,

Brightwheel, Education.com, and Tracemaker. Some teachers described that using online resources helped with obtaining new ideas to include their lesson plan and that modifications to the online resources were necessary. Teachers mentioned many considerations about including online resources into their lesson plans. Similar to Rintakorpi's (2016) article that looked at documentation in early childhood education, the author stated it is important to document because it allows teachers to reflect on teaching practices and content, and findings reveal that issues such as, time, practice documentation, and other issues can make it difficult to focus on applying one's teaching knowledge into the classroom. Most of the considerations of using online resources emphasized by teachers revolved around the practicality of including the online resource in the classroom and for the children. Relatedly, the proximal processes influenced the way teachers interact with online resources and how they evaluate their context in making decisions of including online resources into their lesson plans.

Evaluation

In making decisions about choosing online resources, teachers were evaluating online resources based on what they believed to be important for the children and their teaching. Teachers mentioned the quality of the online resource must meet the developmental needs and interests of the children in the classroom. Therefore, online resources were based on their credibility and if they fit in the teacher's classroom. This study found that online resources were mainly evaluated as ideas and a guidance for lesson planning rather than just adding the online resources without thinking through the outcome. According to Ramirez et al. (2017), when teachers used an information and communication technology (ICT) resource for searching for activities, results show that adding the ICT resource to planning did not change the way teachers planned. Similar to the study described above, teachers in the current study appeared to use

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online resource as a support to their planning process rather than a replacement. Related to the neo-ecological theory, teachers were interacting with the online resources in the virtual microsystem rather than just being passive consumers of what was on the Internet.

Recommendations

Reflecting on the recommendations to preservice teachers, in-service teachers offered insight to using online resources with cautions. Recommendations included to think thorough where the online resource is coming from, if the resource is credible, if including the resource will fit the children's needs, interests and goals, can the online resource be modified, will the online resource fit into the time given to implement it, will all children be able to participate, and lastly, if the online resource will be enjoyable to teach. Teachers provided valuable insight in which that the responses to the interview questions they provided were centered on the children and themselves as teachers who ensured that all planning could promote classroom organization and opportunities to learn. Again, teachers' daily interactions with children influenced the way they interact with online resources for lesson planning. Future studies should examine further the use of online resources in lesson plans in an ECE setting. Specifically, future studies should focus on evaluating the lesson plans made or compare the inclusion of online resources in lesson plans with not using resources.

Perspectives: Similarities and Differences

As perspectives slightly differ even within each participant group, these differences demonstrate the complexity of understanding all the reasons connected with using, evaluating, and recommending online resources for lesson planning. Throughout the discussion, there seems to be overlap and contrast between the interview responses of each group of participants as well. These similarities and differences will be briefly discussed to acknowledge that experiences in

interactions are not linear and that all groups of participants may be influenced by each other. This influence is not direct, because the in-service teachers have not interacted directly with the faculty or preservice teachers; however, in-service teacher responses might provide initial insight into what ECE teachers are currently modelling in the classroom. Furthermore, the assumptions made in comparing and explaining the possible similarities and differences in these groups should be considered with an understanding that the focus of this study was to explore perspectives not to compare perspectives.

Faculty and preservice teachers have possibly had direct interactions with each other as they are both part of the same program. Since faculty's philosophy on planning is taught to the preservice teachers, there were a lot of similarities in responses about the evaluation of online resources for lesson planning. Both mentioned the importance of knowing the children before planning, that standards are important to use in developing lesson plans, and that online resources need to be credible sources. One notable difference was that preservice teachers appeared to be more opened about using online resources compared to faculty. This could be due to that preservice teachers have engaged more with online resources and other person characteristics such as, age and years of working directly with children. Additionally, faculty seemed to be thinking more cautious about using online resources. This wariness could possibly be explained because faculty have prior expertise on lesson planning and in what is expected for preservice teachers based on experience and empirical evidence.

Although faculty and in-service teachers in the current study did not have direct interactions with each other, years of experience in the ECE field might have led to some similarities found in responses to the interviews. Similarities included thinking about online resources as a starting point for new ideas, being cautious about online resources credibility, and

emphasizing children's needs and interests. For differences, in-service teachers seemed possibly more open to online resources, and they considered their own preferences. This could be explained in that there are differences in person characteristics between teachers and faculty. Even though faculty could have experiences in the classroom, in-service teachers are currently in the ECE workforce directly working with children and therefore, their use of online resources for lesson planning might be more current.

As mentioned before, in-service teachers and preservice teachers appeared to be more open about using online resources for lesson planning. This similarity could potentially be explained because preservice teachers and in-service teachers are having direct experiences in a classroom setting. A difference between the two groups was that in-service teachers explained further that online resources can be used to obtain materials needed for supporting their lessons. This might account for that in-service teachers have to think about more of the facilitation about what happens in their own classroom while preservice teachers are still in the process of becoming a lead teacher.

Overall, all participants emphasized the importance of credibility in evaluating online resources and the importance of developing lesson plans that are child centered. As mentioned previously, this part of the paper was for the purpose to discuss the main findings and perspective similarities and differences between groups to explore possible explanations of the findings. Due to the lack of literature regarding early childhood lesson planning and use of online resources, there is still much to explore, and assumptions need to be further examined.

Strengths and Limitations

This study had many strengths and limitations. A limitation of this study is the sample size was small and data was obtained from only one university and childcare center which leads

to results that are not generalizable. Future studies are needed with a larger sample and representative of different ECE settings (teacher preparation programs, childcare centers, schools etc.). Next steps could be to examine the differences in centers who include a standard curriculum and centers that have no set curriculum. The next limitation is that this study did not account for potential biases since the survey and interview items were self-reported. Perceptions were the focus of this study, however, there is uncertainty whether some questions reflected actual practices. For example, in-service teachers might not have included or omitted parts of their lesson planning process during the interview. Third, this study was cross-sectional, and does not account for participants potential changes in responses to the items across time. Lastly, this study is limited in the amount of data collected from the interviews since there were a mix of closed-ended and open-ended questions. Future studies could include more open-ended interview questions for participants to expand and elaborate their perspectives and experiences. Despite the limitations, this study did had strengths and adds to the literature of this topic. The first strength is that this study investigated three perspectives whereas other studies on this topic explored one or two perspectives. The second strength is that this study specifically focused on lesson planning, as much literature has focused on investigating general perspectives online resources or technology in the classroom. Lastly, a strength of this study provides initial recommendations into evaluating and searching for online resources to use in lesson planning.

Implications for Practice

Although research is limited, this study provided some insight into the use of online resources for lesson planning. Implications for practice will be discussed. First, faculty could start discussing with students about what are the types of resources available on the Internet. Next, faculty could discuss the possible advantages and disadvantages of the use of online

resources in lesson planning with students in their courses. Lastly, faculty could discuss the credibility of the online resources. To examine credibility faculty, students, or teachers could: Look at the ending of the website such as, ".edu" or ".org", observe if the activity focuses on infants or toddlers (ECE ages), if it aligns with standards and program guidelines, if the materials are available and appropriate, and lastly, if the resource fits the children. It might be helpful to include coursework on finding online resources, evaluating online resources based on the alignment with standards for the children in their classrooms, how the resource can be modified to fit their children's needs and interests, and to think about what the learning goals are of including the online resource.

Conclusion

The goal of this study was to provide insight from preservice teachers, faculty, and in-service teachers about the use of online resources for lesson planning in early childhood education. In terms of understanding the perceptions about online resources used in ECE settings, this study adds to the limited literature and can be seen as a beginning step into investigating further about this topic. With the continued increasing use of the Internet, understanding what is being used as an educational resource for instructional preparation to ensure that children's needs are being met is important. Having discussion and evaluating online resources for lesson planning in ECE courses is needed to ensure that what students are using or will use for their lesson plans is aligned with the standards and contexts that they will be in when they enter the workforce.

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APPENDIX A: SURVEY ITEMS

Please answer the following questions regarding your information and background.

Please enter your age (in years).

What is your race and/or ethnicity?

What is your gender?

What year are you in the program?

How many years of experience do you have working with children in a childcare setting?

Do you currently work in a childcare setting apart from the practicum for school?

Do you have a preferred age group of children you would like to work with? (If yes, what age group would you prefer working with).

o   Yes _____

o   No

Do you plan to teach after you graduate?

o   Yes

o   No

The purpose of this study is to provide insight on the use and perceptions regarding online resources in lesson planning. An online resource is defined as information found on the Internet that can be used and/or modified. For this study, online resources are meant to refer to information used in lesson plans, such as activities, and/or full lesson plans that come from a search engine, social media application, and/or websites, but that are separate from course materials within a teacher preparation program.

Do you use online resources (besides what is provided from your program/course) when completing an assignment regarding lesson plans?

o   Yes

o   No

What online resources have you used to write lesson plans (for example, ChatGPT, AI, Pinterest, Facebook, Teachers pay teachers etc.)? Please write the name of the online resource(s) below.

Rate how often you feel confident in evaluating whether online resources are developmentally appropriate for including in your lesson plans? (Evaluating is the process of identifying valid, helpful, and developmentally appropriate online resources).

o   Never

o   Rarely

o   Sometimes

o   Often

o   Always

Rate how important it is for teacher preparation programs to help students identify valid, helpful, and developmentally appropriate online resources for lesson planning?

o   Not at all important

o   Slightly important

o   Moderately important

o   Very important

o   Extremely important

Do you think you would need support from your program into evaluating online resources?

o   Yes

o   No

Please explain what supports you would need from your program in evaluating online

resources for lesson planning.

Rate how likely in the future you think you will use online resources for developing

lesson plans?

o   Extremely unlikely

o   Somewhat unlikely

o   Neither likely nor unlikely

o   Somewhat likely

o   Extremely likely

Are you willing to participate in a brief follow-up interview around this topic?

o   Yes

o   No

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APPENDIX B: PRESERVICE TEACHER INTERVIEW SCRIPT

Principal Investigator:

Hello _____, how are you doing?

Thank you for your time today and I greatly appreciate your participation in this study. Just a reminder that the information you provide today will be kept confidential and only the research team will be able to view your interview to analyze the data. Since this interview is being done through Microsoft Teams, you will be audio and video recorded, please be mindful if you are in a public place that what you say may be heard by others. At any time during this interview, you may decline to answer a question and/or end the interview. Refusing to answer or ending the interview early will not affect your relationship to UNCG. At the end of the interview you will be asked to provide your mailing address that will be used to send your gift card.

Demographics

Starting off with background information about yourself, can you please state your age, race and/or ethnicity, and gender.

What year are you in the program?

How many years of experience do you have working with children in a childcare setting?

Do you currently work in a childcare setting apart from the practicum for school?

Do you have a preferred age group of children you would like to work with? (If yes, what age group would you prefer working with).

Do you plan to teach after you graduate?

Online Resources for Lesson Planning

The purpose of this study is to provide insight on the use and perceptions regarding online resources in lesson planning. An online resource is defined as information found on the

Internet that can be used and/or modified. For this study, online resources are meant to refer to information used in lesson plans, such as activities, and/or full lesson plans that come from a search engine, social media application, and/or websites, but that are separate from course materials within a teacher preparation program.

What is your process for completing a lesson plan assignment or developing a lesson plan?

Have you used online resources for lesson planning? Describe how you find online resources useful (or not) in the lesson planning process?

How confident do you feel in being able to evaluate online resources for your lesson planning?

Why is it important, if at all, for teacher preparation programs to help students identify valid, helpful, and developmentally appropriate online resources for lesson planning? ("Valid" meaning aligned with content learned in class).

What do you think are the benefits of using online resources in lesson planning?

What do you think are the drawbacks or disadvantages of using online resources in lesson planning?

What would you recommend to teacher preparation programs regarding using online resources for lesson planning? What information do you need for searching and using online resources for lesson planning?

Is there anything else you would like to say about the use of online resources for lesson planning?

To receive your gift card for this interview, please provide your mailing address.

Do you have any questions for me?

Thank you for your time and have a good day!

APPENDIX C: FACULTY INTERVIEW SCRIPT

Principal Investigator:

Hello _____, how are you doing?

Thank you for your time today and I greatly appreciate your participation in this study. Just a reminder that the information you provide today will be kept confidential and only the research team will be able to view your interview to analyze the data. Since this interview is being done through Microsoft Teams, you will be audio and video recorded, please be mindful if you are in a public place that what you say may be heard by others. At any time during this interview, you may decline to answer a question and/or end the interview. Refusing to answer or ending the interview early will not affect your relationship to UNCG.

Demographics

Starting off with background information about yourself, can you please state your age, race and/or ethnicity, and gender.

How many years have you taught in the early childhood education field? (for clarification: at a college and/or university level).

How many years have you taught in regard to lesson planning in early childhood education? (for clarification: at a college and/or university level).

Online Resources for Lesson Planning

The purpose of this study is to provide insight on the use and perceptions regarding online resources in lesson planning. An online resource is defined as information found on the Internet that can be used and/or modified. For this study, online resources are meant to refer to information used in lesson plans, such as activities, and/or full lesson plans that come from a

search engine, social media application, and/or websites, but that are separate from course materials within a teacher preparation program.

To what extent are students in your course allowed to use online resources beyond course materials for an assignment to develop a lesson plan?

How would you evaluate the appropriateness of the online resources for lesson planning?

Do you provide guidance related to using online resources, what to look for, how to evaluate? (For example, guidance in using specific search terms, what websites to avoid, how to choose a lesson plan online etc).

Do you think it is important for teacher preparation programs to help students identify valid, helpful online resources? Please explain why or why not. ("Valid" meaning aligned with content learned in class).

What do you think are the benefits of using online resources in lesson planning?

What do you think are the drawbacks or disadvantages of using online resources in lesson planning?

What recommendations do you have for preservice teachers to evaluate online resources?

Is there anything else you would like to say about the use of online resources in lesson planning?

Lastly, do you have any questions for me?

Thank you for your time and have a good day!

APPENDIX D: IN-SERVICE TEACHER INTERVIEW SCRIPT

Principal Investigator:

Hello _____, how are you doing?

Thank you for your time today and I greatly appreciate your participation in this study. Just a reminder that the information you provide today will be kept confidential and only the research team will be able to view your interview to analyze the data. Since this interview is being done through Teams, you will be audio and video recorded, please be mindful if you are in a public place that what you say may be heard by others. At any time during this interview, you may decline to answer a question and/or end the interview. Refusing to answer or ending the interview early will not affect your relationship to UNCG and your employment. At the end of the interview, you will be asked to provide your mailing address that will be used to send your gift card.

Demographics

Starting off with background information about yourself, can you please state your age, race and/or ethnicity, and gender.

How many years have you taught in your current workplace?

How many years of experience do you have teaching in early childhood education?

What age group do you currently teach at your workplace?

Online Resources for Lesson Planning

The purpose of this study is to provide insight on the use and perceptions regarding online resources in lesson planning. An online resource is defined as information found on the Internet that can be used and/or modified. For this study, online resources are meant to refer to

information used in lesson plans, such as activities, and/or full lesson plans that come from a search engine, social media application, and/or websites.

Do you develop your own lesson plans? If so, how often and is it required by your workplace? -If not, how are classroom activities planned?

(If #1 answered no, go to question #4)

What is your process in planning and choosing activities for developing lesson plans?

Do you use online resources in developing your lesson plan? If so,

How do you evaluate online resources when you search for activities or lesson plans? What is the evaluation process like, what do you consider? (What do you consider is important when looking for ideas or activities from online resources to include in your lesson plans?)

Do you usually modify the activities/lesson plans that you find online?

What do you think are the benefits of using online resources in lesson planning?

What do you think are the drawbacks or disadvantages of using online resources in lesson planning?

What recommendations do you have for preservice teachers (students who are currently in school to become teachers) to evaluate online resources?

Is there anything else you would like to say about the use of online resources in lesson planning?

To receive your gift card for this interview, please provide your mailing address.

Do you have any questions for me?

Thank you for your time and have a good day!