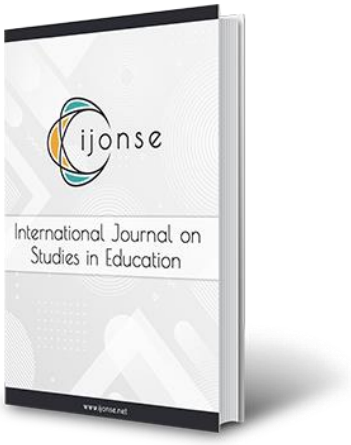

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Navigating Transition: Developing an Instructional Coaching Rubric and UDL-Infused Training for Seasoned Reading and Dyslexia Teachers in Online Education

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Abstract

The central focus of this study is the development of an instructional coaching rubric and the delineation of training activities. The research aims to address the nuanced challenges faced by educators during this transformative process. The primary objective is to craft a comprehensive instructional coaching rubric and training regimen seamlessly integrating Universal Design for Learning (UDL) principals. This endeavor unfolds under the mentorship of an instructional coach, unraveling layers of intricate processes, best practices, and emergent patterns characterizing the shift to online teaching. By dissecting these elements, the study endeavors to provide valuable insights into the development of effective coaching strategies tailored to unique demands of online learning environments. As the educational landscape undergoes a digital transformation, understanding the intricacies of this transition becomes paramount. This research contributes not only to the practical knowledge of instructional coaching but also addresses the critical need for adapting teaching methodologies for educators specializing in reading and dyslexia. Through uncovering the dynamics of successful online education, this study aspires to establish a foundation for future endeavors instructional coaching and teaching training. Ultimately, it aims to foster an environment where seasoned educators can thrive amidst the evolving educational landscape, ensuring their continued efficacy and impact in the digital era.

Introduction

Over the past 30 years, teaching practices have undergone significant transformations, largely influenced by technological advancements, a shift towards student-centered learning, and a commitment to inclusive education. The integration of technology, such as computers and online platforms, has revolutionized the way lessons are delivered. A move towards student-centered and collaborative learning environments has replaced traditional teacher-centric approaches, emphasizing personalized learning and project-based methods. Inclusive education has become a priority, accommodating diverse learning styles and backgrounds. Changes in assessment practices, a focus on global perspectives, ongoing professional development for teachers, and an emphasis on social and emotional learning are also notable shifts. Additionally, educational policies have evolved, emphasizing cultural sensitivity and diversity, and there is a greater recognition of the importance of involving parents and communities

in the educational process. These changes collectively reflect a dynamic response to societal, pedagogical, and technological advancements, aiming to create more effective, inclusive, and globally minded educational practices. As the educational landscape undergoes a digital transformation, understanding the intricacies of this transition becomes paramount. By uncovering the dynamics of successful online education, this study strives to provide a foundation for future instructional coaching and teacher training endeavors, fostering an environment where seasoned professors can thrive in the evolving educational landscape.

The evolution of educational practices reflects dynamic changes and advancements in education over time. Historically, education predominantly occurred in traditional brick-and-mortar classrooms with face-to-face interactions between teachers and students. This model prevailed for many years and laid the foundation for formal education. In the early stages, educational materials were primarily in print form, including textbooks and handwritten lecture notes, with a focus on teacher-led instruction through lectures supported by written resources. The formal institutionalization of education became widespread with the establishment of schools, colleges, and universities, incorporating standardized curricula and examinations as integral components of educational systems. The industrial age further propelled the need for standardized education to meet the demands of a rapidly changing workforce, leading to the establishment of mass education systems designed to prepare individuals for specific roles in industrialized societies.

The late 20th century marked a significant turning point with the integration of technology into education. Computers, multimedia, and the internet began enhancing instructional methods and facilitating access to information. Subsequently, there was a noticeable shift towards student-centered learning in the late 20th and early 21st centuries, with pedagogical practices evolving to engage students actively, foster critical thinking, and promote independent learning. The advent of the internet paved the way for online learning platforms and courses, leading to the popularity of online learning, an educational approach that utilizes the internet and digital technologies to facilitate instruction and interaction between students and educators. Contemporary educational practices now emphasize personalized learning experiences, utilizing adaptive learning technologies, data analytics, and tailored curricula to cater to individual student needs. Moreover, education has become more globalized, with increased international collaboration, exchange programs, and a focus on recognizing diverse cultural perspectives to prepare students for a globalized workforce.

This growing prominence of online teaching is influenced by a myriad of factors that have evolved, shaping the educational landscape. One key driver is the accessibility and flexibility offered by online learning, dismantling geographical barriers, and providing learners with the ability to access educational resources from virtually anywhere. The flexibility inherent in online courses allows students to harmonize learning with other commitments, promoting a more adaptable and personalized experience.

Technological advancements play a pivotal role in the rise of online teaching, transforming the traditional educational paradigm. Leveraging various technological tools such as multimedia resources, virtual classrooms, and collaborative platforms, online teaching creates interactive and engaging learning environments. Furthermore, online teaching caters to diverse learning styles by offering a spectrum of instructional methods, allowing students

to engage with materials through videos, interactive simulations, written content, and discussions.

Online teaching also addresses the evolving needs of learners in the modern era by facilitating lifelong learning opportunities. Individuals can continuously acquire new skills and knowledge throughout their lives, contributing to professional development and adaptability in a rapidly changing job market. Additionally, the cost-efficiency associated with online teaching, including reduced commuting and accommodation expenses, enhances accessibility to education, particularly for those facing financial constraints. Recent global events, such as the COVID-19 pandemic, have underscored the importance of online teaching in ensuring educational continuity during crises, emphasizing the need for institutions to be well-prepared to adapt to unforeseen challenges. Additionally, online teaching fosters global collaboration and cultural exchange, connecting students and educators across the globe, thereby broadening perspectives, and enriching the overall learning experience. Finally, the use of data analytics in online teaching platforms allows for the tracking of student progress and the customization of learning paths based on individual strengths and weaknesses, contributing to more effective and efficient learning outcomes. Collectively, these factors position online teaching as a critical component of modern education, capable of addressing diverse educational needs on a global scale. The evolution of educational practices reflects a continual response to societal changes, technological advancements, and a deeper understanding of effective pedagogy. Today's educational landscape is characterized by a diverse range of approaches, methodologies, and technologies aimed at providing meaningful and relevant learning experiences.

This study investigates the multifacete journey of two seasoned reading teachers as they navigate the complex transition from teaching traditional face-to-face courses to developing and teaching a fully online asychronous graduate-level program. Over a period of two years, the researcher employed a descriptive research study approach, guided by observations from an instructional designer/coach collaborating with two professors transitioning from on-ground to online teaching. The central focus is on the creation of an instructional coaching rubric and the delineation of course design activities, with a keen emphasis on the nuanced challenges faced by professors in the realm of reading and dyslexia. The study is driven by a primary objective: to develop a comprehensive instructional coaching rubric and course design training regimen that seamlessly incorporates Universal Design for Learning (UDL) principles. Under the mentorship of an instructional coach, the research unfolds layers of intricate instructional processes, best practices, and emergent patterns that characterize the transition to online teaching. By dissecting these elements, the study aims to offer valuable insights into developing effective coaching strategies tailored to the unique demands of online learning environments.

Research Questions

1. How do seasoned reading professors adapt to the digital landscape during the transition from traditional in-person instruction to an online asynchronous graduate-level program, and how do they contribute to the development of online courses for a new program?
2. How does the presence of an instructional coach influence the adaptation and contributions of seasoned professors during the transition to online teaching?
3. What patterns and nuances emerge in the processes of seasoned professors as they navigate the complexities

of online teaching for reading? What are the key components of an effective instructional coaching rubric for supporting reading professors in transitioning to online teaching?

Literature Review

In the rapidly evolving landscape of education, the widespread integration of online learning presents an unparalleled opportunity to reach a larger and more diverse student population. However, a critical inquiry arises: does the course design of online learning effectively facilitate the success of students with diverse learning needs? This question underscores the need to explore the intersection of inclusive course design and the potential of online education to cater to learners' variability and backgrounds. Furthermore, as the demand for diverse teaching practices grows, how are college instructors expected to acquire the necessary skills and knowledge to create inclusive learning environments in the online realm? This literature review aims to delve into these questions, examining the available professional development resources for college instructors and evaluating their adequacy in meeting the evolving demands of diverse teaching practices. Additionally, we will explore whether the beliefs, attitudes, and teaching approaches of college instructors align with the success of a diverse population of online students. Finally, an exploration into the extent to which online course designs are developed to meet the unique needs of a diverse online student population will shed light on the comprehensive landscape of inclusive online education.

In response to the growing diversity of the student body, it is imperative to embrace flexible teaching and learning methodologies to enhance student success in higher education. Contemporary postsecondary classrooms accommodate more nontraditional students, including older individuals, those returning to education, first-generation college students, and those with disabilities. Many of these students may not be adequately prepared for or lack the necessary support for the academic challenges of college (McKee & Tew, 2013). The demographic of students with disabilities is expanding within higher education, with their numbers more than tripled over the past three decades (National Center for Education Statistics, 2023). In response to this trend, numerous institutions across the country have enacted policies to guarantee the accessibility of course materials and technologies for individuals with disabilities. The online learning environment presents an opportunity to address the diverse student body while reaching some who may not be able to attend in-person classes for many reasons. Will the course design of online learning enable the success of students with diverse learning needs, even though it can reach more students?

Numerous faculty members lack awareness of diverse teaching methods that can enhance student engagement, often operating in isolation and adhering to conventional higher education practices that prioritize professional autonomy over collaboration (Brancato, 2003). A notable example is the prevalent reliance on lecture-style delivery and static readings, with limited creative use of technology to incorporate interactive elements in both traditional and online classrooms. In higher education, faculty are typically hired for their disciplinary expertise, with minimal training in pedagogy and andragogy (Brancato, 2003; McKee & Tew, 2013; Mundy et al., 2012). While tenure-track faculty may have greater institutional support and resources compared to part-time faculty, they often face challenges in dedicating time to their own professional development due to balancing research,

service demands, and teaching responsibilities (Kezar & Maxey, 2014). How are college instructors expected to learn these diverse teaching practices?

Numerous research studies have underscored the potential economic advantages of establishing online professional development initiatives for higher education faculty. However, they also acknowledge the limited progress in the implementation of such programs across universities (Cook & Steinert, 2013; Rienties, Brouwer, & Lygo-Baker, 2013). A recent literature review on online learning for faculty development highlighted that, despite indications that online programs yield knowledge and skill learning outcomes comparable to traditional in-person training, the evidence base is insufficient and requires further exploration (Cook & Steinert, 2013). Are the professional development resources available and do they meet the needs of the faculty?

Faced with diverse student learning needs and faculty struggling to adapt to new instructional practices, it is imperative to expand the availability of ongoing professional development focusing on evidence-based teaching strategies. Well-designed and effectively implemented faculty development programs contribute to the vitality, collaboration, and productivity of the campus community (Brancato, 2003). Consequently, institutions should seek ways to offer professional development opportunities that are easily accessible to both full- and part-time faculty, enhancing their awareness and application of effective teaching practices. Do college instructors' beliefs, attitudes, and teaching approaches ensure success of a diverse population of online students?

Educational research underscores the profound impact of educators' teaching beliefs on instructional methods (Donche & Van Petegem, 2011; Kember & Kwan, 2000; Prosser & Trigwell, 1999a). Teacher-centered preferences often lead to strategies like extensive lecturing, while those with student-centered perspectives favor engaging strategies, fostering meaningful activities and reflection, associated with enhanced learning outcomes (Kember & Kwan, 2000; Bonwell & Eison, 1991; Benek-Rivera & Matthews, 2004; Blanchard et al., 2010; Derting & Ebert-May, 2010; Sarason & Banbury, 2004; Watkins, 2005). The correlation between instructors' teaching approaches and students' learning styles has been established (Kember & Gow, 1994; Prosser & Trigwell, 1999b), impacting overall learning quality (Trigwell & Prosser, 1991). Students' approaches, categorized as "deep" or "surface," influence their study strategies and intentions (Prosser & Millar, 1989). A deep approach, seeking understanding and meaning, aligns with instructors employing student-centered strategies that facilitate deeper learning (Prosser & Trigwell, 1999a). Is the online course design developed to meet a diverse population of online students?

Universal Design for Instruction (UDI)

Universal Design for Instruction (UDI) is an educational framework focused on fostering equal access to learning and creating an inclusive environment that caters to students with diverse abilities and backgrounds (Scott & McGuire, 2005; Scott, McGuire, & Embry, 2002). UDI entails the proactive establishment of a welcoming classroom atmosphere, incorporating accessible instructional materials and methods, all while upholding academic standards. UDI, drawing from the principles of universal design initially applied in architecture, adapts them to the classroom setting to embrace student diversity as the standard. While various terms are utilized in

educational literature (e.g., Universal Instructional Design, Universal Design for Learning), in this article, we employ UDI to encompass the core principles shared by each. Essentially, UDI encourages college instructors to employ diverse methods for presenting information (e.g., lecture, graphic organizers, videos), diverse assessment types (e.g., projects, papers, tests), and diverse engagement approaches (e.g., hands-on activities, group discussions) (Center for Applied Special Technology, 2011). Beyond fulfilling legal requirements for accommodating students with disabilities, the use of UDI fosters a comprehensive and inclusive learning atmosphere beneficial to all students. Furthermore, the UDI framework aligns with the rigorous educational standards established by online teaching methodologies (Scott et al., 2017).

Recent studies, conducted by Davies, Schelly, and Spooner (2013) and Schelly, Davies, and Spooner (2011), offer empirical evidence of the positive impact of Universal Design for Instruction (UDI) on student learning when faculty receive professional development in UDI strategies. These findings underscore the potential benefits of UDI training for faculty in enhancing effective teaching. Consequently, institutions stand to gain by offering comprehensive professional development to all faculty members on UDI. Additionally, the online context emerges as a potentially efficient platform for delivering this essential education, considering its accessibility and flexibility.

Why Coaching?

By offering teachers expertise in content-specific instruction, coaches enhance educators' comprehension of standards and curricula, thereby promoting educational reform (Campbell & Malkus, 2013; Coburn & Woulfin, 2012; Lockwood, McCombs, & Marsh, 2010; Matsumura, Garnier, & Spybrook, 2013). Coaches leverage their knowledge of learning communities to facilitate collective learning when collaborating with teams of teachers. This involves identifying learning goals for teachers, intentionally sequencing experiences, and cultivating a positive, productive culture among educators (Borko, Koellner, & Jacobs, 2014). With their specialized knowledge in instruction and content, coaches possess the capability to facilitate substantial educational transformation. Nevertheless, the current framework does not systematically empower coaches to undertake this crucial task. The role of coaches lacks institutionalization, exhibiting variations across states, districts, and even within schools (Deussen et al., 2007; Mangin & Dunsmore, 2015). Furthermore, the systems that support coaches and facilitate the integration of their efforts with other initiatives are inadequately developed.

Regarding professional development (PD), coaches can foster coherence among school goals, teachers' needs, and PD offerings through effective communication. In their unique role as intermediaries, coaches can strategically convey insights about teachers' learning needs to learning institutions (Woulfin & Rigby, 2017). This communication facilitates the creation of high-quality, customized professional learning opportunities that address the specific needs of both individuals and teams of teachers.

What Do We Know about Instructional Coaching?

Aguilar (2013), an individual with over a decade of experience coaching classroom teachers, defines coaching as

a transformative process guiding individuals from their current state to their desired destination. According to Aguilar, successful coaching involves the coach actively engaging and enrolling the teacher, with the teacher's genuine desire playing a crucial role. Once enrolled, the coach assists the teacher in identifying and setting goals for professional development (2011).

Furthermore, coaching offers teachers a tailored approach to professional development that caters to their specific needs. This personalized support becomes crucial in acknowledging the diverse strengths and requirements that each teacher brings to the educational setting. Just as a one-size-fits-all curriculum is inappropriate for students, assuming a single type of professional development suffices for all educators is equally misguided. While workshops may introduce novel concepts, coaching creates a platform for teachers to seamlessly apply their newfound knowledge in their classrooms, facilitated by the guidance of their coach. Gill, Kostiw, and Stone (2010) assert that coaching aligns with essential principles of effective professional learning by integrating evidence-informed strategies and acknowledging the unique context of each teacher's work. Wang's (2017) research highlights that a successful coaching model recognizes and appreciates the expertise and voice of the teacher. To ensure productivity and foster teacher growth through coaching, a collective commitment from all parties involved is essential in embracing the coaching concept.

Coaching Models

Various coaching models offer the potential for successful outcomes, presenting diverse approaches based on differences in objectives, processes, points of focus, and more. The following are two models implemented in school contexts, serving as valuable tools to comprehend the range of coaching approaches. These two were the ones that the coach in this investigation was trained and experienced in using frequently. It is important to note that a coach is not obligated to strictly adhere to a specific model, as flexibility in approach can be advantageous.

Instructional Coaching

Instructional coaching is a collaborative and job-embedded professional development approach that aims to improve teaching practices and enhance student learning outcomes. In instructional coaching, a trained coach works closely with instructors or teachers to provide guidance, feedback, and support in implementing effective instructional strategies. The focus is on individualized, continuous improvement, and the coach helps the instructor or teacher reflect on their teaching practices, set goals, and develop action plans (Knight et al., 2020). Key elements of instructional coaching according to Knight et al. (2020) include:

- Collaboration: Coaches work collaboratively with teachers, building a trusting and supportive relationship.
- Data-informed: The coaching process often involves analyzing student data and classroom observations to identify areas for improvement.
- Reflection: Teachers and coaches engage in reflective conversations about instructional practices, exploring what works well and areas that need adjustment.
- Goal setting: Teachers and coaches set specific, measurable, and achievable goals to guide professional

development.

- Modeling: Coaches may demonstrate effective teaching strategies or co-teach with teachers to provide practical examples.
- Feedback: Coaches provide constructive feedback to help teachers refine their instructional techniques and make positive classroom changes.

Jim Knight, a founding senior partner of the Instructional Coaching Group (ICG), and a research associate at the University of Kansas Center for Research on Learning, has dedicated more than two decades to studying professional learning, effective teaching, and instructional coaching.

Cognitive Coaching

The foundation of the cognitive coaching model is rooted in research demonstrating a positive correlation between increased interaction with coaches and higher student achievement in classrooms (Shidler, 2009). Shidler's comprehensive review of existing research, along with her investigation into early childhood teachers and their coaching experiences, revealed a connection between frequent, close modeling and heightened efficacy levels reported by teachers. This increase in efficacy, in turn, influenced student achievement in the classroom. Coaches employing the cognitive coaching model allocate their time across four key components: providing specific content instruction, demonstrating techniques and instructional practices, observing teacher practices, and engaging in consultative sessions with teachers during non-student hours to enhance reflective practices (Shidler, 2009).

Cognitive Coaching was established in the mid-1980s and continues to build its ideals, premises, and practices to develop teachers and students as self-directed learners capable of coping with and living productively and harmoniously in an ambiguous, technological and global future (Costa & Garmston, 2015). Robert Garmston and Dr. Arthur Costa created Cognitive Coaching, aiming to nurture reflection and empowerment within coaching relationships.

The Cognitive Coaching Techniques employed in our Coaching Conversation serve the following purposes:

- Cultivating trust and respect to facilitate secure discussions (Collaboration, Responsiveness, Equity)
- Encouraging invitational and collegial interactions (Reflective Dialogue, Responsiveness, Inquiry)
- Fostering efficacy and empowerment (Positive Presuppositions, Inquiry)

What Do We Know about Transitioning to Online Teaching?

According to Herman (2012) there has been a notable rise in the prevalence of faculty development in the past decade, marked by a significant increase in the establishment of teaching and learning development units (TLDUs). While TLDUs exhibit variations in organizational structure, staffing, and funding, an upward trend is observed in the creation or expansion of such units across institutions. Despite this growth, faculty members express frustration with the available professional development for online instruction. A substantial 70% of faculty

members consider their institution's support for online instruction to be average or below, and nearly 20% of institutions provide no support for faculty teaching online. Additionally, over one-third of faculty members who have developed or taught an online course report that the process demands considerably more effort than traditional courses (Herman, 2012). In Kuhlenschmidt's (2010) study, four key responsibilities were delineated when effectively incorporating technology into their work. The initial task involves comprehending the attitudes of faculty members toward technology.

The second task revolves around selecting suitable technology for the context. The third task entails leveraging knowledge about clients and objectives to assist faculty members in seamlessly integrating technology into their teaching methods. Lastly, the fourth task revolves around implementing appropriate technology tailored to the diverse programs and goals of faculty development centers. These findings and tasks will help the coach/instructional designer in this study to question the faculty members in the initial conversations to gather data about their attitudes and experience with the technologies used in this specific course design. Kuhlenschmidt (2010) work suggests further that faculty developers need to understand that faculty members encounter four challenges when seamlessly incorporating technology into their teaching methodologies. They must (1) stay updated on instructional content, (2) possess knowledge of instructional design, (3) comprehend the strengths and weaknesses of the technology, and (4) have the perspective required to integrate these three aspects. In this process, faculty developers play a crucial role by offering guidance in the instructional design process and providing knowledge about technology, including the ability to recognize when a particular tool is unlikely to contribute to the faculty member's goals.

Throughout the coaching or consultation process, Kuhlenschmidt (2010) advises the developer to assess the instructor's comfort level and proficiency with technology. Inquiries may include asking about the instructor's previous use of technology and identifying the most complex task accomplished with any technological tool. Specific recommendations should only be provided after clarifying the instructor's learning objectives, student demographics, and approach to technology. If the developer agrees with the instructor's belief that a particular technology is the solution, it could prematurely halt the problem-solving process. Therefore, the developer must understand how and why that specific tool was chosen (Kuhlenschmidt, 2010).

What Professional Development Resources are Available to help with this Transition to Online Teaching?

Despite the growing number of teaching centers aiming to tackle the escalating complexities of higher education teaching through faculty development programs (FDPs), and the emergence of a scholarship of faculty development (Eggins & Macdonald, 2003), there is a notable scarcity of research examining the actual impact of these programs. Kember's (1997) elucidative model of learning and teaching elucidates the interconnectedness between faculty perceptions of teaching and student learning outcomes through a set of interrelated and mediating constructs. Additionally, a teacher's conceptions of teaching and approach to teaching may be influenced by factors such as curriculum design, as well as departmental and institutional pressures (Kember & Kwan, 2000).

The institution where this research is taking place offers the following (1) institutionally supported self-teaching

opportunities, (2) online designers for a collaborative course design, (3) workshops, (4) online training, and (5) a Zoom Help Desk. Considering these available resources, the program director asked for the instructional coach/online designer to co-develop these courses and coach two professors through the process of designing asynchronous online graduate-level courses for this two-year program. The director was eager to get started and had an ambitious schedule. The adjunct professor was not so eager, and her schedule was full of many deadlines and tasks that did not align with the ambitious schedule. The institutional influence in this study was the demand to attract more students by having a program fully online and the ambitious schedule of development.

What Tools, Templates, and Rubrics are Readily Available that would align with this Research Study?

In addressing the question of readily available tools, templates, and rubrics aligned with this research study, educators can explore existing online course design frameworks such as Quality Matters or models from organizations like CAST. Additionally, platforms like the Online Learning Consortium (OLC) and California State University offer a range of templates and resources designed to support instructional design in online education. The Universal Design for Learning (UDL) Guidelines and Rubric can serve as a valuable tool to align with inclusive course design principles in the context of this research.

In conclusion, as the landscape of education undergoes rapid transformations, the integration of online learning stands out as a powerful avenue to engage a broader and more diverse student population. The central question posed in this literature review revolves around the effectiveness of online course design in facilitating the success of students with diverse learning needs. The exploration has unveiled a critical need to align inclusive course design with the varied preferences and backgrounds of learners in the online environment. Additionally, the review has probed into the challenges and requirements faced by college instructors in acquiring the essential skills for creating inclusive online learning environments. Evaluating the available professional development resources has been a key focus, shedding light on the evolving demands of diverse teaching practices. Exploring the coaching models available to the participants in this study and how coaching can be an impactful faculty development strategy. Furthermore, an examination of college instructors' beliefs, attitudes, and teaching approaches has been crucial in understanding their impact on the success of a diverse population of online students. Finally, an exploration into the development of online course designs has illuminated the importance of catering to the unique needs of a diverse online student population. This comprehensive review contributes to our understanding of the intricate dynamics surrounding inclusive online education, the faculty who teach these courses, and how to develop the faculty to meet the challenges of today's learners. This literature review serves as a springboard for the researcher to prepare for the document analysis and the coach's training materials to prepare, implement, and evaluate the study.

Research Design

The research design for this descriptive study centers around the development of a comprehensive instructional coaching rubric and training regimen that seamlessly integrates Universal Design for Learning (UDL) principles. Under the mentorship of an experienced instructional coach, this endeavor unfolds as a systematic exploration of

the intricate processes, best practices, and emergent patterns characterizing the transformative shift to online teaching. The study employs a qualitative approach, utilizing methods such as in-depth interviews, document analysis, and direct observations to capture the nuanced insights of instructional coaches and educators navigating the dynamic landscape of online education. By carefully documenting and analyzing these experiences, the research aims to distill key components for a robust coaching rubric and an effective training program that fosters the application of UDL principles in the evolving realm of digital pedagogy. The research design is crafted to provide a rich, context-specific understanding of the challenges and opportunities inherent in instructional coaching within the online teaching environment.

Method

Participants

Roles of Participants: Two former master-level Reading Specialists in K-12 school settings and who are serving as university faculty; one is an adjunct and the other is a full professor. Both are experts in the field of reading and dyslexia. We refer to the first participant as Professor F. a pseudonym to protect their identity. Professor F is a full-time professor and program lead for the graduate reading program. The other participant will be referred to as Professor A, who is an adjunct professor who is currently teaching in the graduate reading program. Professor F and Professor A are a duo creating a series of online courses for a new program that can reach a national and worldwide audience with a new certification in dyslexia. Both professors have decades of experience as reading specialists in K-12 settings and as university professors teaching teachers how to become reading specialists and/or educators who want to know more about the science of reading.

The instructional coach is also an instructor at this university who has K-12 reading specialist experience, experience designing and building online courses, and collaborating and coaching K-12 teachers and university professors on integrating digital pedagogies and online teaching and design. This trio of participants would be instrumental in not only creating a series of online courses for a new dyslexia program they would be ideal in crafting and piloting the instructional coaching rubric that would guide the process.

Variables

In the described study focused on crafting a comprehensive instructional coaching rubric and training regimen integrating Universal Design for Learning (UDL) principles in the context of online teaching, several variables can be identified. In this study, we look at different types of variables.

Dependent Variables

- Effectiveness of Instructional Coaching: Measured through feedback from educators, assessing how coaching impacts their online teaching.
- Application of UDL Principles: Examined through observations to see how educators use UDL principles in online teaching.

Independent Variables

- Comprehensive Coaching Rubric: Creating and using a rubric to assess various aspects of online teaching during coaching.
- Training Regimen: Designing and delivering a training program to equip coaches with UDL integration skills.

Control Variables

- Educator Experience: Considering how educators' prior online teaching experience might influence their response to coaching and UDL integration.
- Technology Access: Making sure the study considers differences in educators' access to technology.

Moderating Variables

- Institutional Support*:* Investigating how support from educational institutions influences educators and coaches in terms of resources, professional development, and policies related to online teaching and UDL integration.

Coaching Mentorship Quality

- Exploring the impact of mentorship provided to instructional coaches: Considering factors like experience and guidance in navigating the challenges of online teaching.

These variables help us understand the complex dynamics in developing and implementing an instructional coaching rubric and training program that effectively integrates UDL principles into online teaching. The study aims to assess the relationships among these variables to create a robust coaching framework for enhancing online instructional practices.

Data Collection

Procedure

An instructional coach plays a crucial role in supporting faculty as they navigate the complexities of online course design. The instructional coach met weekly with each professor separately as they designed a separate course in the new dyslexia program. Here are the steps the instructional coach took to assist in the online course design process with Professor A and F:

1. Needs Assessment: Collaborate with educators to identify the specific needs and goals for their online course.

Conduct a thorough needs assessment to understand the context, student demographics, and learning objectives.

2. Set Clear Objectives: Work with educators to define clear and measurable learning objectives. Align objectives with the curriculum, educational standards, and the unique characteristics of online learning.
3. Provide Professional Development: Offer targeted professional development sessions on effective online teaching strategies. Focus on technology integration, online pedagogy, and the use of digital tools.
4. Assist in Planning: Collaborate with educators to outline the structure and organization of the online course. Help plan the sequencing of content, modules, and assessments.
5. Select Appropriate Tools: Support educators in choosing suitable technology tools and learning management systems (LMS) for the course. Guide how to effectively integrate these tools into the instructional design.
6. Model Instructional Strategies: Demonstrate effective instructional strategies for online teaching. Model engaging and interactive activities that align with the course objectives.
7. Offer Feedback on Content: Review and provide constructive feedback on instructional materials, ensuring they are suitable for online delivery. Help educators curate or create multimedia content that enhances the learning experience.
8. Design Assessments: Collaborate on the development of formative and summative assessments. Ensure assessments align with learning objectives and are conducive to online assessment methods.
9. Facilitate Collaboration: Encourage collaboration among educators to share best practices and resources for online course design. Facilitate virtual meetings or collaborative platforms for ongoing communication.
10. Address Accessibility and Inclusivity: Guide educators in designing courses that are accessible to diverse learners. Emphasize the importance of inclusive design and provide resources on accessibility features.
11. Support Technological Literacy: Provide training on the effective use of technology tools. Support educators in developing their technological literacy to navigate online platforms and troubleshoot issues.
12. Offer Emotional Support: Recognize the challenges educators may face in transitioning to online teaching. Provide emotional support, encouragement, and a platform for educators to share experiences and solutions.
13. Monitor Implementation: Regularly monitor the implementation of the online course. Provide ongoing support and feedback based on observations and learner engagement data.
14. Collect and Analyze Data: Collect data on the effectiveness of the online course design. Analyze student performance, participation, and feedback to inform continuous improvement.
15. Reflect and Iterate: Facilitate reflection sessions with educators to discuss successes and challenges. Collaborate on iterative improvements for future course design.
16. Encourage a Growth Mindset: Foster a growth mindset among educators, emphasizing continuous learning and adaptation. Celebrate successes and encourage a positive outlook on the evolving landscape of online education.

Document Analysis

The coach systematically and comprehensively examined the instructional design checklists, rubrics, and UDL resources to identify key elements and patterns within the existing materials. Here are the steps that were followed:

Collection Existing Materials: The coach gathered all relevant coaching materials, instructional resources, and any draft versions of the rubric that may already exist. This includes documents, manuals, training modules, rubric prototypes, and any other resources related to instructional coaching in the context of online teaching.
Establish Review Criteria: The coach defined clear criteria for evaluating the materials. This could include alignment with UDL principles, clarity of instructions, relevance to online teaching, and effectiveness in promoting instructional improvement. Having specific criteria helps maintain focus during the review process.

Conduct Initial Scan: The coach performed an initial, broad scan of the materials to get an overview of their content and structure. Note any recurring themes, terminology, or key concepts that stand out. This step provides a preliminary understanding of the existing resources.

Detailed Content Analysis: The coach conducted a more in-depth content analysis. Examination of each text carefully, paying attention to details such as specific coaching strategies, UDL integration guidance, and any indicators of effectiveness. Look for patterns, commonalities, and potential gaps in coverage.

Document Key Elements: The coach systematically documented key elements identified during the review. This included specific coaching techniques, recommended UDL practices, and any themes that emerged consistently across different resources. Categorization of the elements for clarity was noted.

Identify Gaps and Redundancies: The coach assessed the materials for any gaps in coverage or redundancies. Note areas where information is lacking or repetitive, as this insight can guide the refinement and consolidation of coaching materials and rubric drafts.

Seek Stakeholder Input: The coach involved Professor F and A in the review process. The coach gathered their perspectives on the strengths and weaknesses of existing materials and considered their feedback in refining the rubric and coaching resources.

Synthesize Findings: The coach summarized the findings from the review, highlighting key elements, patterns, and areas for improvement. This synthesis serves as the foundation for informing the development of a comprehensive coaching rubric and training program.

Iterative Revision: Use of the insights gained from the review to iteratively revise and enhance the coaching materials and rubric drafts. Ensured that the refined versions are aligned with the identified key elements and effectively support the integration of UDL principles in online teaching.

After following these steps, the process of reviewing existing coaching material laid the groundwork for the creation of a robust instructional coaching rubric and training regimen tailored to the specific needs of online educators.

In-depth Interviews and Direct Observations

The researcher conducted in-depth interviews involving one-on-one conversations between the researcher and participants, allowing for an open-ended exploration of experiences, perspectives, and attitudes. The researcher conducted direct observations involving systematically watching and recording participant behavior in natural settings, such as observing instructional coaching sessions and teachers' online teaching practices.

The use of multiple qualitative methods enhances the credibility and validity of the study through triangulation and cross-verifying findings from different sources and methods. In-depth interviews, document analysis, and direct observations collectively provide a holistic understanding by capturing subjective experiences, historical context, and real-time practices.

Data Collection Tools

The tools below were utilized by both the coach and researcher in this study. The data collection methods, involving in-depth interviews and observations, were carried out with planning, execution, and subsequent analysis. The researcher employed handwritten notes for immediate recording of key points during both observations and interviews of the participants:

1. Documents analyzed for this study
2. Document Analysis Form
3. Backward Design Template and Descriptions
4. UDL Implementation Rubric
5. Course Design Checklist
6. Coaching Log
7. Coaching Questions
8. End of Instructional Design Process Coaching Feedback Form

Data Analysis

The systematic process of analyzing data from coaching sessions, logs, in-depth interviews and observations commenced with organizing the data, initially familiarizing oneself with its content and recording initial observation. Subsequently, the process of coding, categorizing the information, and highlighting and organizing recurring patterns. The researcher then engaged in thematic analysis to identify recurring patterns and themes, ensuring consistency across different data sources through triangulation. Considering the context in which coaching sessions and observations occurred and seeking participant validation. The synthesized findings and key insights are outlined in the following section of this report.

Results

Findings from the Document Analysis related to the Development of the Instructional Coaching Rubric

The document analysis revealed a multitude of rubrics employed for online course design, but a limited number focused on integrating Universal Design for Learning (UDL) principles into syllabus construction for college

courses. As the investigation commenced, a noticeable pattern emerged, indicating widespread use of rubrics developed by entities such as Quality Matters, Suny, CAST, or adapted versions thereof in many universities. The goal of the document analysis was not to quantify the number of rubrics available but to identify those essential for the investigation, specifically concentrating on those beneficial for the coach collaborating with the two professors in designing the online program. In instances where a suitable rubric was not found in the public domain, the investigator aimed to construct one tailored to the study's purpose. Once the relevant rubrics were chosen, downloaded, and thoroughly analyzed using the document analysis form, their intended purpose and usability became the primary criteria for adoption in the study (see Table 1). For instance, the specific forms, tools, or rubrics were selected for specific purposes instrumental in guiding the course design and coaching processes. Instead of developing a single rubric for the study, it became clear that adopting an academic coach's playbook was more fitting, aligning with insights gleaned from Jim Knight's (2019) research in the literature review. Crafting the playbook proved beneficial for the coach's continual involvement in departmental coaching, design, development, and course review processes. Furthermore, the playbook stands as a valuable resource for individuals in faculty development roles or those engaged in online instructional support services.

Table 1. Documents Analyzed and Selected for this Study

Pre/Post Assessment Tool	The Quality Course Teaching and Instructional Practice (QCTIP) scorecard.
Pre/Post Assessment Tool	UDL Implementation Rubric-CAST
Program and Course Curriculum, Instruction and Assessment Planning Tool	Backward Design Template and Descriptions
Coaching Forms	Coaching Log and Coaching Questions
Exit Survey Feedback Form of Coach	Electronic Forms Exit Survey for the Coach

The document analysis supported the instructional coaching process of professional learning for the participants in this study (see Table 2), which delineates the various stages and steps integral to the instructional course design process, illustrating how the coach employed data for distinct purposes in guiding participants through the course design process.

Table 2. Document Analysis Data Supported the Instructional Coaching Process

Stage and Steps in the Coaching Process	**Data and Tasks involved**	**Purpose and use of the data**
First Stage Select a Course Big Picture Planning Identify, Prioritize, Pre-Plan	Standards, Big Ideas, CAST UDL Guidelines	The themes found from the data helped the team with priority management of content, assessment, and instruction.
Second Stage Pre-Assess UDL Progression	Coaching Log, 9 UDL Elements, what you teach, how you teach, what requires attention first, appoint roles in course	Data informed what was needed from the coach to support instructors

Pre-Assess Course Outline Gather Data on Instructors (coaching log) knowledge, skills, and attitude for the work ahead	design, deadlines	
Third Stage Implement Changes Assess Outcomes Learning, coaching, creation, and revision of the course.	Review Course Outline and Course Review Form, Committee Reviews and provides feedback and make revisions	Process Flow Coaching Log Coaching questions Data-informed a continuous instruction feedback loop on what instruction was needed at the next meeting.
Fourth Stage Evaluate Outcomes Evaluation, learning, coaching, and revision of the course.	Enrollment of students in the course is completed, and the prototype is implemented. The evaluation process involves assessing what aspects were successful and what were not. Additionally, the instructor's responsibilities in an asynchronous course are considered, focusing on preparation, methods for engagement, effective management, and strategies for sustaining student involvement. The ongoing schedule includes dedicated efforts towards making necessary revisions based on the evaluation outcomes.	This data validation identified the learning objectives achieved by students and pinpointed specific assignments or content areas where they encountered difficulties. These insights were instrumental in informing the team about the necessary adjustments and improvements for the development of the subsequent course and revisions of the current course.
Fifth Stage Post-Assess UDL Progression Post-Assess Course Outline	9 UDL Elements which ones were needed or not applicable for this course, what you teach, how you teach, what requires attention in beginning, middle and end, appoint roles in course design do we continue or modify, deadlines met or extended	This data validation affirmed the accomplishments of the instructors, highlighting specific goals achieved, and assisting in identifying the requirements for the development of the subsequent course.
Sixth Stage Post Assess Coaching Performance Adjust for next cycle of course design	The Coaching Feedback Form furnished feedback for both the coach and participants, offering insights into their collaboration and overall instructional design experience throughout this course cycle.	Provided coach with feedback on strengths, opportunities, modifications, and suggestions for the development of the subsequent course.

Findings from the Coaching Process and Training Activities

The themes derived from observations and in-depth interviews are outlined below. Initially, the coach observed that these instructors, trained as reading specialists, brought extensive experience in K-12 and college instruction, demonstrating a clear understanding of effective teaching and assessment practices. Their expertise in reading and dyslexia positioned them at a higher level of understanding and use of Universal Design for Learning (UDL) principles compared to most education instructors. Their constant inquiry revolved around integrating Universal Design for Learning (UDL) into an online asynchronous course format. The structure of the university's standard format heavily favored the lecture-reading assignment format, characterized by objectives, readings, lectures, and assignments. Consequently, both instructors and students initially favored the face-to-face format and were hesitant about transitioning to this standard type of online instruction. Due to this hesitation and lack of experience in teaching in this online format, they exhibited limited familiarity with the current Learning Management System (LMS), digital tools, and digital pedagogy. Their exposure to online instruction primarily stemmed from Virtual Teaching via Zoom during the pandemic, or they perceived online teaching merely as a supplementary file cabinet for face-to-face courses. While proficient in traditional teaching methodologies, their initial grasp of the nuances of online instruction required development.

Professors Transition to Asynchronous Format

Professor F demonstrated a higher willingness to transition the program to a fully asynchronous online course compared to Professor A. Professor A, despite being less inclined to this work due to time constraints and other commitments and a preference for face-to-face teaching, had more experience with live virtual instruction than Professor F.

Professors Involvement in Crafting Course in LMS Evolved over Time

The level of willingness to actively contribute to the course design process grew the more the professors understood what was expected and their role in contribution to the design process. Initially Professor A relied heavily on the instructional coach/designer, which evolved from wanting the coach/instructional designer to do the work to the professor crafting the course in the LMS. Overall, as the professors gained more knowledge and confidence of the design work in the LMS and can see what they were accomplishing they began to do more of the work in the LMS independently from the coach/designer.

Professors Open-mindedness and Willingness to Experiment

Both instructors exhibited a willingness to maintain an open mind and try new things, particularly in the realm of digital pedagogy. The teaching style of each professor posed a challenge during their transition to the online teaching environment. While both were open to experimentation, they were hesitant to alter their reliance on lecture or discussion-style teaching methods, hindering the initial progress of the design of the first course.

Professors Background Knowledge and Experience Positively Impacted the UDL Implementation

The background experience of instructors positively influenced the course design process and the implementation of Universal Design for Learning (UDL) principles. Based on both professors' experience in the education field this was an expectation of theirs, and they fully implemented the principles as the stages of development progressed. At the beginning of the design process, they expressed they didn't think the asynchronous online teaching format would allow for the (UDL) principles to be incorporated however with the knowledge and experience of the design team there were able to meet this expectation successfully.

Professors Impact of Virtual Teaching Background

While both instructors had experience with virtual teaching, it initially posed challenges for the transition. The coach needed to define and provide models, offering multiple examples of asynchronous instruction processes for both students and instructors to facilitate a smoother transition. Noting the difference between virtual teaching synchronously and teaching in an asynchronous course modality.

Discussion

Research Questions

1. *How do seasoned reading and dyslexia teachers adapt to the digital landscape during the transition from traditional face-to-face instruction to an online graduate-level program, and how do they contribute to the development of online courses for a new program?*

The study participants exhibited skilled adaptation during the transition, utilizing the support of an instructional coach and exposure to various models. They effectively managed the shift with the support provided, contributing positively to the development of online courses for the new program. The coach's use of the Backward Design process guided the overall scheduling of work and homework, ensuring a thoughtful and strategic approach to the coaching process and course design schedule to meet a deadline of when the course would be loaded with students.

The study's second year witnessed a reduced intensity in course design efforts and coaching sessions. Instructors engaged with the coach bi-weekly or monthly, adhering to the established schedule. During these interactions, the focus shifted primarily to exploring the distinctiveness of the course content and brainstorming ways to adapt it for online delivery while aligning with the instructor's teaching style and Universal Design for Learning (UDL) principles within the Learning Management System (LMS) framework. The discussions aimed to push boundaries, foster creative thinking, and strategize ways to fulfill specific content requirements while adhering to the university's style, course design standards, and criteria.

Investigation of Instructional Coaching

2. *How does the presence of an instructional coach influence the adaptation and contributions of seasoned*

professors during the transition to online teaching? Collaboration proves effortless with some individuals but poses challenges with others.

The coaching journey involved navigating the highs and lows alongside instructors as they grappled with the complexities of learning a new Learning Management System (LMS). This challenge unfolded as the professors and coach confronted obstacles imposed by the LMS, which may limit their familiar (UDL) practices with face-to-face instruction and assessment strategies. Creating an environment of space, modeling, and creativity becomes essential in designing strategies that either overcome or substitute what instructors are accustomed to in face-to-face settings. The coach used chunking and scaffolding strategies which is a process of delivering the lesson in distinct portions or breaking down the concept in each session (chunking the content) and gradually reducing support over time as the professors understanding increases (scaffolding the material), aiming to foster autonomy and enhance confidence. Throughout the coaching process, scaffolding and chunking strategies were integrated, employing active listening, paraphrasing, and modeling during Zoom sessions, which emerged the most effective communication tool used in this investigation. Zoom facilitates productive communication by allowing the coach/designer and instructors to share their computer screens, fostering a collaborative understanding of the technology.

The coach/designer presents instructors with a menu of choices, aligning it with the Universal Design for Learning (UDL) principles and a progression rubric. The language used by the coach, combined with open-ended questioning, encourages instructors to take the lead in decision-making, while the coach guides the process without imposing decisions. Scaffolding and modeling strategies are employed to assist instructors in independently navigating the Learning Management System (LMS). As the instructors progressed, they gradually transitioned to self-sufficiency. At the first course's completion, they started informed discussions with the coach, articulating their specific needs and preferences for the subsequent course. This evolution signifies a shift towards greater autonomy and confidence in utilizing the LMS effectively.

Identification of Patterns and Nuances

3. *What patterns and nuances emerge in the processes of seasoned professors as they navigate the complexities of online teaching for reading and dyslexia?*

The data themes evolved as instructors transitioned from a state of uncertainty, characterized by experiencing versions of "I don't know what I don't know," to a more informed perspective of "I know what I know, and I know what I don't know." As the inaugural course approached its conclusion and plans for the second course were underway, a committee conducted a thorough review. This evaluation allowed the instructors to identify redundancies, recognize gaps, and assess the completeness of their work. The reflective process instilled a sense of reassurance and confidence in their efforts, markedly different from the initial stages when the first course was about to commence. The impending launch of the first course with students promised immediate feedback on the overall design's success. The decisions made regarding assessment, assignments, and adherence to Universal Design for Learning (UDL) principles aimed to enhance students' mastery of content, ensuring a high-performance

outcome and the fulfillment of learning objectives. Additionally, the instructors recognized the need to view the program's design not merely as a series of sequentially running courses, but as a cohesive two-year unit of study. Incorporating McTighe and Wiggins' Understanding by Design (UBD) principles into the coaching playbook for this study further fortified their approach (1998).

Over time confidence and skill level increased as frustration decreased; as the work unfolded and week-by-week instruction was built the more the teachers began to see what was going to take place in the eyes of the students; trying things out as a student helped these instructors.

4. *What are the key components of an effective instructional coaching rubric for supporting reading and dyslexia teachers in transitioning to online teaching?*

As Jim Knight's research indicates, crafting an instructional playbook is a foundational step for many coaches, enabling them to assist teachers effectively and articulate their guidance with greater clarity. This playbook typically comprises checklists and customized tools developed by coaches to enhance their comprehension and communication of high-impact teaching strategies frequently shared with teachers (Knight et al., 2020). The researcher found during the literature review document collection and analysis procedures for this study that one rubric was not going to be sufficient for the complexity of the instructional design work that would take place for two years. The coaching process mirrors the instructional process where data informs and guides the instructional planning, implementation, and evaluation process. Therefore, the coach needed to have a collection of tools, rubrics, and checklists to assist them in the process of coaching these instructors to design instruction for several online courses.

Conclusion

In the context of seasoned teachers transitioning from traditional face-to-face teaching to the challenges of online instruction, this study revealed an instructional coach plays a pivotal role in facilitating this significant shift. The process involved leveraging a combination of practical strategies to support professors in adapting to the new online teaching landscape. The coach encouraged self-awareness by helping teachers recognize their strengths, weaknesses, and goals within the online teaching context, while also guiding them to reflect on their reactions to this transformative change. The outcomes of this two-year investigation led the researcher to recognize that a single rubric was insufficient for guiding an instructional coach through the intricacies of developing an online course design that aligns with various standards and guiding principles in the field of education. The process of collecting and analyzing documents highlighted the researcher's realization that having readily available, research-backed tools, rubrics, and checklists is essential for the instructional coach to effectively engage in the various stages of the design process. Following the research guidance provided by (Knight et al., 2020) for creating an instructional coach playbook in teacher coaching, this researcher applied similar concepts to assemble a playbook specifically tailored for coaching instructors in the instructional design of online courses. This playbook for coaching instructors in the instructional design of online courses can now be used by others in faculty development, online learning support, and instructional coaching for university professors.

The research concludes that enhancing instructional coaching practices for online education involves multiple facets. Coaches are urged to seamlessly integrate technology, striking a balance between proficiency and a deep understanding of the pedagogical implications. Prioritizing continuous professional development is crucial, keeping coaches informed about evolving online teaching strategies and the dynamic landscape. The significance of personalized coaching approaches is underscored, recognizing the diverse needs of online educators and adapting strategies accordingly. Efforts to address equity and access issues are highlighted, with a focus on creating inclusive online learning experiences collaboratively. Encouraging participation in research initiatives and robust evaluation practices contributes to refining coaching models for the online learning environment. Additionally, advocating for supportive policies and institutional structures becomes pivotal, acknowledging and valuing the instrumental role of instructional coaching in the success of online education.

Recommendations

As the demand for diverse teaching practices grows, college instructors are expected to acquire the necessary skills and knowledge to create inclusive learning environments in the online realm. Instructional coaching emerges as a valuable solution, providing a supportive framework for instructors to develop the required expertise and adapt their teaching approaches to meet the evolving demands of online education. When considering the broader implications of instructional coaching in the context of online education, several key points should be considered. First, incorporate technology seamlessly into coaching to enhance online teaching practices, emphasizing both technological proficiency and a nuanced understanding of the pedagogical implications of digital tools. Prioritize continuous professional development for coaches to stay informed about evolving online teaching strategies, tools, and best practices, recognizing the dynamic nature of the online education landscape. Implement personalized coaching approaches tailored to meet the unique needs of online educators, adapting strategies to address individual challenges and goals within the diverse context of online teaching. Additionally, ensure that instructional coaching in online education actively addresses issues of equity and access, with coaches attuned to the diverse needs of learners and collaboratively working with educators to create inclusive online learning experiences. Encourage and participate in research initiatives to investigate the impact of instructional coaching in online education, refine the use of the instructional design coach's playbook that was developed in this study, and leverage robust evaluation practices to contribute to the refinement of coaching models and strategies for the online learning environment. Utilize these practices in a larger study with a faculty of thirty or more professors to solidify these findings and refine the tools and practices recommended in this study. Finally, advocate for supportive policies and institutional structures that recognize and value the crucial role of instructional coaching in the success of online education, collaborating with administrators and policymakers to establish a conducive environment for effective coaching practices.

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