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EXPLORING EDUCATION IN THE DIGITAL AGE: INNOVATIONS, INTERSECTIONS AND INSIGHTS

PREFACE

Dear esteemed readers and contributors,

It is with great pleasure and excitement that I extend a warm welcome to you all to this special edition of our journal, dedicated to exploring the diverse and dynamic themes shaping the landscape of education in the digital era. As we embark on this journey of discovery, each theme serves as a guiding beacon, illuminating the innovative intersections of technology and pedagogy.

Our first theme, Teaching based on Artificial Intelligence (AI), Machine Learning (ML), and the Internet of Things (IoT), sets the stage for our exploration by delving into the transformative potential of intelligent technologies in education. From personalized learning experiences to predictive analytics, AI, ML, and IoT hold the promise of revolutionizing traditional teaching methods and unlocking new pathways to knowledge acquisition.

Theme 2 invites us to immerse ourselves in the realm of 360 Learning, Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR). Here, we witness the fusion of physical and digital worlds, as learners embark on immersive journeys that transcend the confines of the traditional classroom. Through experiential learning and interactive simulations, VR, AR, and MR technologies redefine the boundaries of education, offering unprecedented opportunities for engagement and exploration.

In Theme 3, we explore the power of Collaborative Teaching, Global Learning, and innovative practices such as Gamification, Maker-Space, and Maker Lab initiatives. This theme underscores the importance of collaboration, cultural exchange, and hands-on experimentation in fostering creativity, critical thinking, and problem-solving skills among learners worldwide.

Theme 4 sheds light on the paradigm shift towards Open and Distance Learning (ODL), Self-Instructional Materials (SIM), and the utilization of Big Data Analytics in Learning. Here, we witness the democratization of education, as learners gain access to high-quality resources and personalized learning experiences irrespective of geographical constraints. Big Data analytics further enhance the educational landscape by providing insights into learner behavior and preferences, enabling educators to tailor instruction to individual needs.

In Theme 5, we explore the evolving role of Social Media Learning as a catalyst for knowledge dissemination, collaboration, and community building. From online forums to multimedia platforms, social media offers a dynamic space for peer-to-peer learning, digital literacy development, and the cultivation of virtual learning communities.

Theme 6 invites us to embrace Design Thinking for new Learning Delivery, emphasizing the importance of user- centered design principles in creating innovative and inclusive learning experiences. Through empathetic design, educators can reimagine learning environments that foster creativity, adaptability, and lifelong learning skills.

In Theme 7, we delve into Andragogy in technology-based learning, Instructional Design, and Best Practices in e-learning. This theme highlights the importance of learner-centered approaches, effective instructional design strategies, and the dissemination of evidence-based practices to optimize learning outcomes in the digital age.

Finally, Theme 8 explores the Development of e-learning systems, materials, and mobile technologies, including the emergence of MOOC-based mobile learning materials. Here, we witness the evolution of educational technologies, as mobile devices and online platforms redefine the boundaries of access and engagement in education.

As we navigate through these diverse themes, let us embrace the spirit of inquiry, collaboration, and innovation that defines our scholarly community. I extend my deepest gratitude to all the contributors who have enriched this journal with their insights and expertise. May this edition inspire new ideas, spark fruitful discussions, and contribute to the ongoing dialogue surrounding the future of education.

Thank you for your dedication and commitment to advancing the frontiers of knowledge in the field of education.

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1. Student Acceptance with the Usage of Padlet in Guiding Research Statistics Analysis
2. MOOC Courses Development: Guidelines for GLAM MOOC

Guest Editors

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Challenges and Innovations: Adapting Practical Culinary and Foodservice Subjects for Distance Learning during COVID-19

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ABSTRACT
This article presents an overview of the challenges and innovative solutions encountered in adapting practical culinary and foodservice subjects for distance learning during the COVID-19 pandemic. The study explores the limitations of remote learning in culinary education, including the loss of hands-on experience, limited access to specialized resources, the assessment of practical skills, and the impact on students' emotional well-being. To address these challenges, educators have implemented various innovative approaches. Virtual cooking demonstrations, interactive online modules, and simulations have been utilized to recreate practical experiences and engage students in a virtual environment. Collaborations with industry professionals and the establishment

of online communities have facilitated networking, industry insights, and peer learning. Furthermore, future directions are discussed, including the integration of advanced technologies such as virtual reality and augmented reality for a more immersive practical learning experience. Collaborative online platforms and the utilization of technology-enhanced assessments are suggested to enhance student engagement and provide authentic learning experiences. Lastly, continuous professional development for educators is emphasized to ensure effective distance learning practices. The findings presented in this abstract contribute to the ongoing discourse surrounding distance learning in culinary education. By highlighting the limitations, innovative solutions, and future directions, this article aims to inspire further research and advancements in the field. The resilience, adaptability, and commitment exhibited by educators and students in delivering high-quality culinary education remotely during these challenging times underscore the importance of embracing technology and continuous improvement to enrich culinary education practices in the digital era.

Keywords: culinary; foodservice; education; COVID-19

INTRODUCTION

The seismic shift sparked by the COVID-19 pandemic has profoundly altered the educational landscape, not least within the domain of culinary and foodservice disciplines (Anthony Jnr & Noel, 2021). Notably characterized by their tangible and practice-focused nature, these subjects have grappled with large-scale challenges in pivoting to the new paradigm of virtual learning (Skalitzky & Williams, 2023). As traditional classrooms shuttered and face-to-face teaching became untenable, culinary and foodservice educators and students embarked on a voyage into unfamiliar terrain to ensure the continuity of high-quality learning.

The crux of this conceptual paper lies in exploring the obstacles faced when attempting to adapt hands-on culinary and foodservice subjects to a remote learning environment during the seismic disruptions caused by the COVID-19 pandemic. Concurrently, we will peel back the layers of the innovative strategies and solutions that have taken root to surmount these hurdles. Through the microscope of these challenges and innovations, we aspire to glean insights into the efficacy and potential advantages of distance learning within this field.

The swift transition from on-site instruction to remote learning sets a conundrum for culinary and foodservice disciplines. The absence of manual experience, the intricacies involved in assessing practical skills, and restricted access to essential resources are among the myriad problems both pedagogues and students face. Furthermore, the disappearance of personal interactions, along with the communal ethos tightly woven into culinary and foodservice education, fashions an additional layer of intricacy (Anthony Jnr & Noel, 2021). Navigating these challenges necessitate out-of-the-box thinking and flexible adaptability.

Yet, within this tumultuous backdrop, striking innovations and solutions have sprouted. As educators and institutions wrestled to maintain effective and captivating learning experiences, tools like virtual cooking demonstrations, interactive digital modules, simulations, and the

leveraging of tech-savvy, internet-based platforms, have flipped the script on how culinary and foodservice subjects are conveyed (Anthony Jnr & Noel, 2021; Code et al., 2020; Hong et al., 2023; Leung et al., 2022; Tan, 2021). These novel methods have enabled educators to mimic practical real-world experiences engagingly, allowing students to immerse themselves in the virtual sphere, thereby bridging the chasm wrought by physical displacement. Beyond instructional methodologies, synergies with industry veterans, nurturing of virtual communities, and the leverage of networking platforms have played a crucial role in bolstering and amplifying the remote learning experience (Benaraba et al., 2022; King et al., 2021; Lopes et al., 2021). These alliances furnish students with a gateway to live experiences, practical wisdom, and networking possibilities that transcend the boundaries of the digital classrooms.

This paper will delve into these innovative methodologies and their ripple effects on the educational journey, including student engagement, skills development, and learning outcomes. This is based on our faculty practices and others during the pandemic. Furthermore, we will spotlight case studies and exemplars of best practices, thus illuminating the triumphant adaptations within the sphere of culinary and foodservice disciplines amidst the COVID-19 panorama.

Despite the multitude of perks these innovations carry, it is vital to recognize the inherent limitations of distance learning within the scope of culinary and foodservice training. Emulating certain facets of pragmatic learning might pose a challenge in the digital realm, and the vacuum of direct discourse might impinge on the cultivation of interpersonal skills. Recognizing these shortfalls will lay the groundwork to spotlight areas demanding future enhancement and research within the sphere of distance learning for culinary and foodservice disciplines.

BACKGROUND OF THE STUDY

Historically, culinary and foodservice disciplines have been characterized by their tactile, interactive approach (Bucher & Lee, 2023; Muhammad et al., 2022). Rooted in experiential learning, these fields typically rely on direct student engagement in food preparation and service. However, the onset of the COVID-19 pandemic in 2020 posed a significant disruption to these traditional educational modalities globally (Anthony Jnr & Noel, 2021; Finlay et al., 2022). Lockdown mandates, physical distancing requirements, and the widespread closure of educational institutions birthed unprecedented difficulties for both educators and students in these sectors. Suddenly, typical culinary labs, professional-grade kitchens, and dining spaces were off-limits, severely limiting hands-on and practical learning experiences which are crucial for the cultivation of culinary expertise.

The abrupt pivot from in-person instruction to remote learning forces culinary and foodservice educators to drastically reinterpret their teaching techniques and navigate the constraints ushered in by physical separation. As such, distance learning, supported by digital technology, virtual platforms, and online resources, swiftly became the accepted norm (Anthony Jnr & Noel, 2021; Finlay et al., 2022; Skalitzky & Williams, 2023). However, unlike many subjects that can be transitioned relatively smoothly to a virtual format, the realms of culinary and foodservice training present a unique set of hurdles. The quintessence of these disciplines lies in tactile, culinary practices which inevitably become difficult to replicate remotely. Moreover, the

assessment of practical abilities and real-time feedback delivery poses further complications in the virtual environment.

Despite these obstacles, a pressing need to sustain culinary education, support students, and meet industry expectations spurs the exploration of innovative solutions. This adaptive phase fertilizes the soil for unconventional ideas, technological progression, and synergies with industry counterparts. As the pandemic unfolds, educators begin to explore alternative teaching methods such as virtual cooking demonstrations, live broadcasts of dynamic culinary techniques, and enhancing student participation via interactive online modules (Anthony Jnr & Noel, 2021; Benaraba et al., 2022; Briggs et al., 2023; Finlay et al., 2022; Hong et al., 2023; Peng et al., 2022; Skalitzky & Williams, 2023). The primary intent of these techniques is to infuse a touch of realism and engagement into the digital learning space. In addition, simulations and virtual reality technologies offer students the chance to hone their skills in a risk-free, controlled environment.

Partnering with industry professionals and organizations becomes instrumental in bridging the distance between virtual learning and tangible, hands-on experiences. Virtual internships, guest lectures, and mentorship programs grant students exposure to prevailing industry practices, up-to-date trends, and expert guidance. Online communities and networking platforms also provide students with opportunities to interact with professionals and peers, fostering a sense of solidarity and facilitating the exchange of knowledge. Notwithstanding the setbacks introduced by distance learning, these transformative adaptations have underlined the resilience and adaptability of the culinary and foodservice education space. Through strategic adoption of technology, creativity, and collaborative efforts, educators and institutions have managed to perpetuate the impartation of crucial culinary knowledge and skills, even in the absence of physical classrooms.

As the ramifications of the pandemic continue to influence the educational landscape, reflective examination of these adjustments and their efficacy becomes increasingly paramount. Comprehending the difficulties faced and the innovative strategies developed offer insights for future practices by formulating progressive responsiveness to the ever-evolving pedagogical environment. Notably, the pandemic has underscored the necessity to rectify the digital divide and establish fair access to remote learning resources in culinary and foodservice education. Access to technology, high-speed internet, and appropriate kitchen utensils varies among students, raising concerns about inclusivity and fairness within remote learning (Chand et al., 2021; Chatzoglou et al., 2023; Code et al., 2020). This disparity compels educators and institutions to devise solutions that accommodate a spectrum of access to resources, ensuring no student is overlooked.

Moreover, the pandemic has underscored the significance of adaptability and flexibility within culinary and foodservice education. The ability to rapidly alter teaching methodologies, assimilate emerging technologies, and stimulate creative thinking has become integral for pedagogues in this field. The turbulence caused by COVID-19 has instigated a reconsideration of time-honored pedagogical trajectories, endorsing the incorporation of innovative methods and digital tools into culinary and foodservice curriculum models. Looking to the future, the lessons garnered amidst the pandemic may serve to guide the next chapter of culinary and foodservice education. The inventive adjustments employed during virtual learning have the potential to enrich traditional in-person instruction when physical learning spaces eventually reopen. The utilization of technology, virtual simulations, and online resources can serve to supplement tangible, hands-

on experiences, promulgating a more diverse and enriched pedagogical environment.

Furthermore, the disturbances triggered by the pandemic have ignited discourse regarding the future trajectory of culinary and foodservice education. These critical conversations among educators, industry insiders, and policymakers seek to scrutinize the relevance of established curricula and consider the integration of digital literacy, sustainability, and emerging food trends into culinary and foodservice syllabus. Thus, the challenges wrought by COVID-19 have surfaced as catalysts for pedagogical innovation and evolution in these fields, propelling continuous refinement and advancement of culinary education practices.

CHALLENGES FACED DURING PANDEMIC

One of the major challenges of culinary and foodservice education during the pandemic is the lack of hands-on experience. The practical application of skills and techniques is a crucial aspect of this field, and the absence of physical interaction with ingredients, tools, and equipment poses a significant hurdle. Students miss out on the opportunity to develop their culinary senses, learn to adjust techniques based on visual cues and textures, and gain confidence through trial-and-error. Without the direct experience of working with physical ingredients, students may struggle to fully grasp concepts, understand ingredient characteristics, and develop the muscle memory required for proficient culinary skills.

Another difficulty is assessing practical skills remotely. Evaluating practical skills becomes more complex in a distance learning environment. Instructors cannot closely observe students' techniques, provide immediate feedback, correct mistakes, and guide skill development in real-time as they can in traditional settings. Video submissions or virtual cooking demonstrations may not capture the nuances of technique, and limited interaction can hinder instructors' ability to provide timely and specific feedback. Evaluating students' progress and ensuring they meet competency standards may require alternative assessment methods and careful planning.

Limited access to resources is also a significant challenge in culinary and foodservice education during the pandemic. Specialized equipment, ingredients, and dedicated kitchen spaces are often necessary for these subjects. If students lack the proper resources at home, they may struggle to replicate the learning experience and acquire necessary skills. Inequities in access to cooking tools, quality ingredients, and appropriate cooking facilities can result in variations of learning outcomes and hinder students' ability to fully engage in practical exercises. Institutions and educators may need to find creative solutions to provide necessary resources, such as offering loaner tool kits, organizing ingredient pick-ups, or exploring partnerships with local businesses.

Loss of face-to-face interactions and teamwork is another hurdle. Culinary education thrives on collaboration, teamwork and the development of interpersonal skills. In traditional settings, students work together in the kitchen, share ideas, troubleshoot problems, and learn from one another's experiences. The shift to distance learning disrupts these valuable face-to-face interactions. Collaborative group projects, teamwork exercises, and the ability to observe and learn from peers become challenging in virtual environments. Building a sense of community and

fostering teamwork may require implementing innovative approaches, such as virtual breakout rooms for group work and fostering online communities to facilitate communication and collaboration.

Technical challenges and connectivity issues are also prevalent in distance learning. Reliable internet access and suitable devices vary among students. Technical difficulties, such as slow internet speeds, audio/video lag, incompatible software, or hardware limitations, can disrupt the flow of virtual classes and impede effective communication between instructors and students. Mitigating these challenges may involve providing technical support, offering clear instructions on equipment requirements, and considering alternative delivery methods to minimize the impact of connectivity issues.

Translating the sensory experience of culinary education to online platforms is a significant challenge. Cooking is a multisensory activity that involves the observation of colors, smells, textures, and tastes. Replicating these experiences virtually is difficult. Instructors must explore creative strategies to engage students and enhance their sensory understanding through innovative approaches. This might involve utilizing high-quality videos, incorporating close-up demonstrations, offering detailed explanations of sensory elements, and utilizing online platforms that allow students to interact with simulations or virtual cooking environments.

The shift to remote learning can also impact students' emotional and mental well-being. Culinary education often thrives in a supportive and communal environment, where instructors provide immediate feedback, encouragement, and mentorship. The absence of direct interpersonal contact and the increased isolation during distance learning can lead to feelings of disengagement, reduced motivation, and a diminished sense of belonging. Educators need to prioritize fostering a sense of connection through virtual check-ins, offering avenues for open communication, and providing support resources for students who may be dealing with increased stress or anxiety.

INNOVATIONS AND SOLUTIONS

Instructors have innovatively turned to virtual cooking demonstrations to simulate traditional classroom experiences. Using video technology, they craft instructional videos that offer an eye-catching display of culinary techniques and procedures, complete with step-by-step guidance. Details such as close-up shots, various camera angles, quality production and voice-over tips ensure students gain a thorough understanding of the cooking process. Thus, not only precise techniques and movements employed in cooking are made clear, students also foster their visual learning abilities.

As a natural progression from this, in order to make distance learning even more interactive, educators introduce interactive online modules. These modules, a step beyond mere video lectures, encompass interactive elements like quizzes, drag-and-drop activities, and virtual simulations. This creates an atmosphere in which students are at the heart of their learning, actively engaging in tasks and receiving immediate feedback. By integrating multimedia resources such as images, illustrations, and animations, a deeper understanding of concepts is promoted.

Taking an innovative leap further, simulations and virtual reality (VR) technology have entered the learning arena. These virtual simulations provide a platform where culinary skills can be practiced in a digital environment. With this approach, students can safely experiment with various techniques, recipes, and ingredient combinations. Moreover, the immersive VR experiences transport students inside virtual kitchen environments, where they carry out cooking tasks using virtual tools. The goal is that by practicing in this safe simulated environment, students can develop skills and confidence.

In synchrony with these advancements, technology and web-based platforms are employed to deliver course content and facilitate communication. Centralized platforms like Learning Management Systems (LMS) organize materials, host resources, and foster dialogue between educators and students. With incorporated discussion boards or chat functions, students can actively participate within the educational community. Web conferencing tools and integrated multimedia resources enhance this online interaction, connecting students and instructors in real-time and enriching comprehension and engagement.

To further bridge the gap between the virtual and real world, partnerships with industry professionals and guest speakers are leveraged. These professionals deliver virtual lectures and presentations that offer students insights into contemporary industry practices, trends, and potential career paths. Extended collaboration can include virtual internships and online workshops, providing practical learning opportunities and valuable networking connections. Complementing these industry partnerships, online communities and networking platforms are fostered to instill a sense of community among remote learners. These platforms can adopt the form of discussion forums, social media groups, or even specialized platforms tailored for culinary education. The beauty is that not only students have the opportunity to share experiences, query each other and collaborate, they also can partake in peer learning and create prospective career networks.

Accounting for these shifts in learning methods, educators have adapted assessment methods to suit remote environments. Moving beyond traditional written exams and quizzes, alternative evaluation methods like student-generated video submissions and digital portfolios have been adopted. As a result, educators can more holistically assess a student's culinary skillset, creativity, critical thinking, and ability to practically apply their knowledge. Embracing these innovative approaches marks a significant stride in culinary and foodservice education. The aim is to authentically replicate practical experiences, foster active learning, and ensure valuable skill acquisition. By promoting experiential learning and engaging students, a newfound balance between conventional practical instruction and remote learning settings is found.

LIMITATIONS OF THE SOLUTIONS

Virtual culinary education, while advancing in leaps and bounds, inherently comes with its own set of challenges. Firstly, the lack of full sensory immersion proves an impediment. While virtual demonstrations and simulations provide an approximation of practical culinary experiences, they truly cannot replicate the tangible aspects. Students do not have the opportunity to touch, taste, or smell ingredients, which hampers the development of proficient culinary skills. The absence of tactile feedback, the ability to adjust based on sensory cues, and the development of muscle

memory that come from physically handling ingredients and tools in a kitchen can result in a superficial understanding of the culinary art.

Another challenge is the provision of specialized resources to every student, a task that becomes notably difficult in a distance learning setting. Not every participant may have the necessary tools or access to high-quality ingredients that are crucial for practical learning. This disparity could affect the homogeneity of the learning experiences and deter students from fully engaging with and developing their culinary skills. It puts the onus on the institutions and educators to devise strategies that could help bridge this gap, such as the provision of loaner toolkits or organizing ingredient pick-ups for students.

Examining practical culinary skills remotely introduces another layer of difficulty. Difficulty arises in accurately assessing students' proficiency due to the constraints of traditional in-person observation methods, such as direct feedback and assessment. These become severely limited in the realm of virtual education. The constriction in examination might fail to capture the fine points of technique or provide guidance and feedback instantaneously. Consequently, educators need to embrace unconventional approaches to assessment. These could include video submissions, detailed written reflections or the use of real-time video platforms to evaluate practical skills effectively.

Lastly, the transition to distance learning can create ripples in students' emotional and mental well-being. The absence of personal interaction with peers and instructors can trigger a sense of disconnection, reduced motivation, and heightened stress levels or anxiety. Students might yearn for the sense of camaraderie, community, and support offered by a physical classroom or kitchen environment, which are factors that significantly affect their learning experiences. It is therefore paramount that proactive measures be taken to support students' emotional well-being in the virtual learning space. These strategies could include facilitating online social interactions, setting aside time for check-ins, and ensuring the availability of mental health resources.

FUTURE DIRECTIONS

Looking ahead, the evocative potential of advanced virtual reality (VR) and augmented reality (AR) technologies can fundamentally alter the landscape of remote culinary education. With these technologies, students can experiment with culinary ingredients, tools, and equipment in a virtual environment that closely mirrors a physical kitchen. Such immersive experiences can be further enriched by incorporating haptic feedback technology, which adds another layer of realism to the virtual simulation.

Creating synergies across different sectors can give rise to dedicated online platforms uniquely customized for culinary and foodservice subjects. Such platforms, developed collaboratively by culinary institutions, industry leaders, and technology companies, can offer shared interactive kitchens, real-time contact with instructors and peers, access to extensive culinary resources, and opportunities for virtual teamwork. This is an avenue that could foster a robust sense of community, propel peer learning, and facilitate smooth collaboration within a virtual setting.

The realm of practical skills assessment presents a fascinating terrain for innovation. Trending towards more effective ways of remotely evaluating students' practical skills are techniques such as remote proctored practical exams utilizing live video feeds, real-time virtual cooking competitions, multi-sensory interfaces for virtual taste tests, and comprehensive digital portfolios that capture students' culinary achievements. This innovation paves the way for accurate and reliable evaluation of practical skills and knowledge. The integration of advanced technologies, such as artificial intelligence (AI), machine learning, and data analytics, can take distance learning experiences a notch higher. AI-driven virtual assistants or chatbots can provide real-time feedback and tailor learning recommendations and pathways to suit individual student needs. Machine learning, through analysing student performance data, can pinpoint areas that require reinforcement and suggest targeted strategies for skill enhancement. The inclusion of these components significantly boosts the effectiveness of distance learning within culinary education.

Of key importance is the provision for continual professional development of educators. This is instrumental in aiding their successful transition to remote methods of teaching. Concentrating on technology utilization, content development that is engaging and interactive, design of authentic assessment tools, and the construction of pedagogical strategies suitable for remote instruction should be the core areas of attention during training. Fostering supportive professional learning platforms and networks can facilitate the dissemination of best practices, resources, and shared experiences, thereby improving the overall quality of distance learning in culinary and foodservice subjects. As we navigate the waters of culinary education, adapting to the challenges of distance learning, the key lies in addressing the existing limits while exploring possibilities for the future. By harnessing advancements in technology, encouraging collaboration, and investing in professional growth, we can provide comprehensive and engaging educational experiences. This approach, whilst ensuring that students amass essential practical skills, also paves the way for navigating the dynamic landscape of culinary and foodservice industry successfully.

CONCLUSION

Undeniably, the COVID-19 pandemic has necessitated a rapid adaptation of practical culinary and foodservice courses to fit the mold of distance learning. This abrupt transition has unveiled a spectrum of challenges, including diminished hands-on learning opportunities, restricted access to specialized resources, difficulties in evaluating practical skills, and concerns for students' emotional wellness. Yet, amidst these hindrances, innovative solutions have surfaced to alleviate such issues. The encapsulation of virtual cooking exhibitions, interactive online segments, simulations, and groundbreaking VR technologies have served as conducive mechanisms for mimicking practical experiences and engaging students in a vibrant virtual environment. Fusing advanced technologies, industry collaboration, and the birth of online communities have efficiently bridged the gap between remote academia and grounded culinary experiences; concurrently affording students crucial exposure to real-world practices, networking prospects, and peer-assisted learning.

Despite existing barriers to distance learning yet to be surmounted, the horizon for

vocational education in the culinary and foodservice domain is promising. Prospective advancements in VR and AR technologies bear the potential to offer students a more immersive and lifelike learning environment. The creation of online platforms, designed specifically for culinary education, hold the promise to amplify student interaction and cooperation. Constant innovation in appraisal methods, integration of technology-enhanced platforms, and the ongoing professional development for educators, cumulatively enhance the efficacy and inclusivity of distance learning. It remains paramount for educators and institutions to consistently assess, reflect upon, and refine these modifications to maintain the delivery of top-tier culinary educational experiences. By confronting initial restrictions and embracing future directions, culinary and foodservice educators are equipped to endow students with invaluable skills, knowledge, and experiences; thereby priming them for the fluctuating demands of the culinary industry.

Within the stern backdrop of innumerable challenges unfurled by the COVID-19 pandemic, the resilience, inventiveness, and adaptability exhibited by educators and learners, whilst translating practical culinary and foodservice subjects into a distance learning context, stand as a testament to the unwavering commitment to impart quality education. Optimizing the potential of technology and collaboration, coupled with a resolute focus on continuous enhancement, ensures that culinary education will flourish, ultimately delivering the critical knowledge, skills, and experiences necessary for students to thrive within the culinary and foodservice industry.

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Conflict of Interest

The authors declare that there is no conflict of interest in completing this article.

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Authors' Contributions

Author 1 initialized the topic and the idea for challenges and solution. Author 2 edited and researched the contents to be included in the article. Author 3 carried out the writing process of the whole article.

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