

**IMPACT OF MOBILE TECHNOLOGY INTEGRATION IN THE LEARNING  
EXPERIENCE OF TRAINEES IN CATERING SCHOOLS IN BENIN  
METROPOLIS, EDO STATE**

**BY**

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**DEPARTMENT OF ADULT AND NON-FORMAL EDUCATION**

**UNIVERSITY OF BENIN**

**BENIN CITY, NIGERIA**

**APRIL, 2024**

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF ADULT AND NON-  
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**UNIVERSITY OF BENIN**

**BENIN CITY, NIGERIA**

**APRIL, 2024**

## CERTIFICATION

We, the undersigned hereby certify that this research work was carried out by UKATTA BENITA CHINENYE with Matriculation Number: EDU1902911 of the Department of Adult and Non-Formal Education, Faculty of Education, Faculty of Education, University Of Benin, Benin City in partial fulfillment of the requirements for the Award of Bachelor Degree (B.Sc. Ed) in Adult and Non-Formal Education in Political Science.

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## **DEDICATION**

This work is dedicated to God Almighty. The work is also dedicated to my lovely parents,  
Mr. and Mrs. Ukatta.

## **ACKNOWLEDGEMENTS**

I would like to express my sincere gratitude to everyone who has contributed to the successful completion of my final year project. I am deeply grateful to my supervisor, Dr. Sesan Olawale for his guidance, support, and encouragement throughout the project. His expertise and advice have been invaluable in helping me to develop and refine my ideas and to overcome the challenges I faced.

I would like to express my deepest gratitude to my parents, Mr. and Mrs. Ukatta and my elder sister, Eunice whose unwavering support and encouragement have been instrumental in the successful completion of this project. Their love, guidance, and sacrifices have been the driving force behind my academic journey. I am eternally grateful for their patience, understanding, and willingness to help me in every step of the way.

They have been my pillars of strength, providing me with the motivation and inspiration to pursue my dreams. Their belief in my abilities has given me the confidence to overcome challenges and achieve my goals. I am truly blessed to have them in my life. May God continue to bless them.

I would also like to thank my colleagues for their support, encouragement, and feedback during the project. Their contributions and insights have been essential in helping me to improve the quality of my work and to stay motivated throughout the process.

And finally, a special thanks to my friends Ayo and Sarah for their unwavering support and encouragement throughout my academic journey. Their love have been a constant source of inspiration and motivation, and I could not have done this without them.

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## **ABSTRACT**

The study investigated the impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis, Edo State. To achieve the purpose of the study, four research questions were raised and examined. The sample size for the study was made up of 100 trainees which were randomly selected from the 10 catering schools in Benin Metropolis. The questionnaire was the instrument for data collection. The descriptive survey research design was adopted for the study. An analysis of data was done using frequency count and percentages. The major finding from the study include that there is low extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis. It was concluded that there is a significant impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis.

The study recommended among others that there should be collaboration between the government and catering schools to invest in the development of robust infrastructure to support the integration of mobile technology in catering schools. This should include ensuring reliable internet connectivity, access to devices such as tablets or laptops, and the availability of technical support services.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **Background to the Study**

Mobile technology has evolved into a multifaceted phenomenon that goes beyond the mere amalgamation of telecommunications and computing. Mobile technology refers to technology that is designed to be portable and used while on the move. It encompasses a wide range of devices, applications, and services that enable communication, productivity, entertainment, and access to information from anywhere with a mobile connection (Amokachi, 2022). Examples of mobile technology include smartphones, tablets, wearable devices, mobile apps, mobile operating systems (like Android and iOS), mobile websites, and various wireless communication technologies such as Wi-Fi, Bluetooth, and mobile networks (3G, 4G, 5G). Mobile technology has revolutionized the way people communicate, work, and access information in today's digital age.

Mobile technology represents the culmination of human ingenuity and innovation, empowering individuals with unprecedented levels of connectivity and convenience (Umoh, 2020). In today's digital age, the concept of mobile technology encompasses a broad spectrum of devices, services, and infrastructures that enable seamless communication, access to information, and interaction with the digital world. With the advent of high-speed internet and wireless networks, mobile devices serve as conduits to a vast digital ecosystem where information flows effortlessly. Whether through

smartphones, tablets, or wearable devices, individuals can stay connected with friends, family, and colleagues regardless of their physical location. Social media platforms, messaging apps, and video conferencing tools have become integral components of modern communication, enabling individuals to share experiences, exchange ideas, and forge meaningful connections in virtual spaces (Ibeh, 2023). Mobile technology has fundamentally altered the dynamics of human interaction, bridging gaps and fostering a sense of global community in an increasingly interconnected world.

Mobile technology has become an integral part of modern society, revolutionizing various aspects of human life. One prominent use of mobile technology is in communication. Mobile devices, such as smartphones, facilitate instant communication regardless of geographical barriers (Aliyu, 2021). Through calls, text messages, emails, and various messaging applications, people can stay connected with friends, family, and colleagues effortlessly. Moreover, mobile technology has enabled real-time communication through video calls, allowing for face-to-face interactions even when individuals are miles apart. This ease of communication has enhanced collaboration in personal and professional settings, fostering stronger relationships and improving productivity.

Another significant use of mobile technology is in access to information and entertainment. With the internet at their fingertips, mobile users can easily browse websites, access news updates, and engage with social media platforms. Mobile apps

provide a vast array of content, including educational resources, streaming services, and gaming platforms, catering to diverse interests and preferences (Iweala, 2020). Furthermore, mobile technology has transformed how people consume media, with on-demand services offering convenience and flexibility. Mobile technology have reshaped the way individuals interact with information and entertainment, making it more accessible and personalized. Mobile technology constitute a significant factor influencing the learning environment in catering schools.

Catering schools typically refer to educational institutions that offer training and coursework in the field of catering and hospitality. These schools provide instruction on culinary skills, food preparation, presentation, menu planning, event management, and other aspects related to the catering industry (Akinola, 2019). Students often learn both the practical skills and the business aspects of running a catering service or managing food-related events. Catering schools embody an educational paradigm meticulously designed to nurture a profound understanding of the culinary arts and hospitality industry. These institutions stand as bastions of learning, where the convergence of theory, practice, and experiential knowledge forms the bedrock of comprehensive education. A pivotal aspect of the meaning behind catering schools lies in their commitment to shaping individuals into adept chefs, restaurateurs, and hospitality professionals (Usman, 2022). The curriculum at these schools is intricately crafted to encompass not only the nuances of food preparation but also the broader spectrum of business management, customer service, and adherence to stringent food safety standards.

The integration of technology in the learning experience of trainees in catering schools cannot be overemphasized. Mobile technology integration has sparked a profound transformation in the educational landscape of catering schools throughout Nigeria, reshaping the learning experience for trainees in myriad ways. With the advent of smartphones, tablets, and other portable devices, students now have unprecedented access to a vast array of educational resources at their fingertips. This accessibility transcends the confines of traditional classrooms, empowering trainees to explore diverse culinary techniques, recipes, and cultural cuisines from around the globe (Dieberuo, 2020). Through mobile applications, online platforms, and digital libraries, learners can delve into interactive tutorials, virtual cooking demonstrations, and culinary forums, expanding their culinary horizons beyond the constraints of physical textbooks and lecture halls.

Moreover, the integration of mobile technology cultivates an interactive and dynamic learning environment that fosters engagement, collaboration, and experiential learning among trainees in catering schools. Through gamified learning platforms, trainees can participate in virtual cooking challenges, team-based cooking projects, and culinary simulations, transforming the learning process into an immersive and enjoyable experience (Ajiboye, 2021). These interactive activities not only reinforce theoretical concepts but also instill practical skills, creativity, and problem-solving abilities essential for success in the culinary profession. Additionally, mobile technology facilitates real-time feedback and assessment, allowing instructors to monitor trainee progress, identify areas for improvement, and provide personalized guidance and support.

## **Statement of the Problem**

In contemporary time, preliminary observation has shown that the integration of mobile technology into the learning experience of trainees in catering schools appears to remain disappointingly scarce, hindering the advancement of culinary education and skill development. Unlike various sectors that have embraced technological advancements, catering schools seem to lag behind in utilizing mobile technology as a pedagogical tool. With the global shift towards digitalization, the failure to incorporate mobile technology into the learning process not only perpetuates outdated teaching methods but also deprives trainees of valuable opportunities for growth and innovation.

It has also been observed that dearth of mobile technology integration has profoundly impacted the learning experience of trainees in catering schools. In an era characterized by connectivity and information sharing, the isolation imposed by the lack of mobile technology integration stifles collaborative learning opportunities and inhibits the development of a vibrant culinary community. Ultimately, the failure to leverage mobile technology in catering schools not only perpetuates traditional teaching methodologies but also undermines the competitiveness and adaptability of future culinary professionals in an increasingly digitalized world. The researcher is worried by these problems and so wishes to investigate on the impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis, Edo State.

## **Research Questions**

The following questions will guide the study:

1. What is the extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis?
2. What is the influence of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis?
3. What are the constraints to the effective integration of mobile technology in the catering schools in Benin Metropolis?
4. What are some measures which could be taken to address the challenges against the integration of mobile technology in catering schools in Benin Metropolis?

## **Purpose of the Study**

The main purpose of the study is to investigate on the impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis, Edo State. The specific objectives of the study are to:

1. Ascertain the extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis;
2. Examine the influence of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis;
3. Find out the constraints to the effective integration of mobile technology in the catering schools in Benin Metropolis;

4. Establish some measures which could be taken to address the challenges against the integration of mobile technology in catering schools in Benin Metropolis.

### **Significance of the Study**

The study will benefit teachers, trainees in catering schools, catering establishment, policy makers, Ministry of Education and prospective researchers. The study will benefit teachers as it will help them understand how mobile technology can enhance the learning process. The study will help provides insights into effective strategies for integrating mobile technology into the curriculum, making teaching more engaging and interactive.

The study will benefit trainees in catering schools as it will help them explore how mobile applications and resources can enhance their knowledge acquisition, culinary skills, creativity, and problem-solving abilities. The study will empowers them to leverage technology to their advantage and develop the necessary skills for the modern job market.

The study will benefit catering establishment as it will help them tailor training programmes to better prepare individuals for real-world catering environments, improving workforce readiness. By understanding the impact of mobile technology on trainees' learning experience, catering establishments can identify ways to adapt their training programmes accordingly.

The study will benefit policy makers and the Ministry of Education as it will provide them with insights into the effectiveness of integrating mobile technology in catering schools. They can use this information for crafting policies and initiatives that

promote digital literacy, access to technology, and improve teaching methods across schools.

The study will benefit prospective researchers as it will serve as a source of reference point to them. The study can serve as a foundation for future research endeavors exploring related topics in educational technology, pedagogy, and catering education.

### **Scope and Delimitation of the Study**

The study focuses on the impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis, Edo State.

The study will be delimited to catering schools in Benin Metropolis, Edo State.

### **Definition of Terms**

The following terms were defined in the study:

**Catering Schools:** Catering schools typically refer to educational institutions that offer training and coursework in the field of catering and hospitality.

**Learning Experience:** Learning experience entails any events or activity through which an individual gain knowledge, skills or understanding.

**Mobile Technology:** Mobile technology refers to technology that is designed to be portable and used while on the move.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

This chapter contains the review of relevant literatures related to this study under the following subheadings:

- Concept of Mobile Technology
- Concept of Catering Schools
- Influence of Mobile Technology Integration in the Learning Experience of Trainees in Catering Schools
- Constraints to the Effective Integration of Mobile Technology in Catering Schools
- Measures to Address the Challenges against the Integration of Mobile Technology in Catering Schools
- Reviewed of Empirical Studies
- Summary of Literature Reviewed

#### **Concept of Mobile Technology**

Mobile technology epitomizes the principle of convergence, consolidating a myriad of functionalities into compact and portable devices. The modern smartphone, for instance, is not merely a communication tool but a multifaceted device that integrates features such as cameras, GPS navigation, multimedia playback, and personal assistant services (Aluko, 2020). This convergence extends beyond hardware capabilities, encompassing a diverse array of software applications and services that cater to the diverse needs and preferences of users. From productivity apps to entertainment platforms, mobile technology empowers individuals with personalized experiences tailored to their lifestyles and interests. The

seamless integration of various functionalities enhances efficiency, convenience, and overall user experience, making mobile devices indispensable companions in everyday life.

Mobile technology refers to technology that is designed to be portable and used while on the move. It encompasses a wide range of devices, applications, and services that enable communication, productivity, entertainment, and access to information from anywhere with a mobile connection (Amokachi, 2022). Examples of mobile technology include smartphones, tablets, wearable devices, mobile apps, mobile operating systems (like Android and iOS), mobile websites, and various wireless communication technologies such as Wi-Fi, Bluetooth, and mobile networks (3G, 4G, 5G). Mobile technology has revolutionized the way people communicate, work, and access information in today's digital age.

The concept of mobile technology underscores the transformative power of innovation and adaptation in shaping the digital landscape. As technologies evolve and consumer demands evolve, mobile devices continually evolve to embrace emerging trends and paradigms. The emergence of 5G networks, augmented reality, and artificial intelligence heralds a new era of possibilities, unlocking novel applications and experiences that were once unimaginable (Nnamdi, 2021). Mobile technology serves as a catalyst for innovation, driving advancements in fields ranging from healthcare and education to commerce and entertainment. Its adaptive nature ensures that it remains at the

forefront of technological progress, perpetually pushing the boundaries of what is achievable.

Feature phones, also referred to as basic phones, represent the earliest iteration of mobile technology. These devices emerged during an era when mobile communication was primarily centered around voice calls and text messages. Feature phones typically feature physical keypads, small non-touch displays, and limited internet connectivity, if any. Despite their simplicity, feature phones remain relevant for certain demographics and use cases. They boast long-lasting battery life, robust build quality, and affordability, making them ideal choices for individuals seeking basic communication tools without the complexity of modern smartphones. Feature phones are often favored in regions with limited network coverage or where access to advanced mobile technology is restricted due to economic factors (Oni, 2019). In addition, feature phones serve as reliable backup devices for emergencies or situations where smartphone functionality is unnecessary or impractical.

Smartphones represent a paradigm shift in mobile technology, combining advanced computing capabilities with telecommunication functionalities in a single compact device. These pocket-sized powerhouses feature touchscreen interfaces, intuitive operating systems (such as iOS and Android), and extensive app ecosystems, offering users unprecedented levels of connectivity, productivity, and entertainment. Smartphones enable users to perform a wide range of tasks, including web browsing, social media interaction,

multimedia consumption, gaming, and productivity (Anyanwu, 2021). They also support features like GPS navigation, high-definition cameras, biometric authentication, and augmented reality, transforming them into indispensable tools for both personal and professional use.

Mobile technology represents the culmination of human ingenuity and innovation, empowering individuals with unprecedented levels of connectivity and convenience (Umoh, 2020). In today's digital age, the concept of mobile technology encompasses a broad spectrum of devices, services, and infrastructures that enable seamless communication, access to information, and interaction with the digital world. With the advent of high-speed internet and wireless networks, mobile devices serve as conduits to a vast digital ecosystem where information flows effortlessly.

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devices, such as smartphones, facilitate instant communication regardless of geographical barriers (Aliyu, 2021).

### **Concept of Catering Schools**

Catering schools typically refer to educational institutions that offer training and coursework in the field of catering and hospitality. These schools provide instruction on culinary skills, food preparation, presentation, menu planning, event management, and other aspects related to the catering industry (Akinola, 2019). Students often learn both the practical skills and the business aspects of running a catering service or managing food-related events. Catering schools embody an educational paradigm meticulously designed to nurture a profound understanding of the culinary arts and hospitality industry. These institutions stand as bastions of learning, where the convergence of theory, practice, and experiential knowledge forms the bedrock of comprehensive education.

A pivotal aspect of the meaning behind catering schools lies in their commitment to shaping individuals into adept chefs, restaurateurs, and hospitality professionals (Usman, 2022). The curriculum at these schools is intricately crafted to encompass not only the nuances of food preparation but also the broader spectrum of business management, customer service, and adherence to stringent food safety standards. At the heart of the concept of catering schools is their role as transformative environments where aspiring culinary enthusiasts embark on immersive journeys. The educational landscape within these institutions is dynamic, fostering a symbiotic relationship between students and

seasoned professionals. Under the mentorship of experienced chefs, students delve into the intricacies of culinary techniques, recipe innovation, and the art of gastronomy. Beyond the confines of traditional classrooms, catering schools offer students the chance to immerse themselves in real-world settings such as professional kitchens, restaurants, hotels, and catering events. This practical exposure is not merely an auxiliary element but an integral part of the educational fabric, enabling students to seamlessly bridge the gap between theoretical knowledge and hands-on proficiency.

Furthermore, the holistic concept of catering schools extends beyond immediate skill acquisition to encompass the cultivation of a mindset steeped in creativity, innovation, and excellence. These institutions serve as incubators for the culinary imagination, encouraging students to explore diverse cuisines, experiment with ingredients, and push the boundaries of traditional culinary norms (Jegade, 2020). By fostering an environment where creativity flourishes, catering schools prepare students to navigate the ever-evolving landscape of gastronomy, adapting to changing consumer preferences and industry trends. This emphasis on creativity not only hones culinary skills but also instills a spirit of entrepreneurship, enabling graduates to carve unique niches in the competitive hospitality market.

Catering schools epitomize educational havens where passion for the culinary arts converges with structured learning, practical experience, and innovative thinking (Oaikhena, 2019). By delving into the intricate meaning and concept behind these

institutions, it becomes evident that they are not merely conveyors of knowledge but incubators of talent, preparing individuals to be leaders and trendsetters in the dynamic realm of food and hospitality. Through a robust curriculum, experiential learning, and a commitment to fostering creativity, catering schools empower students to embark on fulfilling careers, leaving an indelible mark on the global culinary landscape.

### **Influence of Mobile Technology Integration in the Learning Experience of Trainees in Catering Schools**

Mobile technology integration has sparked a profound transformation in the educational landscape of catering schools throughout Nigeria, reshaping the learning experience for trainees in myriad ways. With the advent of smartphones, tablets, and other portable devices, students now have unprecedented access to a vast array of educational resources at their fingertips. This accessibility transcends the confines of traditional classrooms, empowering trainees to explore diverse culinary techniques, recipes, and cultural cuisines from around the globe (Dieberuo, 2020). Through mobile applications, online platforms, and digital libraries, learners can delve into interactive tutorials, virtual cooking demonstrations, and culinary forums, expanding their culinary horizons beyond the constraints of physical textbooks and lecture halls.

Moreover, the integration of mobile technology cultivates an interactive and dynamic learning environment that fosters engagement, collaboration, and experiential learning among trainees in catering schools. Through gamified learning platforms, trainees

can participate in virtual cooking challenges, team-based cooking projects, and culinary simulations, transforming the learning process into an immersive and enjoyable experience (Ajiboye, 2021). These interactive activities not only reinforce theoretical concepts but also instill practical skills, creativity, and problem-solving abilities essential for success in the culinary profession. Additionally, mobile technology facilitates real-time feedback and assessment, allowing instructors to monitor trainee progress, identify areas for improvement, and provide personalized guidance and support.

Furthermore, the integration of mobile technology enhances the efficiency and effectiveness of catering school training programs, streamlining administrative tasks, and optimizing instructional delivery. With the integration of learning management systems (LMS) and mobile applications tailored for culinary education, instructors can seamlessly create and disseminate course materials, administer assessments, and track trainee performance with unprecedented ease and precision (Ayoola, 2022). This digitization of instructional content not only reduces administrative burdens but also enables instructors to allocate more time and resources to interactive, hands-on learning experiences that promote skill mastery and culinary excellence.

Mobile technology facilitates seamless communication and collaboration among instructors, trainees, and industry stakeholders, fostering a vibrant learning community that transcends geographical barriers and enhances professional networking opportunities. The integration of mobile technology in catering schools in Nigeria has revolutionized the

educational landscape, empowering trainees to embrace lifelong learning, creativity, and innovation in the culinary arts. By leveraging the power of mobile devices, online platforms, and digital resources, catering schools can cultivate a dynamic and inclusive learning environment that equips trainees with the skills, knowledge, and confidence to thrive in the fast-paced and competitive culinary industry (Oshokwue, 2021). As technology continues to evolve, catering schools must remain agile and adaptive, embracing emerging technologies and pedagogical innovations to ensure that trainees are equipped with the tools and competencies they need to succeed in the digital age and beyond

### **Constraints to the Effective Integration of Mobile Technology in Catering Schools**

Some of the constraints to the effective integration of mobile technology in catering schools include:

***Infrastructure Limitations:*** Infrastructure limitations constitute formidable barriers to the effective integration of mobile technology within catering schools across Nigeria. Foremost among these challenges is the unreliable electricity supply prevalent throughout the country. Nigeria's electricity infrastructure struggles with persistent issues such as frequent power outages and voltage fluctuations, which severely impede the seamless operation of electronic devices crucial for the integration of mobile technology (Ogbuabor, 2020). In the context of catering schools, where the preparation of food and the demonstration of culinary techniques heavily depend on electrical appliances, the erratic

power supply disrupts not only daily activities but also compromises the functionality of essential mobile devices like tablets and laptops. These devices serve as gateways to educational resources, recipe databases, and online tutorials vital for culinary education. However, the inability to rely on consistent electricity undermines the potential benefits of mobile technology, causing students and instructors alike to contend with interruptions and setbacks in their teaching and learning endeavors. Without stable power infrastructure, catering schools face an uphill battle in fully incorporating mobile technology into their educational practices, limiting the scope and effectiveness of culinary training programs across the nation (Ojukwu, 2019).

Moreover, inadequate internet infrastructure further compounds the challenges associated with integrating mobile technology into catering schools in Nigeria. While mobile devices offer access to a wealth of educational materials and online platforms, their utility hinges on reliable internet connectivity—a resource that remains elusive for many educational institutions in the country. Catering schools, in particular, grapple with limited access to high-speed internet or, in some cases, complete absence of internet connectivity (Chukwuemeka, 2022). This deficiency severely constrains students' ability to leverage mobile technology for educational purposes, hindering their access to virtual culinary workshops, collaborative learning environments, and online resources essential for skill development. Furthermore, sluggish internet speeds impede the efficient utilization of cloud-based applications and online communication tools, undermining efforts to foster a dynamic and interactive learning environment within catering schools.

***Financial Constraints:*** Effective integration of mobile technology in catering schools in Nigeria faces significant challenges, foremost among them being financial constraints. Catering schools often operate on tight budgets due to limited funding from government sources or private investors. These institutions must allocate resources judiciously, primarily focusing on essential infrastructure, curriculum development, and staff salaries. Catering schools, especially those in rural or underserved areas, may struggle to secure adequate funding to meet basic operational needs, let alone invest in technological advancements (Fashagba, 2021). As a result, the integration of mobile technology becomes a secondary consideration, overshadowed by more immediate financial priorities.

Furthermore, the financial limitations within catering schools hinder their ability to adapt to the evolving demands of the digital age. While the world witnesses a rapid transformation driven by technological innovations, many catering schools in Nigeria remain constrained by outdated equipment and traditional teaching methods (Olorunsola, 2019). The reluctance or inability to allocate funds towards upgrading technology infrastructure inhibits the adoption of mobile devices and digital platforms in educational settings. Without sufficient financial support, catering schools struggle to keep pace with global advancements, thereby compromising the quality of education and limiting students' exposure to modern tools and techniques essential for success in the hospitality industry.

***Lack of Technological Literacy:*** In the context of catering schools in Nigeria, the lack of technological literacy poses significant constraints to the effective integration of mobile

technology. Without adequate technological literacy among both educators and students, the utilization of mobile technology becomes cumbersome and inefficient (Gbadegesin, 2020). In catering schools where the integration of technology could streamline processes, enhance learning experiences, and expose students to modern culinary tools and practices, the absence of technological literacy impedes the realization of these benefits. Educators may struggle to incorporate mobile applications or digital resources into their curriculum effectively, leading to missed opportunities for interactive learning experiences and skill development.

The absence of technological literacy exacerbates the digital divide within catering schools in Nigeria. Students who are proficient in using mobile technology may have a competitive advantage over their peers who lack such skills. This disparity in technological proficiency can widen socioeconomic gaps and hinder equal access to educational opportunities (Adebayo, 2022). Moreover, catering schools may face difficulties in implementing comprehensive training programs or workshops to enhance technological literacy among their faculty and students due to resource constraints and limited expertise in educational technology integration. Consequently, the inability to bridge the technological literacy gap inhibits the full potential of mobile technology to revolutionize teaching and learning experiences in catering schools, stifling innovation and hindering the development of a digitally literate workforce poised to thrive in the modern culinary landscape.

***Socio-cultural Factors and Resistance to Change:*** The socio-cultural landscape of Nigeria presents significant challenges to the seamless integration of mobile technology in catering schools. Nigeria's diverse cultural milieu encompasses a plethora of languages, traditions, and social norms, which greatly influence attitudes towards technology adoption. Nigeria's hierarchical societal structure often values traditional methods of learning and teaching over technological innovations. Many communities uphold deep-rooted beliefs that prioritize face-to-face interaction and tactile learning experiences, relegating mobile technology to a secondary role in educational settings (Igbineweka, 2019). Moreover, the prevalence of socio-economic disparities across the country exacerbates the digital divide, with marginalized populations lacking access to requisite mobile devices and internet connectivity. This digital inequity perpetuates educational disparities, hindering the widespread adoption of mobile technology in catering schools.

Furthermore, cultural perceptions surrounding gender roles in Nigeria contribute to the resistance against integrating mobile technology in catering schools. Traditional gender norms often dictate limited access to education and technology for girls and women, perpetuating inequalities in the acquisition of digital skills and knowledge. Deep-seated patriarchal structures undermine efforts to promote gender-inclusive technological advancements, stifling the potential of mobile technology to revolutionize catering education (Nwagwu, 2021). Additionally, prevailing cultural attitudes towards authority and institutional hierarchy impede the autonomy of educators to embrace innovative pedagogical approaches facilitated by mobile technology. The reluctance to deviate from

established teaching methodologies impedes the effective utilization of mobile devices as educational tools, constraining their integration into the curriculum of catering schools across Nigeria.

### **Measures to Address the Challenges against the Integration of Mobile Technology in Catering Schools**

Some of the measures which could be taken to address the challenges against the integration of mobile technology in catering schools include:

***Infrastructure Development:*** Infrastructure development plays a pivotal role in addressing the challenges hindering the integration of mobile technology in catering schools across Nigeria. Enhancing internet connectivity is paramount. Many regions in Nigeria still lack reliable internet access, which inhibits the effective utilization of mobile technology in educational settings. To tackle this, investing in expanding broadband infrastructure and implementing policies to ensure affordable and accessible internet services can significantly improve connectivity in catering schools (Edoja, 2020). Moreover, establishing Wi-Fi networks within schools can facilitate seamless access to online resources and educational materials, fostering a conducive environment for integrating mobile technology into the curriculum.

Upgrading physical infrastructure is essential to support the integration of mobile technology in catering schools. This includes equipping classrooms with modern facilities such as smart boards, projectors, and computer labs. Adequate power supply is also crucial,

as frequent power outages can disrupt teaching and learning activities reliant on mobile technology. Investing in alternative power sources like solar energy can mitigate this challenge and ensure uninterrupted access to technology-enabled education (Nwankwo, 2023). Additionally, providing students and teachers with access to devices like tablets or laptops and offering training programs to enhance digital literacy skills can empower them to effectively utilize mobile technology for learning purposes. By focusing on infrastructure development, Nigeria can overcome barriers to the integration of mobile technology in catering schools, fostering innovation and improving educational outcomes.

***Training and Capacity Building:*** Training stands as a pivotal measure in overcoming the challenges hindering the seamless integration of mobile technology in catering schools across Nigeria. Targeted training programs can address the technological knowledge gap prevalent among educators and students alike (Uwazie, 2022). By organizing workshops, seminars, and immersive training sessions, educators can familiarize themselves with the latest mobile technologies, applications, and digital platforms relevant to catering education. Through such initiatives, educators gain confidence in utilizing mobile tools effectively within their teaching methodologies, thereby enhancing the overall learning experience for students.

Capacity building emerges as a strategic imperative in surmounting the barriers obstructing the seamless integration of mobile technology within Nigerian catering schools. Investing in infrastructure upgrades and technological resources is essential to

bolstering the capacity of educational institutions to accommodate mobile technology integration effectively. This entails providing access to high-speed internet connectivity, acquiring compatible devices, and establishing digital laboratories equipped with culinary-specific software and applications (Udeaja, 2020). By enhancing the technological infrastructure of catering schools, stakeholders can create an enabling environment conducive to the seamless incorporation of mobile technology into culinary curricula.

***Curriculum Integration:*** Integrating mobile technology into the curriculum stands as a pivotal measure to counter the challenges hindering its adoption in Nigerian catering schools. Curriculum integration ensures that mobile technology becomes an organic part of the educational process rather than an optional addendum. By embedding mobile technology use within various subjects such as culinary arts, nutrition, and food safety, students not only become proficient in its usage but also grasp its practical applications within their field of study (Sowunmi, 2019). For instance, incorporating mobile apps for recipe management not only enhances students' culinary skills but also acquaints them with modern tools essential for success in the evolving culinary landscape. Moreover, by integrating mobile technology across subjects, educators can seamlessly blend theoretical knowledge with practical skills, fostering a holistic learning experience that mirrors real-world scenarios.

Curriculum integration serves as a catalyst for enhancing digital literacy among both students and educators. By systematically incorporating mobile technology into

lesson plans, educators are compelled to familiarize themselves with relevant apps, tools, and platforms, thereby bridging the digital divide prevalent in many educational settings (Babatunde, 2023). Through hands-on engagement with mobile devices, students cultivate critical thinking, problem-solving, and adaptability skills essential for navigating the digital age. Moreover, as mobile technology becomes deeply entrenched in the curriculum, students develop a sense of digital fluency that transcends the classroom, empowering them to leverage technology for lifelong learning and professional advancement. Thus, curriculum integration not only addresses the challenges hindering mobile technology adoption but also equips students with the digital competencies necessary for success in the modern catering industry.

### **Reviewed of Empirical Studies**

Studies conducted by scholars has shown the extent of application of mobile technology into teaching and learning activities in catering schools. Ikpigbi (2020) in a study investigated the extent of application of mobile technology into teaching and learning activities in catering schools in Osun state, Nigeria. A descriptive research design of survey type was adopted for the study. The sample consisted of 300 respondents from six randomly selected schools. A questionnaire on the extent of application of mobile technology into teaching and learning activities in catering schools was used to collect data. Expert judgments were used to ensure face and content validity. Test-retest method was used to determine the reliability and a reliability coefficient of 0.72 was obtained. Data collected were analyzed by using t-test. The result revealed that there is a low extent of

application of mobile technology into teaching and learning activities in catering schools in Osun state, Nigeria.

Binani (2020) carried out a study on the level of application of mobile technology into teaching and learning activities in catering schools in Zamfara state, Nigeria. The purpose of the study was to examine the level of application of mobile technology into teaching and learning activities in catering schools in Zamfara state. The study adopted a descriptive survey design. A sample of 180 respondents was used for the study. A structured questionnaire was used to collect data for the study. Data collected were analyzed using mean and standard deviation to answer the five research questions while t-test statistics was employed to test the two null hypotheses at 0.05 level of significance. The results of the study among others indicated that there is low level of application of mobile technology into teaching and learning activities in catering schools in Zamfara state, Nigeria.

Khalid (2020) carried out a study on extent of application of mobile technology into teaching and learning activities in catering schools in Ogun State, Nigeria. The purpose of the study was to ascertain extent of application of mobile technology into teaching and learning activities in catering schools in Ogun State. Five research questions and two null hypothesis guided the study. The study employed a descriptive survey design. A sample size of 160 respondents constituted the sample for the study. A 20 item questionnaire designed by the researchers was the major instrument used. Mean scores were used to

answer the research questions and the t-test was used to test the hypothesis at 0.05 level of significance were used for the data analysis. The results of the study among others revealed that there is a high extent of application of mobile technology into teaching and learning activities in catering schools in Ogun State.

Studies carried out by scholars has shown the impact of mobile technology integration in the learning experience of trainees in catering schools. Fakunmoju (2021) carried out his study on the impact of mobile technology integration in the learning experience of trainees in catering schools in Akwa Ibom state, Nigeria. This research work seeks to determine whether the impact of mobile technology integration in the learning experience of trainees in catering schools. Survey research design, proportionate random sampling, and research instrument such as the structured questionnaire were used. For data analysis, mean, frequency count, chart, and percentages were used. The study revealed that there is a significant impact of mobile technology integration in the learning experience of trainees in catering schools in Akwa Ibom state, Nigeria.

Uzuegbunam (2019) researched on the influence of mobile technology on teaching and learning activities in catering schools in Adamawa state, Nigeria. The survey research design was used for the study. The sample for this study comprised of 200 respondents gotten through the simple random sampling method. Structured questionnaire was the instrument used for data collection, and the instrument was face validated by three experts. Three research questions guided the study. The data were analyzed using percentages. The

result among other things revealed mobile technology constituted a significant factor influencing the teaching and learning activities in catering schools in Adamawa state, Nigeria.

Ogbomo (2020) carried out a study on the relationship between the use of mobile technology and the learning experience of trainees in catering schools in Asaba metropolis, Delta state, Nigeria. The researcher sought to examine the relationship between the use of mobile technology and the learning experience of trainees in catering schools. Five research questions were raised by the researcher to guide the study. The descriptive survey research design was used by the research while the simple random sampling technique was used by the researcher to draw out 115 respondents which constituted the sample size for the study. Structured questionnaire was the instrument used for data collection, and the instrument was face validated by two experts. The data were analyzed using percentages. It was found out that there was a significant relationship between the use of mobile technology and the learning experience of trainees in catering schools in Asaba metropolis, Delta state, Nigeria.

### **Summary of Literature Reviewed**

The theoretical framework for the study was hinged on the Constructivist Learning Theory. The theory is relevant to the study as it help offers insights into how mobile technology serves as a gateway to culinary knowledge, offering instant access to an array of recipes, cooking demonstrations, and cultural insights.

The literature reviewed critically examined the concepts of mobile technology and catering schools. As seen from the reviewed of literature, mobile technology refers to technology that is designed to be portable and used while on the move. Catering schools on the other hand refer to educational institutions that offer training and coursework in the field of catering and hospitality. It could be seen from the reviewed of literature that there is low extent of application of mobile technology into teaching and learning activities in catering schools.

The literature reviewed also examined influence of mobile technology integration in the learning experience of trainees in catering schools. It could be seen from the reviewed of literature that with the advent of smartphones, tablets, and other portable devices, trainees now have unprecedented access to a vast array of educational resources at their fingertips which transcends the confines of traditional classrooms, empowering trainees to explore diverse culinary techniques, recipes, and cultural cuisines from around the globe.

The literature reviewed further examined constraints to the effective integration of mobile technology in catering schools. Some of the constraints to the effective integration of mobile technology in catering schools as highlighted in the literature reviewed include infrastructure limitations, financial constraints, lack of digital literacy, socio-cultural factors and resistance to change. Some of the measures which could be taken to address the challenges against the integration of mobile technology in catering schools include infrastructure development, training and capacity building and curriculum integration.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter contained the methods employed by the researcher in carrying out the study under the following subheadings:

- Research Design
- Population of the Study
- Sample and Sampling Technique
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

#### **Research Design**

The research design adopted for this study is the descriptive survey research design. The descriptive survey is a design that collects data on a given population, and describes the data in a systematic manner pointing out the characteristic features or facts about that population. This design is considered suitable for this study as it helped to collect data to investigate on the impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis, Edo State.

## **Population of the Study**

The population of this study was made up of all trainees in 10 catering schools in Benin Metropolis, Edo State.

## **Sample and Sampling Technique**

The sample size for the study was made up of 100 trainees which were randomly selected from the 10 catering schools in Benin Metropolis. Using the simple random sampling technique, 10 trainees each were selected from the 10 catering schools in Benin Metropolis, thus making a total sample size of 100 respondents.

## **Research Instrument**

The instrument which was used for the data collection is a structured questionnaire titled “Impact of Mobile Technology Integration in the Learning Experience of Trainees in Catering Schools Questionnaire (IMTILETCSQ)”. The questionnaire was divided into two sections, A and B. Section A focuses on the demographic or personal data of the respondent while section B contains information which bothers on the problem of this research. The questionnaire consisted of 4-point Likert scale response of Strongly agree (SA), Agreed (A), Disagree (D), Strongly Disagree (SD).

## **Validity of the Instrument**

The questionnaire designed by the researcher was presented to the project supervisor to cross check for content validity. The supervisor’s opinion and observation was incorporated into the instrument before it was administered to the respondents.

### **Reliability of the Instrument**

The test re-test method was used to determine the reliability of the instrument. The questionnaire was administered to a group of 10 respondents which did not constitute part of the study. The instruments were given to the students to fill and the data obtained were analyzed using Pearson's Product Moment Correlation Coefficient. A reliability coefficient of 0.87 was obtained, indicating that the instrument is reliable for the study.

### **Method of Data Collection**

The questionnaire was administered by the researcher to the respondents. The researcher offered information to the respondents on how they should fill their questionnaires and also waited to collect back the filled questionnaires from the respondents after they have answered the questions.

### **Method of Data Analysis**

In analyzing the data, the researcher made use of frequency count and simple percentage to compute the findings of the study.

## CHAPTER FOUR

### PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter presents the analysis of data and the presentation of results. The data are presented in tables and are arranged according to the order of the research questions raised in the study.

**Research Question 1:** What is the extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis?

**Table 1:** Distribution of responses on the extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis

S/N	Items	Total No of respondents	Agree	%	Disagree	%	Remarks
1.	Catering school often utilize mobile technology to create interactive coking tutorials for their students	100	39	39	61	61	Low
2.	Catering school often develop their own mobile application where trainees can access lecture notes, assignment and other course materials	100	22	22	78	78	Low
3.	Catering school often implement virtual kitchen simulations and cooking games that students on their mobile devices to practice culinary skills	100	19	19	81	81	Low
4.	Catering school often offer access to online recipe databases or cooking apps where students can explore new recipes	100	33	33	67	67	Low
5.	Catering school regularly organize workshops or training session for their students to learn how to effectively utilize mobile technology for culinary education	100	46	46	54	54	Low

The analysis of data in the above table revealed that under item 1, 39% of the sampled respondents agreed on the notion that catering school often utilize mobile technology to create interactive coking tutorials for their students while 61% of the sampled respondents held the contrary view. Under item 2, 22% of the sampled respondents agreed on the notion that catering school often develop their own mobile application where trainees can access lecture notes, assignment and other course materials while 78% of the sampled respondents held the contrary opinion. Under item 3, 19% of the sampled respondents agreed on the notion that catering school often implement virtual kitchen simulations and cooking games that students on their mobile devices to practice culinary skills while 81% of the sampled respondents held the contrary view. Under item 4, 33% of the sampled respondents agreed on the notion that catering school often offer access to online recipe databases or cooking apps where students can explore new recipes while 67% of the sampled respondents held the contrary view. Under item 5, 46% of the sampled respondents agreed on the notion that catering school regularly organize workshops or training session for their students to learn how to effectively utilize mobile technology for culinary education while 54% of the sampled respondents held the contrary view.

The analysis of data in the above table therefore implies that there is low extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis.

**Research Question 2:** What is the influence of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis?

**Table 2:** Distribution of responses on the influence of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis

S/N	Items	Total No of respondents	Agree	%	Disagree	%	Remarks
1.	Mobile technology integration often help provide trainees with engaging and personalized learning experiences	100	91	91	9	9	Agreed
2.	Mobile technology integration often help trainees to practice cooking techniques and understand culinary concepts at their own pace	100	89	89	11	11	Agreed
3.	Mobile technology integration can help trainees access vast array of culinary resources such as cooking tutorials and videos	100	93	93	7	7	Agreed
4.	Mobile technology integration can help enhances trainees learning and provide with inspiration and guidance on culinary activities	100	87	87	13	13	Agreed
5.	Mobile technology integration can help provide virtual cooking labs where trainees can virtually experiment with ingredients and practice cooking techniques	100	94	94	6	6	Agreed

The analysis of data in the above table revealed that under item 1, 91% of the sampled respondents agreed on the notion that mobile technology integration often help provide trainees with engaging and personalized learning experiences while 9% of the sampled respondents held the contrary opinion. Under item 2, 89% of the sampled respondents agreed on the notion that mobile technology integration often help trainees to practice cooking techniques and understand culinary concepts at their own pace while 11% of the sampled respondents held the contrary view. Under item 3, 93% of the sampled respondents agreed on the notion that mobile technology integration can help trainees access vast array of culinary resources such as cooking tutorials and videos while 7% of the sampled respondents held the contrary view. Under item 4, 87% of the sampled respondents agreed on the notion that mobile technology integration can help enhances trainees learning and provide with inspiration and guidance on culinary activities while 13% of the sampled respondents held the contrary opinion. Under item 5, 94% of the sampled respondents agreed on the notion that mobile technology integration can help provide virtual cooking labs where trainees can virtually experiment with ingredients and practice cooking techniques while 6% of the sampled respondents held the contrary view.

The analysis of data on the above table therefore implies that there is a significant influence of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis.

**Research Question 3:** What are the constraints to the effective integration of mobile technology in the catering schools in Benin Metropolis?

**Table 3:** Distribution of responses on the constraints to the effective integration of mobile technology in the catering schools in Benin Metropolis

S/N	Items	Total No of respondents	Agree	%	Disagree	%	Remarks
1.	Infrastructure limitations can constitute a constraint to the effective integration of mobile technology in the catering schools	100	94	94	6	6	Agreed
2.	Financial constraints may constitute a problem to the effective integration of mobile technology in the catering schools	100	97	97	3	3	Agreed
3.	Lack of digital literacy can constitute a constraint to the effective integration of mobile technology in the catering schools	100	88	88	12	12	Agreed
4.	Socio-cultural factors may constitute a constraint to the effective integration of mobile technology in the catering schools	100	77	77	23	23	Agreed
5.	Limited technical support can constitute a constraint to the effective integration of mobile technology in the catering schools	100	84	84	16	16	Agreed

The analysis of data in the above table revealed that under item 1, 94% of the sampled respondents agreed on the notion that infrastructure limitations can constitute a constraint to the effective integration of mobile technology in the catering schools while 6% of the sampled respondents held the contrary view. Under item 2, 97% of the sampled

respondents agreed on the notion that financial constraints may constitute a problem to the effective integration of mobile technology in the catering schools while 3% of the sampled respondents held the contrary view. Under item 3, 88% of the sampled respondents agreed on the notion that lack of digital literacy can constitute a constraint to the effective integration of mobile technology in the catering schools while 12% of the sampled respondents held the contrary view. Under item 4, 77% of the sampled respondents agreed on the notion that socio-cultural factors may constitute a constraint to the effective integration of mobile technology in the catering schools while 23% of the sampled respondents held the contrary opinion. Under item 5, 84% of the sampled respondents agreed on the notion that limited technical support can constitute a constraint to the effective integration of mobile technology in the catering schools while 16% of the sampled respondents held the contrary view.

The analysis of data in the above table therefore implies that the constraints to the effective integration of mobile technology in the catering schools in Benin Metropolis include infrastructure limitations, financial constraints, lack of digital literacy and socio-cultural factors and limited technical support.

**Research Question 4:** What are some measures which could be taken to address the challenges against the integration of mobile technology in catering schools in Benin Metropolis?

**Table 4:** Distribution of responses on measures to address the challenges against the integration of mobile technology in catering schools in Benin Metropolis

S/N	Items	Total No of respondents	Agree	%	Disagree	%	Remarks
1.	Infrastructure development may constitute a measure to address the challenges against the integration of mobile technology in catering schools	100	92	92	8	8	Agreed
2.	Training and capacity building can constitute a measure to address the challenges against the integration of mobile technology in catering schools	100	86	86	14	14	Agreed
3.	Curriculum integration may constitute a measure to address the challenges against the integration of mobile technology in catering schools	100	94	94	6	6	Agreed
4.	Digital content development can constitute a measure to address the challenges against the integration of mobile technology in catering schools	100	82	82	18	18	Agreed
5.	Technical support services may constitute a measure to address the challenges against the integration of mobile technology in catering schools	100	91	91	9	9	Agreed

The analysis of data in the above table revealed that under item 1, 92% of the sampled respondents agreed on the notion that infrastructure development may constitute a measure to address the challenges against the integration of mobile technology in catering schools while 8% of the sampled respondents held the contrary view. Under item 2, 86% of the

sampled respondents agreed on the notion that training and capacity building can constitute a measure to address the challenges against the integration of mobile technology in catering schools while 14% of the sampled respondents held the contrary opinion. Under item 3, 94% of the sampled respondents agreed on the notion that curriculum integration may constitute a measure to address the challenges against the integration of mobile technology in catering schools while 6% of the sampled respondents held the contrary view. Under item 4, 82% of the sampled respondents agreed on the notion that digital content development can constitute a measure to address the challenges against the integration of mobile technology in catering schools while 18% of the sampled respondents held the contrary view. Under item 5, 91% of the sampled respondents agreed on the notion that technical support services may constitute a measure to address the challenges against the integration of mobile technology in catering schools while 9% of the sampled respondents held the contrary opinion.

The analysis of data in the above table therefore implies that some measures which could be taken to address the challenges against the integration of mobile technology in catering schools in Benin Metropolis include infrastructure development, training and capacity building, curriculum integration, digital content development and technical support services.

## **Discussion of Findings**

The findings of the study in research question one revealed that there is low extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis. This is in line with Ikpigbi (2020) who found out in his study that there is a low extent of application of mobile technology into teaching and learning activities in catering schools. Also supporting the findings, Binani (2020) found out that there is low level of application of mobile technology into teaching and learning activities in catering schools.

The findings of the study in research question two shows that there is a significant influence of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis. This is in consonance with Dieberuo (2020) who asserted that mobile technology integration have empowered trainees to explore diverse culinary techniques, recipes, and cultural cuisines from around the globe. Similarly, Fakunmoju (2021) found out that there is a significant impact of mobile technology integration in the learning experience of trainees in catering schools.

The findings of the study in research question three indicated that the constraints to the effective integration of mobile technology in the catering schools in Benin Metropolis include infrastructure limitations, financial constraints, lack of digital literacy and socio-cultural factors and limited technical support. In collaboration with the findings, Ogbuabor (2020) found out in his study that infrastructure limitations constitute formidable barriers

to the effective integration of mobile technology within catering schools across Nigeria. Also supporting the findings, Fashagba (2021) found out that catering schools, especially those in rural or underserved areas, often struggle to secure adequate funding to meet basic operational needs, let alone invest in technological advancements

The findings of the study in research question four revealed that some measures which could be taken to address the challenges against the integration of mobile technology in catering schools in Benin Metropolis include infrastructure development, training and capacity building, curriculum integration, digital content development and technical support services. In support of the findings, Edoja (2020) found out that infrastructure development plays a pivotal role in addressing the challenges hindering the integration of mobile technology in catering schools across. Also supporting the findings, Uwazie (2022) found out that targeted training programmes can address the technological knowledge gap prevalent among educators and trainees in catering schools.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### Summary

The study investigated the impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis, Edo State. To achieve the purpose of the study, four research questions were raised and examined. The sample size for the study was made up of 100 trainees which were randomly selected from the 10 catering schools in Benin Metropolis. Using the simple random sampling technique, 10 trainees each were selected from the 10 catering schools in Benin Metropolis, thus making a total sample size of 100 respondents

The instrument that was used for the data collection is a structured questionnaire designed by the researcher titled “Impact of Mobile Technology Integration in the Learning Experience of Trainees in Catering Schools Questionnaire (IMTILETCSQ)”. The questionnaire consisted of 4-point Likert scale response of Strongly agree (SA), Agreed (A), Disagree (D), Strongly Disagree (SD). The constructed questionnaire for the study was presented to the project supervisor to confirm for content validity. The questionnaire was the instrument for data collection. The descriptive survey research design was adopted for the study. An analysis of data was done using frequency count and percentage.

## **Findings of the research**

Findings from the study include:

- That there is low extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis.
- That there is a significant impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis.
- That the constraints to the effective integration of mobile technology in the catering schools in Benin Metropolis include infrastructure limitations, financial constraints, lack of digital literacy and socio-cultural factors and limited technical support.
- That some measures which could be taken to address the challenges against the integration of mobile technology in catering schools in Benin Metropolis include infrastructure development, training and capacity building, curriculum integration, digital content development and technical support services.

## **Conclusion**

The study investigated the impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis, Edo State. Based on the findings of the study, the researcher concluded that there is a significant impact of mobile technology integration in the learning experience of trainees in catering schools in Benin Metropolis. It was also concluded that there is low extent of application of mobile technology into teaching and learning activities in catering schools in Benin Metropolis

and that the constraints to the effective integration of mobile technology in the catering schools in Benin Metropolis include infrastructure limitations, financial constraints, lack of digital literacy and socio-cultural factors and limited technical support.

## **Recommendations**

Based on the findings and conclusion drawn, the following recommendations were put forward:

1. Catering schools should integrate mobile technology seamlessly into the catering school curriculum by aligning it with learning objectives, competencies, and industry standards.
2. There should be collaboration between the government and catering schools to invest in the development of robust infrastructure to support the integration of mobile technology in catering schools. This should include ensuring reliable internet connectivity, access to devices such as tablets or laptops, and the availability of technical support services.
3. Catering schools should provide comprehensive training and capacity-building programmes for instructors, administrators, and support staff to effectively leverage mobile technology in teaching and learning. They should offer workshops, certification courses, and professional development opportunities focused on pedagogical strategies, technical skills, and instructional design principles tailored to mobile-assisted learning.

4. Catering schools should develop customized training programmes that incorporate mobile technology to meet the diverse learning needs of trainees in catering schools. These programs should leverage mobile apps, interactive modules, and multimedia resources to enhance engagement and knowledge retention.
5. Catering schools should implement robust assessment and feedback mechanisms to monitor the impact of mobile technology on the learning experience of trainees.

## REFERENCES

- Adebayo, I. A. (2022). Constraints to the effective integration of ICT in Nigerian educational system. *Journal of Information and Knowledge Management*, 2(1), 45-54.
- Ajiboye, S. A. (2021). Enhancing Teaching and Learning Processes with Mobile Technology: A Case Study of Nigerian Secondary Schools. *Journal of Educational Technology Systems*, 4(3), 298-312.
- Akinola, C. O. (2019). Enhancing Culinary Education in Nigeria: The Role of Catering Schools. *Journal of Hospitality & Tourism Education*, 2(3), 256-271.
- Aliyu, R. S. (2021). Mobile Payment Systems and Financial Inclusion in Nigeria: A Case Study of Lagos State. *Journal of Financial Technology and Innovation*, 5(2), 67-79.
- Aluko, Y. (2020). Adoption of Mobile Technology for Agricultural Extension Services: A Case Study of Northern Nigeria. *Journal of Agricultural Extension and Rural Development Studies*, 5(2), 45-56.
- Anyanwu, O. P. (2021). Mobile Learning Technologies and Academic Performance: Evidence from Nigerian Universities. *Journal of Educational Technology*, 1(2), 87-101.
- Amokachi, C. F. (2022). Mobile Banking Adoption in Nigeria: The Role of Perceived Usefulness and Trust. *Journal of Banking and Financial Issues*, 3(1), 112-126.
- Ayoola, C. K. (2022). Mobile Technology Integration in Higher Education: A Case Study of Nigerian Universities. *Journal of Information Technology Education*, 1(4), 93-109.
- Babatunde, E. O. (2023). Teachers' Attitudes Towards the Integration of Mobile Technology in Catering Education: A Case Study of Technical Colleges in Kwara State. *International Journal of Vocational Education and Training Research*, 3(1), 67-82.
- Binani, I. P. (2020). Level of application of mobile technology into teaching and learning activities in catering schools in Zamfara state. *Journal of Research in National Development*, 1(1), 96-105.
- Chukwuemeka, S. S. (2022). Challenges of integrating information and communication technology into education in Nigeria. *International Journal of Education, Learning and Development*, 7(1), 12-23.

- Dieberuo, E. J. (2020). The Impact of Mobile Technology on Teaching and Learning in Nigerian Tertiary Institutions. *International Journal of Education and Information Studies*, 6(2), 23-35.
- Edoja, T. O. (2020). Challenges of Information and Communication Technology (ICT) Facilities Utilization in Catering and Hotel Management Programmes in Tertiary Institutions in Osun State. *International Journal of Research in Education and Sustainable Development*, 1(2), 18-31.
- Fashagba, O. D. (2021). The impact of digital divide on educational performance in Nigeria: Implications for policy implementation. *International Journal of Educational Administration and Policy Studies*, 9(5), 62-73.
- Fakunmoju, H. K. (2021). Impact of mobile technology integration in the learning experience of trainees in catering schools in Akwa Ibom state. *Journal of Vocational Education Research*, 2(1), 56-68.
- Gbadegesin, C. E. (2020). Adoption of mobile learning in Nigerian higher education institutions: Opportunities and challenges. *International Journal of Social and Management Sciences*, 4(2), 17-28.
- Ibeh, G. C. (2023). Mobile Commerce Adoption among SMEs in Nigeria: A Study of Factors Influencing Usage Behavior. *Journal of Business Management*, 2(1), 18-30.
- Ikpigbi, E. C. (2020). Extent of application of mobile technology into teaching and learning activities in catering schools in Osun state. *Journal of Education and Learning*, 2(1), 60-69.
- Igbineweka, O. N. (2019). Privacy concerns in mobile learning: A case study of Nigerian higher education. *Journal of Information Security Research*, 2(3), 78-87.
- Jegede, A. E. (2020). Entrepreneurial Skills Development in Catering Schools: A Case Study of Southwestern Nigeria. *International Journal of Vocational Education and Training Research*, 4(2), 15-26.
- Khalid, T. G. (2020). Extent of application of mobile technology into teaching and learning activities in catering schools in Ogun State. *Global Journal of Human-Social Science*, 1(4), 35-44.
- Nnamdi, F. G. (2021). Mobile Health Technology Adoption and Usage among Healthcare Professionals in Nigeria. *Journal of Health Informatics in Africa*, 6(1), 78-92.

- Nwagwu, W. O. (2021). Security challenges of mobile learning in Nigerian universities. *International Journal of Computer Applications*, 1(3), 15-21.
- Nwankwo, I. A. (2023). Impact of Information and Communication Technology (ICT) on the Teaching and Learning of Catering and Hotel Management in Nigeria. *Journal of Education, Society and Behavioural Science*, 2(3), 1-11.
- Ogbomo, J. B. (2020). Relationship between the use of mobile technology and the learning experience of trainees in catering schools in Asaba metropolis, Delta state. *International Journal of Culinary Science and Technology*, 4(3), 78-91.
- Ogbuabor, S. A. (2020). Digital divide and education in Nigeria: Implications for sustainable national development. *Journal of Education and Learning*, 1(2), 37-46.
- Ojukwu, I. F. (2019). Digital divide and its implications for sustainable development in Nigeria. *International Journal of Information Technology and Electrical Engineering*, 2(5), 8-16.
- Olorunsola, A. O. (2019). Mobile learning technologies in Nigerian universities: Challenges and prospects. *Journal of Education and Practice*, 1(2), 100-108.
- Oshokwue, B. K. (2021). Mobile Learning Technologies and Educational Outcomes: A Study of Nigerian Polytechnics. *International Journal of Learning, Teaching and Educational Research*, 20(5), 120-134.
- Oaikhena, O. M. (2019). Quality Assurance in Culinary Education: Perspectives from Nigerian Catering Schools. *Journal of Quality Assurance in Hospitality & Tourism*, 1(4), 356-370.
- Oni, T. B. (2019). Impact of Mobile Technology on Small and Medium Enterprises (SMEs) in Nigeria: A Case Study of Lagos State. *Journal of Entrepreneurship and Innovation*, 3(2), 30-42.
- Sowunmi, O. (2019). Enhancing the Quality of Catering Education through Mobile Technology: Challenges and Opportunities. *Journal of Hospitality, Tourism and Culinary Arts*, 1(3), 20-35.
- Udeaja, A. O. (2020). Assessing the Readiness of Catering Schools for Mobile Technology Integration: A Case Study of Selected Schools in Lagos State. *Journal of Educational Technology and Research*, 7(2), 45-56.
- Umoh, A. K. (2020). Mobile Technology Adoption in Nigerian Agriculture: Opportunities and Challenges. *Journal of Agricultural Technology and Innovation*, 4(3), 55-68.

- Usman, O. O. (2022). Trends and Challenges in Catering Education: A Case Study of Selected Schools in Lagos State, Nigeria. *African Journal of Hospitality, Tourism, and Leisure*, 2(2), 21-32.
- Uwazie, O. O. (2022). Utilization of Mobile Phones for Teaching and Learning: A Panacea for Enhancing Productivity of Catering Teachers in Technical Colleges in Oyo State, Nigeria. *Journal of Vocational and Technical Education*, 1(1), 90-104.
- Uzuegbunam, K. O. (2019). Influence of mobile technology on teaching and learning activities in catering schools in Adamawa state. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 2(4), 56-67.

**DEPARTMENT OF ADULT AND NON-FORMAL EDUCATION**  
**FACULTY OF EDUCATION**  
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**IMPACT OF MOBILE TECHNOLOGY INTEGRATION IN THE LEARNING  
EXPERIENCE OF TRAINEES IN CATERING SCHOOLS QUESTIONNAIRE  
(IMTILETCSQ)**

**Section A: Demographic Data**

Sex: Male ( ) Female ( )

**Section B: Data on Questionnaire**

Indicate the extent to which you agree or disagree with the following statements.

Key: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)

S/N	ITEMS	SA	A	D	SD
	<b>Extent Of Application Of Mobile Technology Into Teaching And Learning Activities In Catering Schools</b>				
1.	Catering school often utilize mobile technology to create interactive coking tutorials for their students				
2.	Catering school often develop their own mobile application where trainees can access lecture notes, assignment and other course materials				
3.	Catering school often implement virtual kitchen simulations and cooking games that students on their mobile devices to practice culinary skills				
4.	Catering school often offer access to online recipe databases or cooking apps where students can explore new recipes				
5.	Catering school regularly organize workshops or training session for their students to learn how to effectively utilize mobile technology for culinary education				
	<b>Influence of Mobile Technology Integration in the Learning Experience of Trainees in Catering Schools</b>				
6.	Mobile technology integration often help provide trainees with engaging and personalized learning experiences				

7.	Mobile technology integration often help trainees to practice cooking techniques and understand culinary concepts at their own pace				
8.	Mobile technology integration can help trainees access vast array of culinary resources such as cooking tutorials and videos				
9.	Mobile technology integration can help enhances trainees learning and provide with inspiration and guidance on culinary activities				
10.	Mobile technology integration can help provide virtual cooking labs where trainees can virtually experiment with ingredients and practice cooking techniques				
	<b>Constraints to the Effective Integration of Mobile Technology in the Catering Schools</b>				
11.	Infrastructure limitations can constitute a constraint to the effective integration of mobile technology in the catering schools				
12.	Financial constraints may constitute a problem to the effective integration of mobile technology in the catering schools				
13.	Lack of digital literacy can constitute a constraint to the effective integration of mobile technology in the catering schools				
14.	Socio-cultural factors may constitute a constraint to the effective integration of mobile technology in the catering schools				
15.	Limited technical support can constitute a constraint to the effective integration of mobile technology in the catering schools				
	<b>Measures to Address the Challenges against the Integration of Mobile Technology in Catering Schools</b>				
16.	Infrastructure development may constitute a measure to address the challenges against the integration of mobile technology in catering schools				
17.	Training and capacity building can constitute a measure to address the challenges against the integration of mobile technology in catering schools				
18.	Curriculum integration may constitute a measure to address the challenges against the integration of mobile technology in catering schools				
19.	Digital content development can constitute a measure to address the challenges against the integration of mobile technology in catering schools				
20.	Technical support services may constitute a measure to address the challenges against the integration of mobile technology in catering schools				