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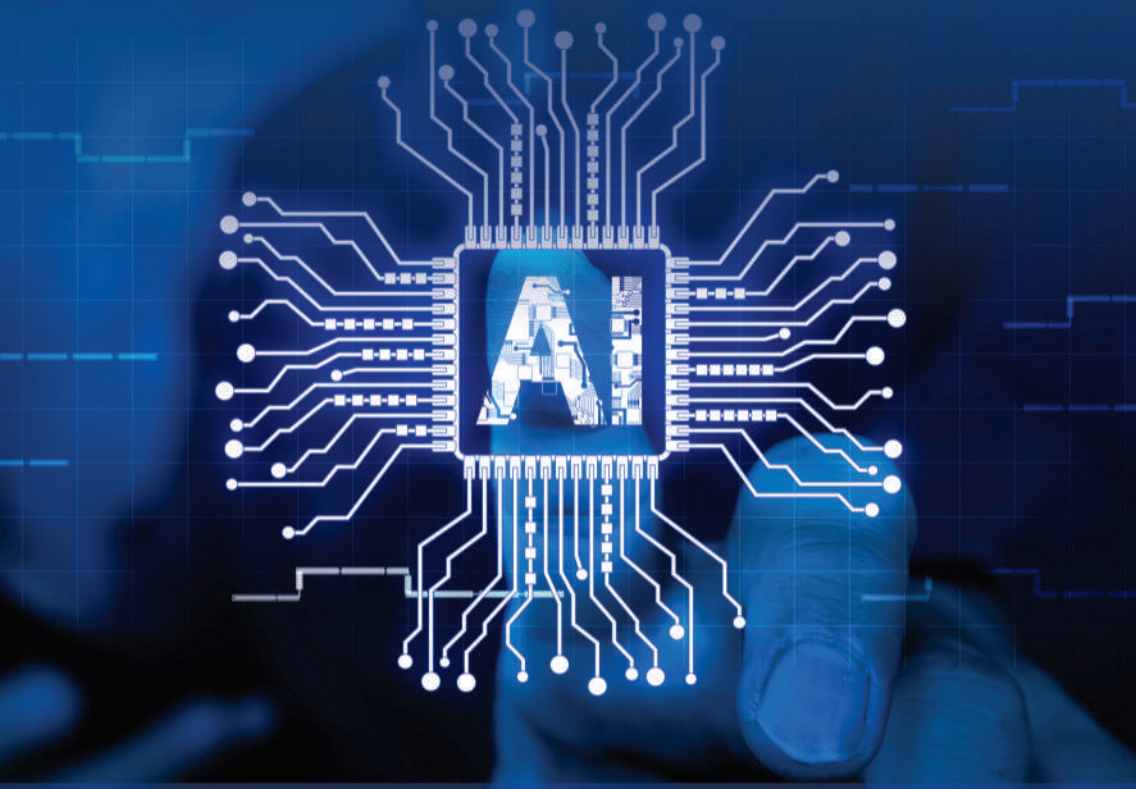
The Integration of ARTIFICIAL INTELLIGENCE AND DIGITAL PLATFORMS

for Innovative Learning Spaces in Future Education



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This book presents a comprehensive and insightful exploration of Artificial Intelligence and digital platforms for innovative learning spaces in future education are revolutionizing education in the 21st century. The collection brings together diverse voices from scholars and practitioners who examine the theoretical foundations and practical applications of emerging technologies in learning environments. The chapters delve into a wide range of topics, including the use of WhatsApp voice notes for enhancing speaking practice, adaptive learning systems for gifted students, AI in professional development, and the ethical use of plagiarism detection tools.

Through empirical research, classroom case studies, and pedagogical reflections, the book demonstrates AI-powered tools such as intelligent tutoring systems, real-time feedback apps, and virtual 3D classrooms can personalize learning, foster inclusivity, and enhance learner engagement. It critically addresses challenges such as digital equity, data privacy, and teacher readiness, emphasizing that technology must support rather than replace human centered pedagogy.

Each chapter encourages educators, administrators, and policymakers to consider thoughtful, ethical, and collaborative strategies for integrating AI into their practice. Ultimately, this volume contributes to reimagining education as inclusive, adaptive, and future ready, where learners are empowered to thrive in an increasingly digital world.

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FOREWORD

Alhamdulillah, praise be to Allah SWT, whose endless grace, compassion, and blessings have granted us the strength and well-being to complete and proudly present this book entitled The Integration of Artificial Intelligence and Digital Platforms for Innovative Learning Spaces in Future Education. The convergence of Artificial Intelligence (AI) and digital platforms is not only reshaping how knowledge is disseminated but also redefining the roles of educators, learners, and institutions. As such, the book chapters compiled in this volume provide a timely and critical exploration of how AI and digital media intersect to create innovative learning environments that respond to the demands of 21st-century education.

This collection serves as a platform for educators, researchers, and technologists to articulate their experiences, insights, and research findings in navigating the educational challenges and opportunities presented by digitalization. From the use of WhatsApp voice notes in enhancing speaking skills to the application of AI for professional development and the theoretical exploration of plagiarism detection, each chapter offers a unique contribution to the ongoing discourse on technology enhanced learning.

This book particularly valuable is its grounding in empirical practices and real-world applications, especially within the Indonesian higher education context. Beyond share both theoretical frameworks and practical interventions, presenting case studies, classroom-based experiments, and pedagogical innovations that reflect local relevance with global significance. The editors have curated a diverse range of topics, all united by a shared vision: to empower learners and educators through meaningful integration of digital tools and AI. This aligns with broader educational goals to foster critical thinking, communication, collaboration, and creativity the core competencies necessary for thriving in a digital world.

We hope that this book serves as both a resource and an inspiration. For educators, it offers actionable strategies and reflective insights. For policymakers and administrators, it underscores the importance of supporting technological integration in a purposeful and equitable manner. For researchers, it opens avenues for further inquiry into the evolving interplay between technology, pedagogy, and learning outcomes.

As we stand at the threshold of a new educational era, this compilation reminds us that the most impactful innovations are those that keep human needs specially the needs of learners at the center of technological progress. May this book contribute to ongoing efforts to make education more inclusive, dynamic, and future ready.

Makassar, July 6, 2025

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PREFACE

This book explores the integration of artificial intelligence and digital platforms for innovative learning spaces in future education. It offers a comprehensive exploration of how AI and digital technologies are reshaping education in the 21st century. Through diverse chapters grounded in both empirical and theoretical frameworks, this volume highlights the transformative potential of tools like WhatsApp, adaptive learning systems, AI-powered feedback, virtual 3D classrooms, and plagiarism detection technologies. Each contribution illustrates how these innovations enhance teaching effectiveness, personalize learning experiences, and support inclusive educational practices. At the same time, the book does not shy away from critical challenges, such as digital equity, ethical data use, and teacher preparedness. The authors emphasize that technology must serve as a complement not a substitute for human-centered pedagogy. Overall, the collection calls for collaborative, thoughtful integration of AI and digital platforms, with a clear focus on empowering educators and learners alike to thrive in dynamic, future-ready learning environments.

Unit 1 explores about the integration of digital conversation through platforms like WhatsApp voice notes has significantly enriched EFL speaking practice by creating flexible, interactive, and learner-centered environments. WhatsApp enables both synchronous and asynchronous communication, allowing students to engage in authentic language use at their own pace while reducing speaking anxiety. Its multimodal features such as voice messages, text, and multimedia sharing enhance learner engagement, collaboration, and fluency development. This digital approach not only supports personalized speaking practice but also fosters meaningful teacher-student and peer-to-peer interaction. When guided by clear pedagogical goals and digital etiquette, WhatsApp voice notes emerge as an effective and inclusive tool that transforms traditional speaking instruction into a dynamic, reflective, and empowering learning experience.

Unit 2 explains about fast-evolving professional landscape, continuous learning and adaptability are vital for both individual and organizational success. This chapter underscores the importance of lifelong learning and highlights how AI tools and digital platforms offer flexible, personalized, and scalable opportunities for professional development. By adopting clear strategies such as setting goals, leveraging online resources, seeking mentorship, and engaging in professional communities' educators and professionals can remain competitive and resilient. Furthermore, organizations play a crucial role by fostering a culture that values growth, invests in training, and supports innovation through technology. When both individuals and institutions commit to ongoing development, they build the foundation for a dynamic, skilled, and future-ready workforce capable of thriving amid constant change.

Unit 3 describes about in the digital era, plagiarism detection has evolved into a multifaceted discipline that blends information retrieval, computational linguistics, machine learning, and educational psychology to uphold academic integrity and foster ethical scholarship. As plagiarism becomes increasingly sophisticated ranging from verbatim copying to paraphrasing, translation, and idea-based appropriation modern detection tools must move beyond surface-level comparison to semantic and stylistic analysis. While advanced technologies such as AI and NLP enhance detection accuracy, their success lies in aligning with pedagogical goals: supporting students' learning through formative feedback and cultivating awareness of ethical academic practices. Ultimately, effective plagiarism detection systems not only enforce standards but also promote intellectual honesty and responsible authorship in a knowledge-driven society.

Unit 4 explores about language learning in the 21st century demands a shift from traditional, one-size-fits-all approaches to more flexible, multimodal, and learner-centered pedagogies that reflect the realities of globalization, technological innovation, and linguistic diversity. Contemporary methods such as CLT, TBLT, CLIL, and translanguaging empower learners to communicate

meaningfully while affirming their cultural identities. However, challenges such as unequal access to technology and the dominance of English must be addressed through inclusive and context-aware strategies. Innovations like AI, mobile learning, VR, and social media offer new opportunities for personalized and immersive learning, while pedagogical priorities including engagement, autonomy, cultural responsiveness, and formative assessment ensure that language education remains equitable and relevant. Ultimately, successful language learning in this era equips learners not only with linguistic competence but also with the confidence and critical awareness needed to participate fully in diverse, global communities.

Unit 5 describes about adaptive learning represents a transformative approach in modern education, particularly in addressing the diverse needs of gifted and talented students by personalizing instruction based on individual learning styles, strengths, and challenges. Leveraging advanced technologies, including artificial intelligence and data analytics, adaptive learning systems enable more accurate feedback, tailored curriculum, and dynamic instructional strategies that enhance student engagement and academic outcomes. Despite its vast potential, the successful implementation of adaptive learning faces significant hurdles such as infrastructure limitations, privacy concerns, educator readiness, and the need for continuous research in real-world classroom contexts. However, with strategic investment, inclusive policies, and professional development, adaptive learning can bridge educational disparities, empower students across ability levels, and pave the way for more equitable, responsive, and future-ready learning environments.

Unit 6 explores about managing English language classrooms requires more than enforcing discipline it demands cultivating an inclusive, engaging, and supportive learning environment where students feel confident using the language. In ESL/EFL settings like Indonesia, teachers face multifaceted challenges, including limited resources, lack of training, varied student proficiency levels, and psychological barriers. However, with well-structured classroom

management strategies such as cooperative learning, communication-based activities, and consistent routines educators can enhance student motivation and learning outcomes. Success in this domain depends on equipping teachers with both pedagogical and interpersonal skills through ongoing professional development and institutional support, ensuring classrooms become spaces where language learning thrives.

Unit 7 explains about artificial intelligence (AI) plays a transformative role in shaping connected campuses by seamlessly integrating digital systems, enhancing operational efficiency, and personalizing the learning experience. Through the synergy of AI and Internet of Things (IoT) technologies, campuses evolve into intelligent ecosystems where academic administration, energy management, security, and instructional delivery are optimized in real time. AI enables educators to deliver tailored instruction based on individual learning needs, while simultaneously reducing staff workloads through automation of routine tasks. It also supports distance and hybrid learning, enhances campus safety through smart surveillance, and fosters data-driven decision-making. As higher education embraces digital transformation, the successful implementation of AI requires strategic collaboration, ethical considerations, and ongoing innovation to create inclusive, adaptive, and future-ready educational environments.

Unit 8 explores about the use of Google Docs significantly enhances collaborative learning in online educational settings by offering real-time document editing, accessibility across devices, and features that foster active participation among students. Its integration with other Google platforms makes it a comprehensive tool for managing academic tasks, facilitating peer feedback, and supporting teamwork, regardless of physical location. While challenges such as internet dependency, unequal participation, and limited digital literacy remain, these can be addressed through structured guidance, role division, and supportive institutional policies. Ultimately, Google Docs not only improves the technical efficiency of group work but also cultivates essential soft skills such

as communication, responsibility, and digital collaboration among learners.

Unit 9 explains about Artificial Intelligence (AI) has demonstrated remarkable potential as a real-time speaking coach in Indonesian universities, revolutionizing how students engage with language learning. Through voice recognition, pronunciation assessment, and interactive simulations, AI empowers students to practice autonomously, build confidence, and receive immediate, personalized feedback. Its adaptive nature allows for inclusive, flexible, and scalable learning experiences, particularly in large and diverse classrooms. However, successful integration requires addressing key challenges, including technological infrastructure, digital literacy, ethical data use, and institutional readiness. When implemented thoughtfully and ethically, AI not only enhances speaking proficiency but also supports the broader goal of cultivating globally competent graduates in a digitally-driven education ecosystem.

Unit 10 describes about virtual 3D Classrooms represent a transformative leap in educational technology, offering immersive, interactive, and spatially enriched learning environments that enhance student engagement, conceptual understanding, and collaboration. While implementation challenges such as limited access to technology and the need for teacher training remain significant, the pedagogical advantages including emotional immersion, real-time interaction, and safe simulation underscore their potential as a powerful tool for 21st-century education. With sustained investment in infrastructure, digital equity, and professional development, Virtual 3D Classrooms can support more inclusive, innovative, and future-ready learning experiences.

Unit 11 describes about artificial Intelligence (AI) offers powerful opportunities to foster awareness and empathy in education by supporting not just intellectual understanding, but also emotional and behavioral engagement with real-world issues like climate change, poverty, and social justice. Through personalized learning, interactive simulations, and emotional expression tools, AI can help students experience and respond to

global challenges in more meaningful ways. However, its use must be approached critically, given ongoing challenges such as emotional limitations, data privacy concerns, unequal access, and the absence of clear ethical standards. Therefore, AI should function as a complementary tool supporting, not replacing—the human-centered values, interactions, and reflections that are essential in shaping socially responsible and empathetic learners.

Unit 12 explains about Guest speakers bring unique value to events by offering real-world insights, fresh perspectives, and emotional engagement that enrich the overall experience for audiences across academic, professional, civic, and cultural contexts. Their ability to inform, motivate, and connect with participants helps transform passive attendance into active learning and inspiration. However, their effective inclusion requires thoughtful planning from selecting the right speaker to managing logistics, audience engagement, and unexpected challenges. By understanding the strategic role of guest speakers and addressing potential obstacles in advance, organizers can maximize their impact, elevate event quality, and create lasting, meaningful experiences.

Unit 13 explores about Artificial Intelligence (AI) presents a transformative potential for fostering inclusive English Language Teaching (ELT) by enabling early detection and personalized support for learners with dyslexia. Through tools that leverage natural language processing, machine learning, and real-time data analysis, educators can more accurately identify reading and writing difficulties that often go unnoticed in traditional classrooms. AI not only complements teacher efforts but also promotes equity, accessibility, and universal learning design, especially when embedded within ethical and pedagogical frameworks. As ELT continues to evolve globally, integrating AI for dyslexia detection must be approached collaboratively, ensuring cultural relevance, data privacy, and ongoing professional development for educators. In doing so, AI can play a pivotal role in creating responsive and empowering language learning environments for all students.

Unit 14 describes about artificial intelligence is reshaping personalized learning by delivering real-time, data-driven adaptations that let every learner progress at an individual pace while freeing teachers to focus on higher-order guidance and socio-emotional support. Intelligent tutoring systems, adaptive platforms, NLP-powered feedback tools, and predictive analytics now make it possible to scale tailor-made instruction from early childhood through lifelong upskilling. Yet these gains come with critical responsibilities: protecting student data, eliminating algorithmic bias, ensuring transparency, bridging digital-access gaps, and equipping educators to interpret AI insights ethically. Balancing innovation with vigilant governance will determine whether AI fulfills its promise of equitable, human-centered learning for all.

Unit 15 explores about the integration of artificial intelligence and smart technologies in English language classrooms within higher education marks a pivotal advancement toward more personalized, interactive, and data-informed pedagogy. By aligning with constructivist and connectivism learning theories and supported by frameworks like TPACK and AI-TPACK, educators are increasingly empowered to deliver adaptive instruction that meets diverse learner needs. Tools such as NLP-powered writing assistants, intelligent tutoring systems, and speech recognition apps have revolutionized skill acquisition across reading, writing, speaking, and listening domains. Despite notable benefits, ethical concerns such as data privacy, algorithmic bias, and teacher readiness demand careful navigation. As institutions continue to adopt AI-enhanced learning environments, a human-centered, reflective approach remains critical to ensure equitable access, pedagogical integrity, and meaningful learning experiences in English language education.

Unit 16 explains about Artificial Intelligence (AI) has emerged as a powerful ally in transforming pedagogical decision-making, providing teachers with timely, data-driven insights that enhance instruction, personalize learning, and support more efficient classroom practices. Rather than replacing human

judgment, AI augments teachers' professional capacities by uncovering learning patterns, predicting student needs, and enabling more targeted interventions. However, its successful integration requires thoughtful implementation, ethical data management, equitable access to technology, and strong teacher digital literacy. Ultimately, AI's value in education lies in its ability to complement rather than substitute the human empathy, experience, and contextual understanding that educators bring to the learning process.

UNIT 1

DIGITAL CONVERSATION FOR WHATSAPP VOICE NOTES IN EFL SPEAKING PRACTICE

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A. Definition Digital Conversation

Digital conversation in education refers to the exchange of ideas, questions, feedback, and collaborative dialogue that occurs through digital platforms to support learning. These conversations can happen synchronously such as in video conferences or asynchronously such as in discussion forums, emails, or voice notes (Davidson-Shivers et al., 2001). These are integral to modern pedagogy, especially in online and blended learning environments (Palahicky et al., 2019). Digital conversations enable flexible communication beyond the physical classroom. As such, they redefine how interaction takes place in educational contexts (Fischer et al., 2020).

Unlike traditional classroom dialogue, digital conversation is often multimodal. It can include not just text and speech but also emojis, images, hyperlinks, and video responses (Loveys et al., 2020). This multimodal nature enriches communication, allowing learners to express ideas in various forms. For example, a student may use a voice note for explanation, supported by a shared document or infographic (Pham & Li, 2023). These tools collectively enhance engagement, comprehension, and creativity in learning (Kirschner & Erkens, 2006).

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UNIT 2

PROFESSIONAL DEVELOPMENT: AI TOOLS PROVIDE PERSONALIZED OPPORTUNITIES FOR EDUCATORS

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A. Introduction

The 21st century has brought great changes in terms of rapid technological advancement, globalization, and changing workforce dynamics. In this context, professional development has become increasingly important. As industries evolve and new job roles emerge, the need for individuals to continuously update their skills and knowledge becomes more pressing (Smith, 2020). Traditional educational pathways, which often focus on static learning, are no longer sufficient to prepare professionals for the complexities of modern work environments. Therefore, a proactive approach to professional development is necessary to achieve success (Jones and Taylor, 2021).

Lifelong learning has become a fundamental principle in this new landscape. It emphasizes the importance of continuing education and skills acquisition throughout one's career, so that individuals can adapt to change and take advantage of new opportunities (Brown, 2019). With the rapid pace of technological change, skills can easily become outdated, making it imperative for professionals to engage in continuous learning to remain competitive (Davis, 2022).

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UNIT 3

PLAGIARISM DETECTION : A THEORETICAL AND TECHNOLOGICAL OVERVIEW

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A. Introduction

The rapid advancement of digital technology has fundamentally transformed the way information is created, shared, and consumed across the globe. In academic and professional settings, this transformation has brought significant benefits-enabling instant access to vast repositories of knowledge, fostering collaboration, and accelerating research and innovation (Smith, 2020). However, these same advancements have also introduced new challenges, particularly in the area of academic integrity. One of the most persistent and complex of these challenges is plagiarism, defined as the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work (Gabriel, 2010).

Plagiarism is not a new phenomenon, but its prevalence has increased dramatically in the digital era. The ease with which information can be copied, paraphrased, or even automatically generated by sophisticated tools has made traditional approaches to plagiarism prevention and detection less effective (Park, 2003). As a result, educational institutions, publishers, and organizations are increasingly turning to technological solutions to address this issue. Plagiarism detection systems have become

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UNIT 4

LANGUAGE LEARNING IN THE 21ST CENTURY: APPROACHES, CHALLENGES, AND INNOVATIONS

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A. Introduction

Language learning in the 21st century is shaped by complex socio-cultural, technological, and cognitive factors. Globalization has increased the need for multilingual competence, not only for academic or occupational mobility but also for intercultural communication and personal growth. Traditional methodologies, though foundational, are increasingly viewed as insufficient in addressing the diverse needs of modern learners. As language classrooms become more multimodal and learner-centered, there is an urgent need to reimagine pedagogies, tools, and assessments in ways that are inclusive and adaptive (Richards, 2015; García & Wei, 2014).

B. Contemporary Approaches to Language Learning

Communicative Language Teaching (CLT) CLT prioritizes communication as both the means and goal of language learning. It focuses on fluency over accuracy and incorporates role-plays, group work, and real-life simulations (Littlewood, 2004). However, critics argue that its effectiveness can be limited in contexts with large class sizes or exam-oriented systems.

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UNIT 5

THE DISCUSSION OF ADAPTIVE LEARNING

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A. Introduction

Gifted and talented students have garnered significant attention in the realm of education due to their exceptional abilities and their potential for remarkable achievements. These students often display distinct traits, including a strong sense of self-worth, perfectionism, high levels of energy and enthusiasm, along with creative and productive thought processes. They typically possess outstanding leadership qualities and exhibit advanced physical and cognitive skills. Their remarkable curiosity and passion for challenges fuel their heightened responsiveness to new information. Furthermore, they demonstrate superior memorization abilities, impressive reading speeds, and exceptional critical thinking skills. Research indicates that gifted and talented students process information more efficiently, often diving into advanced conceptual content that sets them apart from their peers.

Effectively optimizing and managing the learning process for gifted and talented students necessitates customized approaches that cater to their unique needs (Scholz & Tietje, 2012). A deep understanding of these students, combined with creative teaching methods, is crucial for fostering innovations that resonate with their requirements (Bastani et al., 2018).

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UNIT 6

MANAGING ENGLISH LANGUAGE CLASSROOMS: CHALLENGES AND BEST PRACTICES

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A. Introduction

Learning, engagement, conduct, and emotions all come together in the dynamic environment of the classroom. It is more than just a place where classes are taught. In English language classrooms, especially those with second or foreign language learners (ESL/EFL), effective classroom management is both a science and an art. Teachers have to handle a wide range of student needs, including language skills, cultural backgrounds, and behavioral expectations, in addition to teaching subjects.

There are unique pedagogical and management challenges associated with learning English. Unlike disciplines that primarily rely on vocabulary, language acquisition requires active participation, continuous practice, and meaningful contact. Students must also feel at ease using the language in real-world communication scenarios. As a result, students may become nervous, reluctant to participate, or act out, particularly if they are feeling overburdened or self-conscious. Additionally, different students often have different skill levels in English language classrooms, which calls for flexible grouping strategies and specialized instruction to ensure that no student falls behind. The purpose of classroom management is the creation of conditions for learners to work and listen to their teacher. There

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UNIT 7 ARTIFICIAL INTELLIGENCE IN CONNECTED CAMPUSES

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A. Introduction

As these technologies continue to advance, education has undergone many major changes over the past few decades. An increasingly influential technology is artificial intelligence (AI). The ability to perform tasks that would normally require human intelligence provides a range of possibilities that will revolutionize the world of education. From how lessons are delivered to managing education and campus management, AI plays a key role in creating a more efficient, integrated and intelligent education system. In particular, AI acts with respect to the connected campus, integrating various technologies and systems into the educational environment, creating an efficient and interconnected ecosystem. This chapter describes how AI shapes the networked campus by simultaneously improving the quality of learning and education using various systems that can be collaborated to improve connectivity, security and management of campus resources. Artificial intelligence in education is not a completely new concept, but its development has led to significant changes. The technology has been used in many aspects from learning platforms through campus management. Below are some of the areas where AI is making important contributions to modern education. AI enables more

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UNIT 8

THE USE OF GOOGLE DOCS TO ENHANCE EFFECTIVE COLLABORATION IN ONLINE LEARNING ENVIRONMENTS

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A. Introduction

Education in Indonesia is now growing, especially in terms of the use of learning media. In this digital era, information and communication technology has become an essential part of teaching and learning activities. In this digital era, education in Indonesia is not only evolving in terms of technology, but also in the way students are educated (Salsabila et al., 2024). Students are encouraged to be more critical, communicate well, be creative, and be able to work together with others. In the current digital era, collaborative learning methods are becoming increasingly relevant as technology makes it easier for students to interact and work together, both in real classrooms and in virtual environments (Mannisto et al., 2019). So, technology plays an important role in education, especially in supporting the development of students' collaborative learning skills in an online learning environment.

The development of technology has changed the way we learn. In the past, the learning process required teachers and students to meet face-to-face in a classroom, but now they can still interact even though they are in different places. Nowadays, there are many media that can be used as a discussion space in the learning process. One that is quite popular and easy to use is

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UNIT 9

ARTIFICIAL INTELLIGENCE (AI) AS A SPEAKING COACH REAL-TIME FEEDBACK IN INDONESIAN UNIVERSITY

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A. Definition of Artificial Intelligence (AI)

Artificial Intelligence (AI) is a branch of computer science that focuses on developing systems that can mimic human intelligence. AI enables machines to learn from data, recognize patterns, and make decisions automatically. This technology aims to create programs capable of performing complex tasks such as logical thinking, problem solving, understanding language, and recognizing images and sounds (Sarker, 2022). The concept of AI evolved from the idea of creating machines as intelligent as humans, which has now become a reality in various fields (Lu, 2019). AI is divided into several types, such as narrow AI, which performs a single specific task, and general AI, which has broader capabilities. Currently, narrow AI is more commonly used in everyday life. For example, in virtual assistants like Siri, YouTube recommendations, and automation features in vehicles (Janagama, 2025).

The development of AI began in the 1950s, when scientists such as Alan Turing began to question whether machines could think like humans. Over time, this technology has developed rapidly with the help of advances in computing and the availability of big data (Duan et al., 2019). Today, AI is used in various fields, including health, education, business, and the

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UNIT 10

VIRTUAL 3D CLASSROOMS

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A. Introduction

In the quickly expanding digital era, the profession of education must constantly adapt to technology innovations in order to produce learning experiences that are relevant, engaging, and efficient. One such innovation emerging in this area is the Virtual 3D Classroom, which uses three-dimensional technology to provide immersive and realistic learning interactions. This technology lets professors and students to be present in a virtual environment as avatars, interact directly, explore instructional materials, and even perform simulations as if in the real world.

A number of research have demonstrated the pedagogical value of using 3D virtual classrooms. Dalgarno and Lee (2010) underline that 3D learning environments provide learning opportunities such as spatial comprehension, real engagement, and social presence, which all improve constructivist learning experiences. Radianti et al. (2020) discovered that immersive learning environments like this can boost student enthusiasm and conceptual understanding, particularly in STEM areas. Meanwhile, Bailenson (2018) developed the concept of embodied cognition in virtual learning, which states that students' physical and emotional engagement in a three-dimensional environment improves memory retention and comprehension.

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UNIT 11

BUILDING AWARENESS THROUGH ARTIFICIAL INTELLIGENCE IN EDUCATION

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A. Introduction

As quickly as technology is advancing today, Artificial Intelligence (AI) has arguably made one of the largest impacts. AI is a technology that is very impactful and helpful in nearly every aspect, education included. AI does not only serve to assist students in learning, it can also assist learners to be more concerned and aware about more pressing global issues like climate change, poverty, or social injustices. Such awareness matters a lot. Learning goes beyond memorizing and achieving high scores, but rather, it is about how we can feel, comprehend, and respond to what is happening around us. AI seems to be a great contributor in such matters. AI can utilize collaborative and interactive technology to allow students to undergo a more rich and meaningful learning experience. According to Rahayu (2023), AI can improve learning efficiency by automating the assessment process, so that teachers and students can focus more on real-world applications and global issues rather than just grading mechanisms.

B. The ABC Model of Awareness in Education

In the context of education, awaeness of social issues cannot be fully understood through intellectual understanding alone. True awareness includes three main dimensions, namely

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UNIT 12

GUEST SPEAKER AND EVENTS

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A. Introduction

Guest speakers play an important role in the success of many types of events, including academic, professional, and cultural events. Their presence helps improve the content by bringing in real experiences and different points of view that may not be available from the main organizers or hosts. They can make the topic easier to understand and more interesting to follow, especially when they share stories or examples from their own background. Guest speakers also help keep the audience focused and involved by creating a more interactive atmosphere, such as through question-and-answer sessions or open discussions. When a guest speaker is someone with a strong background or good reputation, it makes the event feel more trustworthy and professional. People are more likely to take the information seriously and feel that the event is valuable. In general, having a guest speaker adds something special to the event that makes it more meaningful and memorable for the audience.

B. Types of Events that Feature Guest Speakers

Guest speakers are often invited to many different types of events. Each event has its own goal, audience, and topic. To make the most of a guest speaker, it is important to understand

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UNIT 13

AI FOR DYSLEXIA DETECTION IN ELT: TOWARDS INCLUSIVE ENGLISH LANGUAGE EDUCATION

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A. Introduction

In recent years, the use of artificial intelligence (AI) into education has created new opportunities for identifying and supporting children with a variety of learning requirements. Among these needs, dyslexia—a unique learning disability that largely impacts reading and writing skills—poses a substantial problem in English Language Teaching (ELT) settings. Dyslexic learners frequently difficulty with phonological processing, decoding, and spelling, which can impede language acquisition and academic success (Snowling, 2013). As English continues to be a worldwide language, the need for inclusive language instruction for all learners, including those with learning disabilities, becomes more pressing. This chapter investigates how AI can help with the early detection of dyslexia in ELT, resulting in a more inclusive and responsive learning environment.

Dyslexia frequently goes undetected in many English schools, particularly if resources and teacher training on learning disorders are scarce. Traditional techniques of detecting dyslexia often include clinical exams, which are time-consuming, costly, and not available to all schools or teachers. As a result, many students may continue to struggle silently without obtaining adequate assistance. The use of AI-based tools offers a viable

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UNIT 14

ARTIFICIAL INTELLIGENCE IN PERSONALIZED LEARNING: TRENDS, TOOLS, AND CHALLENGES

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A. Introduction

The introduction of artificial intelligence (AI) and other technologies into educational institutions has led to revolutionary changes in traditional teaching approaches. Personalized learning adjusts its educational services according to the preferences of individual students, their interests, and responses to learning. In this way, students can develop at their own rhythm (Siemens, 2005). In comparison to traditional standardized education systems, which often leave students with different learning styles and needs to fall through the cracks (Shute & Towle, 2003). Personalized learning has been found to enhance student engagement and motivation, and it can even raise academic achievement by delivering more relevant information with greater flexibility (Hattie 2009).

Custom learning driven by AI is now king. Through sifting through huge amounts, artificial intelligences can offer each learner lively learning experiences that are exclusive to him (Khan & Hossain, 2019). Unlike what many textbooks would have the world believe, adaptive learning and tutoring systems will change the delivery of teaching material according to their progress and performance. In this way, education always matches one's current knowledge (VanLehn, 2011). Knewton, DreamBox, ALEKS Trugger, and other platforms all show us

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UNIT 15

SMART TECHNOLOGIES AND AI INTEGRATION IN ENGLISH LANGUAGE CLASSROOMS: A HIGHER EDUCATION PERSPECTIVE

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A. Introduction

The rapid advancement of digital technologies has fundamentally transformed the landscape of education, with higher education institutions at the forefront of adopting innovations to enhance teaching and learning. Among these innovations, artificial intelligence (AI) and smart technologies have emerged as pivotal tools in reshaping pedagogical practices and facilitating more personalized, adaptive, and efficient educational experiences. The integration of such technologies aligns with global efforts to prepare students for the demands of a digital society, where information processing, language proficiency, and critical thinking are key competencies. In this context, the field of English language education—particularly within higher education—has witnessed a growing interest in leveraging AI-driven tools to address evolving learner needs, foster engagement, and optimize instructional outcomes.

Artificial intelligence has transitioned from a futuristic concept to a practical reality in education, offering solutions that range from intelligent tutoring systems and predictive analytics to natural language processing and machine learning applications. AI's capacity to process vast amounts of data and

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UNIT 16

TRANSFORMING PEDAGOGICAL DECISION-MAKING WITH AI INSIGHT

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IAIN Bone

A. Introduction

In the field of education, pedagogical decision-making lies at the heart of effective teaching. The teachers have to make numerous decisions in their teaching practice, from selecting instructional strategies and adapting materials, to responding to the dynamic needs of students. These are not only immediate responses to teaching practice and classroom conditions but also significantly impact students' academic growth and the learning experiences (Shavelson, 1973). However, pedagogical decisions are often made under conditions of uncertainty, time constraints, and incomplete information, making them complex and sometimes subjective.

As the demands on teachers' improvement, the need for data-informed approaches to support their decision-making processes are necessary. In this context, technology—particularly Artificial Intelligence (AI)—has emerged as a transformative force in education. AI is no longer confined to administrative tasks; it has evolved into a sophisticated tool capable of analyzing vast sets of educational data, identifying learning patterns, and offering personalized recommendations for both teachers and students (Luckin et al., 2016).

The integration of AI in education results a paradigm shift in how teachers access and interpret information about their students. Through systems such as learning analytics, adaptive

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