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Chief Editors:
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Preface

Pioneering Educational Perspectives: Series 2025 is a collection of thought-provoking insights and research contributions exploring contemporary educational trends and practices. This eBook presents a diverse range of perspectives on innovative teaching methodologies, digital learning strategies, and transformative approaches in education. Designed to serve as a resource for educators, researchers, and practitioners, it aims to inspire meaningful discussions and advancements in the field. Through carefully curated chapters, this publication offers fresh ideas and practical solutions to enhance learning experiences in an ever-evolving educational landscape.

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3M-VM: REVOLUTIONIZING ESL SKILLS THROUGH AI IN PROJECT- BASED LEARNING

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ABSTRACT
Many ESL learners face challenges in developing proficient speaking skills due to traditional teaching methods that often do not cater to individual learning needs. This leads to varying levels of English proficiency and communication apprehension among students. The 3M-VM project is designed to enhance ESL speaking skills through the integration of AI-driven tools, specifically Voki and Murf.ai, within a Project-Based Learning (PBL) framework. This innovative approach addresses the challenges faced by ESL learners, including communication apprehension and varied proficiency levels, by offering personalized and interactive learning experiences. The project aims to improve students' speaking abilities, fluency, and confidence by utilizing AI-generated avatars and voice-overs, making learning more engaging and tailored to individual needs. Through a mixed-methods research methodology, including pre-tests, post-tests, and questionnaires, the study evaluates the effectiveness of these tools in improving students' engagement and overall proficiency in spoken English. The findings suggest that AI-driven tools, when integrated into ESL education, significantly enhance learning outcomes while reducing communication anxiety, preparing students with essential 21st-century skills for academic and professional success.

KEYWORDS: Project-based learning, ESL, English proficiency, Innovative technology, 21st century skills

PROBLEM AND OBJECTIVE

Many ESL learners face significant challenges in achieving fluency and confidence in speaking English, largely due to communication apprehension and the limitations of traditional language teaching methods (Rahman & Maarof, 2016). These methods often fail to provide personalized, engaging learning experiences that address individual student needs, leading to uneven proficiency levels and heightened anxiety in communication settings.

Objective:
The 3M-VM project aims to tackle these issues by integrating AI-driven tools (Voki and Murf.ai) into Project-Based Learning (PBL) environments. The primary objectives are to:

1. Enhance ESL speaking skills by improving pronunciation, fluency, and confidence.
2. Reduce communication apprehension through interactive and immersive AI-based learning activities.
3. Evaluate the effectiveness of this innovative approach in boosting student engagement and learning outcomes in ESL education.

By addressing these objectives, the project aims to revolutionize ESL teaching and

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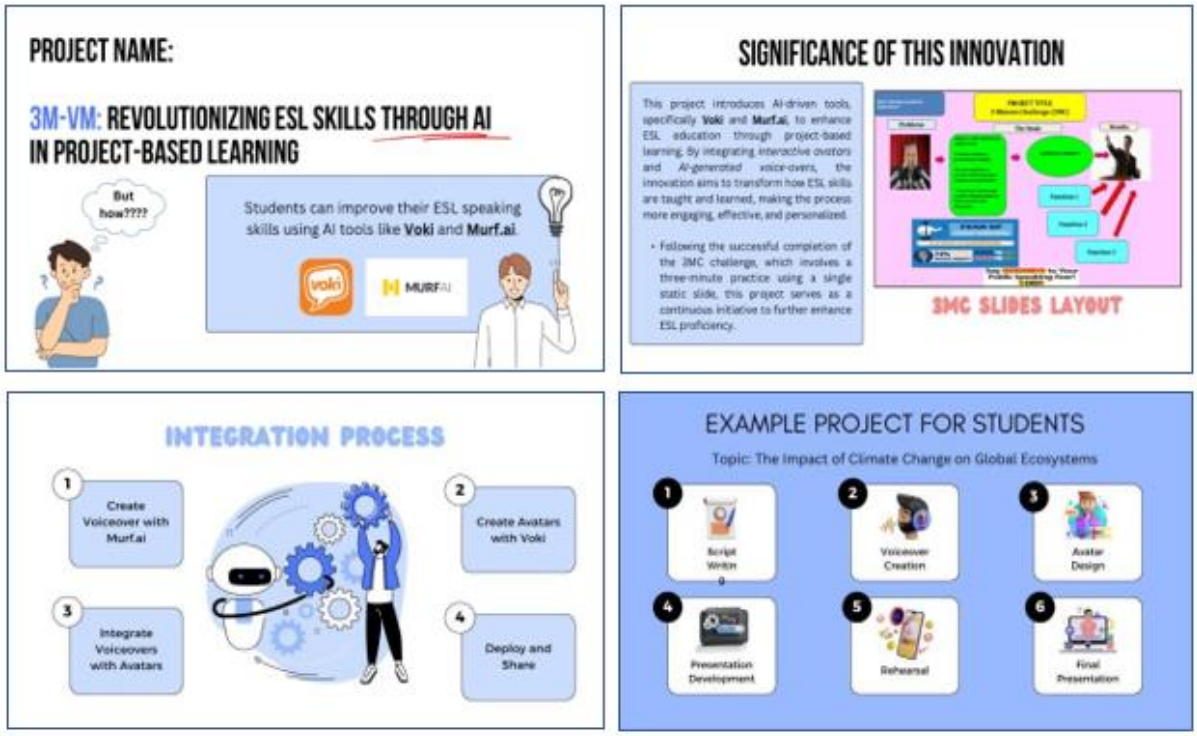
learning, making it more personalized, engaging, and effective for learners worldwide.

DESIGN DESCRIPTION

The 3M-VM design combines AI-driven tools (Voki and Murf.ai) within a Project-Based Learning (PBL) framework to enhance ESL speaking skills. The purpose of the design is to improve pronunciation, fluency, and confidence in English while reducing communication apprehension through personalized, interactive experiences. Key features include AI avatars and voice-overs that simulate real-world communication scenarios, offering students immediate, real-time feedback on their speaking performance.

Functionality is centered around students creating projects using these tools, allowing for practical application of language skills in a dynamic, engaging way. The design is particularly suited for ESL students at the university level, as well as educators seeking innovative methods to improve student engagement. The unique selling points of 3M-VM include its ability to customize learning experiences, reduce communication anxiety, and provide instant feedback through AI, making it a highly effective tool for modern ESL instruction.

VISUALS



NOVELTY AND UNIQUENESS

The novelty of the 3M-VM project lies in its innovative use of AI technology to provide personalized learning experiences tailored to individual student needs, enhance engagement and motivation through interactive and immersive learning activities and offer real-time feedback. The project aims to improve ESL speaking skills and confidence among students, enhance student engagement and participation in project-based learning activities and foster a supportive learning environment that reduces communication apprehension and promotes effective communication skills. This project innovates by leveraging cutting-edge AI tools (Voki and Murf.ai) to create dynamic and interactive learning experiences. In Voki, we can record our voices by using microphone, typing text, or uploading an audio file (Voki, 2015). By integrating AI-generated avatars and voice-overs, the project enhances traditional ESL education methods, making learning more accessible, engaging, and effective.

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BENEFITS TO MANKIND

The 3M-VM project offers significant benefits to mankind by addressing one of the most pressing global needs: effective communication in English. In an increasingly interconnected world, proficiency in English is crucial for personal, academic, and professional advancement. By leveraging AI-driven tools to enhance ESL education, this project provides an innovative and inclusive solution to bridge communication gaps (Maarof & Abdul Rahman, 2018). The key benefits include empowering Global Communication by improving English speaking skills (Brooks & Kerschen, 2022), the project helps individuals participate more fully in the global economy, fostering cross-cultural dialogue and collaboration. It also reducing Communication Apprehension by using interactive and engaging methods, the project addresses the widespread issue of communication anxiety, boosting learners' confidence in various settings (Izzatillaeva, 2024). In short, the 3M-VM project contributes to building a more connected, educated, and inclusive global community.

COMMERCIAL POTENTIAL

The 3M-VM project has strong commercial potential in the growing EdTech market, driven by the global demand for English language proficiency. Its competitive advantage lies in the integration of AI-driven tools (Voki and Murf.ai), which offer personalized and engaging learning experiences that traditional methods lack. This design is scalable across educational institutions and online platforms, making it adaptable for both classroom and remote learning environments. Potential business models include licensing the AI technology to schools and universities, subscription- based access for learners, and collaborations with EdTech platforms to expand market reach. Cost- effective AI solutions ensure accessibility for a wide audience.

CONCLUSION

The 3M-VM project demonstrates that integrating AI-driven tools like Voki and Murf.ai within a Project-Based Learning framework significantly improves ESL speaking skills and reduces communication apprehension. By offering personalized, engaging, and interactive learning experiences, this approach enhances student confidence, fluency, and overall proficiency. The project addresses a critical need in global education, providing scalable, cost-effective solutions that can be adopted worldwide. Future directions for this design could include expanding the use of AI tools to target other language skills, developing mobile applications for greater accessibility, and exploring partnerships with global educational platforms to further commercialize and enhance the reach of these innovative tools.

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