Examining the Correlations Between Teacher Profiling, ICT Skills, and the Readiness of Integrating Augmented Reality in Education

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Abstract— This study explores the relationship between respondent demographic profiling and the factors affecting teachers' readiness in adopting augmented reality (AR) for teaching and learning. While AR holds promise for transforming educational practices, the readiness of teachers to adopt this technology remains a critical factor for successful implementation. However, there is a lack of research examining the specific relationship between respondent demographics and the factors influencing teachers' readiness in AR adoption. This study aims to fill this gap by employing a quantitative research approach and survey methodology. By analyzing the data collected from primary school teachers, including demographic information and factors affecting readiness, the study seeks to identify any significant correlations or patterns. The findings will contribute to a better understanding of how respondent demographics influence teachers' readiness in AR integration, addressing a crucial problem in the field of educational technology. The insights gained from this study will inform policymakers and educational institutions in developing targeted strategies to enhance teachers' readiness and support the successful integration of AR in primary school classrooms.

Keywords—augmented reality, readiness, educational technology, mixed reality, education

I. INTRODUCTION

Augmented reality (AR) has emerged as a promising technology in education, offering immersive and interactive learning experiences that can enhance student engagement and understanding. However, the successful integration of AR in classrooms relies heavily on the readiness and acceptance of teachers. Teachers play a pivotal role in incorporating AR activities into their teaching practices, and their knowledge, attitudes, and perceptions towards AR adoption are crucial factors to consider.

While research on the adoption of AR in education has increased in recent years, there is still a gap in understanding the relationship between respondent demographic profiling and the factors influencing teachers' readiness in adopting AR. It is important to investigate how demographics, such as age,

gender, teaching experience, and technological proficiency, may shape teachers' attitudes and preparedness for AR

integration. By identifying these relationships, policymakers and educational institutions can develop targeted strategies to enhance teachers' readiness and facilitate the successful implementation of AR in primary school classrooms. In [1], factors that influenced elementary school teachers' readiness for augmented reality integration is examined. Their findings revealed that one of the element is teacher attitudes were significant predictors of readiness. However, the study did not explore the relationship between respondent demographics and readiness factors, indicating the need for further research to fill this gap. The present study aims to contribute to the existing literature by specifically examining the relationship between respondent demographic profiling and the factors affecting teachers' readiness in adopting AR.

II. RELATED WORKS

A. Augmented Reality

Augmented reality (AR) has gained increasing attention in the field of education due to its potential to enhance learning experiences and engage students in interactive and immersive environments. The successful integration of AR in classrooms relies on the readiness and acceptance of teachers, who play a crucial role in incorporating this technology into their teaching practices. This literature review explores the existing research on the relationship between respondent demographic profiling and the factors affecting teachers' readiness in adopting AR for teaching and learning.

B. Factors that Affecting Readiness

Several factors influence teachers' readiness to adopt AR in their classrooms. One critical factor is teachers' knowledge and familiarity with AR technology. Research by [2] found that teachers innovation and understanding of AR demonstrate greater readiness and confidence in integrating AR into their teaching practices.

Attitudes and Perceptions towards AR also play a significant role in teachers' readiness. Studies by [3] revealed