Project Title: Unveiling the Virtual Classroom: An In-depth Analysis of the Online Education System

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1. Defining Problem / Problem Understanding

1.2. Literature Survey

The contemporary education system is currently experiencing significant modifications owing to advancements in society, education, and technology. As a result, virtual classrooms have emerged, amalgamating computational and physical processes to augment the interaction between instructors and pupils [1]. These virtual classrooms offer a plethora of advantages, including open access to educational resources, flexibility in distance learning, and the ability to conserve network resources [2]. However, there are several obstacles to overcome, such as the need for new interaction models, reducing interface intricacy, and accommodating diverse learning styles [3] [4]. The implementation of virtual classrooms varies across different educational levels and contexts, with various platforms providing an array of tools and functionalities [5]. While virtual classrooms provide opportunities for self-paced learning, diversified communication channels, and learning analytics, they lack timely access to information and natural interpersonal interaction. In order to augment the quality of the education provided through online means, it is imperative for instructors to maintain a flexible approach towards the selection of technologies and give due consideration to the incorporation of virtual reality, thereby creating an immersive learning experience that emulates the in-class environment.

Reference

[1] Yang-bo, Wu., Hui, Lin., Wei-hua, Zhu. (2021). Function Design of Music Online Education Network Virtual Classroom Platform. doi: 10.1007/978-3-030-84383-0_53

[2] J., I., Olszewska. (2021). The Virtual Classroom: A New Cyber Physical System. doi: 10.1109/SAMI50585.2021.9378678

[3] Natalia, Burlacu. (2020). Virtual classroom in digital age: concept, product and applicability. doi: 10.5281/ZENODO.3971948

[4] Md., Mostaq, Ahamed, Sharmin, Siddiqui. (2021). From the Normal to the New Normal: Reflecting Metamorphosis in Pedagogies. Arab World English Journal, doi: 10.24093/AWEJ/CALL7.29

[5] Zilu, Liang., Miguel, Gomes, da, Costa, Junior., Ian, Piumarta. (2020). Opportunities for Improving the Learning/Teaching Experience in a Virtual Online Environment. doi: 10.1109/TALE48869.2020.9368419