AR APPLICATION REVIEW

Upon reviewing the works of literature, I examined the inherent potential of AR for educational purposes, considering limitations imposed by current technological resources and development constraints.

To advance my research, I systematically explored extant AR software designed explicitly for educational purposes. Employing the Google search engine, I utilized keywords such as AR, Augmented Reality, learning, education, etc., to refine the search results exclusively to AR software tailored for educational contexts. During my search, I discovered an AR tool created by mathematics teacher Burgess Jeffries for visualizing pre-calculus problems in mathematics. Utilizing a graph model with points across axes (x, y, and z), he demonstrated the application's capability to represent mathematical concepts such as the angle of elevation during a plane's take-off. Burgess manually crafted these models using the Geogebra online mathematical learning tool. Users could access the AR experience through their iOS-enabled mobile devices on the website. Burgess aimed to use AR to engage learners by bringing textbook concepts to life. Motivated by his innovative approach and considering previous research, I aimed to develop a prototype incorporating key aspects of Burgess' work, focusing on visualizing abstract mathematical concepts, and enhancing user interaction for improved learning experiences (Ref #11 and Ref #4).

In the subsequent section, I will discuss the design approach for implementing my AR project, focusing on the chosen design practices and their underlying reasons.