Virtual Academic Insight Aid

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This project began as a chance discussion with peers regarding incorrect retrospective GCSE subject choices which restricted A-level options and ultimately career opportunities. A survey of Peers identified Biology as the subject omitted. Health Services are experiencing massive staff shortages, this factor will impact on future Healthcare if reflected across other schools. Failure to choose GCSE Biology resulted from insufficient course information and potential career opportunities. Many students are visual learners and my specific interest in the potential of VR as an educational tool, led me to develop an App to allow students an in-depth review of Biology. VR places the user inside an experience enhancing the learning process by adding interactive content that is engaging, facilitates experimentation, practice, and learning by doing. Refining the App in targeting key Biological concepts, involved surveying GCSE students to identify 'difficult topics/concepts', thus defining the core of the App. The final App is versatile making it more accessible, without the need for expensive and complex equipment. The entire application runs on Meta Quest and Android headsets. The App, through 'ray casting' provides a complete immersive experience in key Biological concepts such as Photosynthesis, Cell Division and Enzymes etc. The final App refinement required measuring App impact in a pre and post interface test with students. The pre and post-test results demonstrated a significant increased predisposition to Biology. The App has massive potential as an insight and learning aid in other subjects and key training simulations in the Industrial, Healthcare and Aviation sectors.

Awards Won:

Fourth Award of $500