A Model for Designing Authentic Learning: Summer Student Scholarships.

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Abstract:

There is huge potential for enhancing healthcare through wearable and mobile technologies: tracking patient biometrics and location, optimising and digitising patient data, and providing accessible feedback. However, hospitals are ill equipped to develop or research custom mobile applications. There are mutual benefits for hospitals to collaborate with universities to explore the development of wearable and mobile applications, including providing students with authentic learning experiences. Student internships and work experience schemes provide students with highly authentic learning experiences (Bosco & Fern, 2014). In this presentation we explore a model that extends the summer student work experience concept as part of a longer term collaboration between university students, academic supervisors, and district health providers to collaborate on exploring the potential of wearable and mobile applications to healthcare. This extended model brokers real world projects that benefit the wider community through developing solutions to health care problems in collaboration with a local district health board (ADHB or Auckland District Health Board). In this model communication design students apply to form design teams, selected and supervised by university academics, to address design briefs from the district health board's Design Lab. Key aspects of this collaboration include: developing a sense of trust between the university and the district health Design Lab, establishing a supervision team and protocols, and establishing an ecology of supporting resources - including providing students with the work space and infrastructure access to achieve the project goals. The summer student scholarships are designed to be the first step in a long term collaboration that will potentially lead into major undergraduate student projects and post-graduate research. The summer scholarship projects use a Design Based Research (DBR) methodology (McKenney & Reeves, 2018) to address the first design stages of specific health care problems: analysis and exploration, and initial prototype design. The following stages of a DBR methodology (design implementation, evaluation, and redesign) are addressed through subsequent major student projects or post graduate research following agreement with the district health Design Lab after the presentation of the summer student scholarship project outcomes. The scope of the projects aim to explore the potential of wearable and mobile technologies to enhance health care practice and the patient experience (Rich & Miah, 2017). The research questions underpinning the extended student scholarship model are:
1. In what scenarios can wearable and mobile technologies most effectively enhance health care practice and the patient experience?
2. What are the design principles that can guide the development of authentic mobile learning collaborative student projects?

References

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