

# Use of VR technology to enhance students' understanding of residents living in subdivided units



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## Abstract

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Social work emphasises the understanding of persons in an systemic ecological perspective when assessing clients' family situations. Nonetheless, practical difficulties exist in the process of contextualisation, such as the spatial stress of bringing a class of students to visit a subdivided unit. It would be burdensome for the residents to receive such visits. The use of virtual reality (hereby VR) technology provides an experiential way of understanding the living milieu of marginal group, reducing the burden of residents when receiving visits from students, saving time and traveling costs. The VR micro module is now used in our Casework course, community work course and even service learning general education course, enhancing perspective awareness of students and empathetic understanding of marginal groups.

Second, the VR documentary would be used as a component of our flipped classroom, preparing students for in-depth learning, allowing more time for discussion and reflection in class which extends the learning beyond classroom teaching.

Third, VR technology provides the entire class an opportunity to engage in direct dialogue with the resident, which is more than actual home visits, where only around 5 students per class having this opportunity. VR technology provides larger groups of students a chance to have direct contact with the residents in their living milieu simultaneously. As the students can have a 360 degree vision of the living environment using Google cardboard, students found the experiences more engaging and gained a deeper understanding about the limited space available to the residents. Further, they can observe how residents have to scale seven stories when returning to their subdivided cubicle.

## Approaches

- (1) Flipped classroom: VR videos would be used as background material for students to watch in their own time before the class, preparing students for classes focusing on how to conduct case assessment and understand the needs and problems encountered by residents.
- (2) Live discussion: In class, another VR video of the same case would be utilized for further analysis enabling deeper understanding of the client's situation and learn how to conduct case formulation.
- (3) E learning assignment: A second case study in animation format would be used for students to apply what they have learnt in class. Google classroom and google form would be used to assess whether students successfully utilized knowledge taught in class.

#### Evaluation

This exploratory study found that students enjoy the VR learning, and consider the approach stimulating and engaging, helping them to learn case assessment and understanding needs and problems of marginal groups.

## Data highlights

All respondents 'prefer' or 'strongly prefer' the new flipped and blended learning approach

76.9% of respondents 'strongly agreed' that interaction and engagement was enhanced in small-class format, with the rest agreeing to this statement

All students 'strongly agree' or 'agree' that their understanding on assessment has been enhanced.

# Quotes from students



"Using VR really made lessons interactive"

"Allows intense learning in one specific topic and facilitates more interaction "









