ONLINE EDUCATION: TEACHING IN A TIME OF CHANGE

• Paper / Proposal Title:
Use of Gamified Platform to Improve Freshmen Approaches to Learning

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• Abstract (300 words):
Transition to university education is an important area to address. With an attempt to improve freshmen's self efficacy in university learning, we developed AdventureLearn, a gamified platform that targets four key learning traits, namely, “Approaches to Learning & Studying”, “Well-Being”, “Grit & Resilience” and “Mindset”. These are traits that are identified in the literature as being crucial to learning. AdventureLEARN is made available to all freshmen, students can access the platform remotely and in privacy. Students first answer validated questionnaires to learn more about themselves relating to the 4 learning traits. A gamified island as a starting point in the learning platform is generated indicating strengths and weaknesses with regards to these traits. Students are then recommended to high quality, curated resources that help them learn how to develop traits that are identified to be lacking in them. There are over 100 curated resources which have all have gone through a rigorous process of inter-rater reliability for quality and appropriateness. There are mini-quizzes for knowledge check, developed by academic faculty or staff with psychology backgrounds. The platform also utilizes meaningful gamification where visualization of their progress and rewards are provided to encourage participation. Comparing 398 AY18 freshmen with 302 AY19 freshmen, we
found that freshmen who used AdventureLearn reported decrease in surface learning compared to the control group. Students feedback that the platform provides, “engaging content”, “resources that develop character” and that “videos are short and easy to absorb”. The biggest barrier reported by students in term of accessing the platform is their heavy workload and finding time to watch resources that will develop their traits. With increase in online learning, we see potential in this platform in helping students learn how to learn better and improve in learning traits such as grit and growth mindset.

• Author(s) Biography (200 words each):

Dr May Lim is an Associate Professor at the Singapore Institute of Technology (SIT). May oversees Centre for Learning Environment and Assessment Development (CoLEAD) that looks after the faculty development programmes in learning and teaching at the university level. She won the university Teaching Excellence Award in 2016, 2018 and 2020. She actively looks for coachable moments to coach students for holistic development. In 2020, she led the team in developing a programme that equips university educators with coaching skills for students with academic issues or struggles in workplace learning. May has published books and research articles in international peer reviewed journals both in higher education and occupational therapy. She is interested in occupational transition, higher education research, developmental disabilities, self-efficacy and resilience. She has received two teaching grants from Ministry of Education, first to investigate the effect of experiential learning to improve students’ communication and empathy through learning from people with disability and second on the effect of a gamified platform to improve learning traits for at-risk freshmen. May is an experienced occupational therapist by profession, she has been working with children with developmental delay and disorders in Singapore and Australia.