

# From Disengagement to Engagement: The Journey of Online Teaching Practices



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## Introduction

- The sudden move to e-learning due to the pandemic and Movement Control Order (MCO) results in disruption to the teaching model.
- After online learning was conducted for a month in VU Undergraduate Programme, a survey (n=178) was conducted by Sunway College Academic Quality to gauge students' adaptation to online learning. All variables measured with 5-point scale.
- Besides, a word cloud (Figure 1) was generated based on open comments..

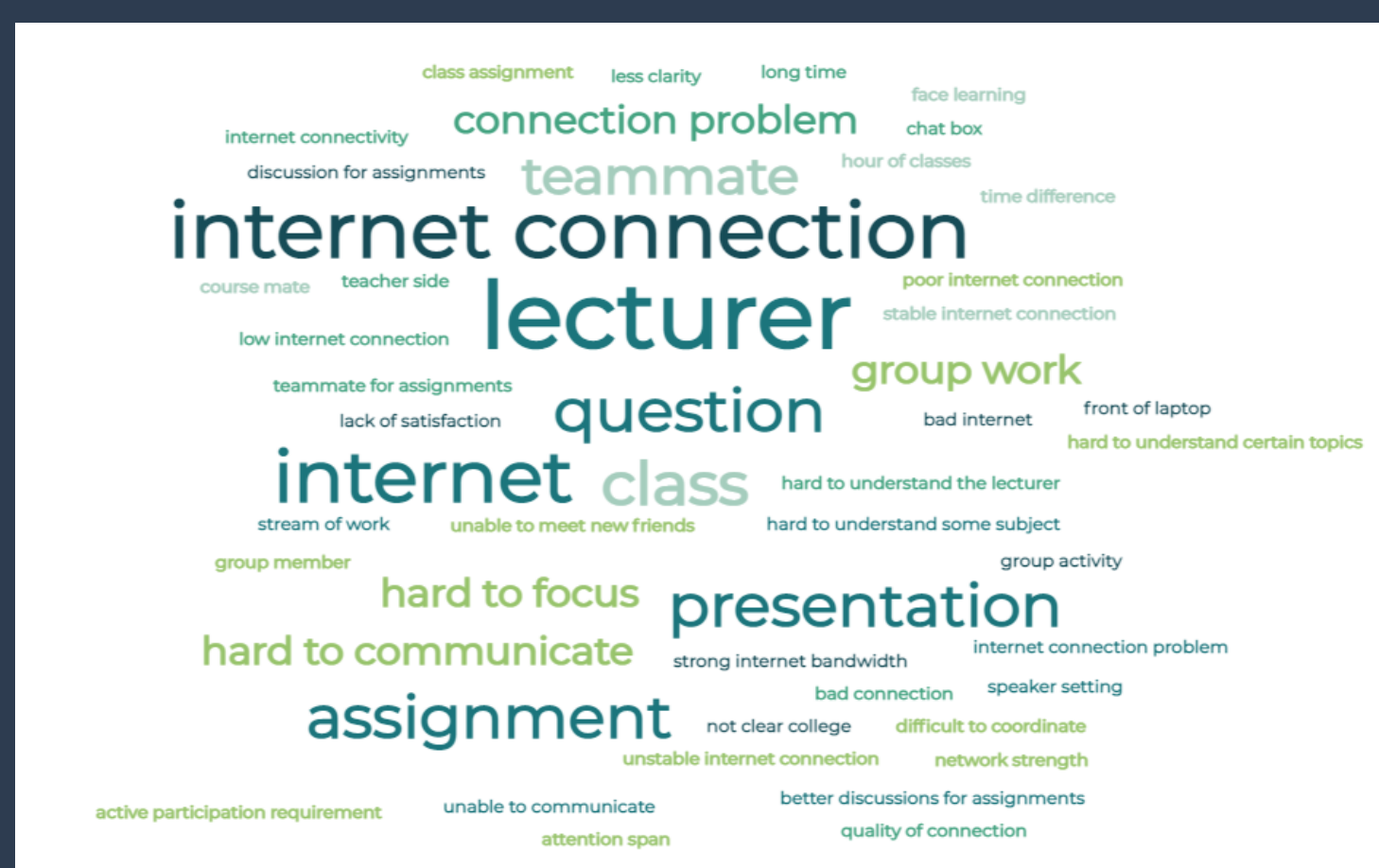


Figure 1: Biggest Challenge Faced by Students in Online Learning

- As an important component of online learning competency, students' self-efficacy beliefs must be accessed for instructors to better understand their capacity to learn in the online setting (Sun & Rogers, 2021).
- Four dimensions of OLSS (Sun & Rogers 2021) i.e. 1) technology use self-efficacy [3 items], 2) online learning task self-efficacy [3 items], 3) instructor interaction and communication self-efficacy [3 items], as well as 4) self-regulation and motivation efficacy [2 items]; class engagement [5 items] (defined as students' cognitive, emotional and behavioural reactions to learning activities, Gunuc & Kuzu, 2015); and satisfaction [1 item] were examined.
- Problems: Students' self-regulation and motivation efficacy scored the lowest across the OLSS dimensions while class engagement and satisfaction level also scored lower than expected.

## Teaching Strategies Adopted

- There is an urgent need to examine teachers' implementation of student engagement as a tri-dimensional construct (Pedler, Yeigh, & Hudson, 2020). All three dimensions i.e. cognitive (CE), behavioural (BE) and emotional engagement (EE) should be focused in promoting positive student engagement (Fredricks, Blumenfeld, & Paris, 2004).
- To improve class engagement, the Final Thoughts Protocol (FTP) which is a feedback form for students to fill up at the end of each online session was created. It was posted on E-learn and QR code to access the FTP was shown after every online class by the lecturers.
- The FTP includes four main questions focusing on class engagement:



- To increase both class engagement and OLSS, I organised a training session focusing on interactivity where strategies of interactive collaborative learning were shared by few of my colleagues. The interactivity design theory highlights that interactive activities focus on two-way communication, typically between students and instructor, or among students (Liaw & Huang, 2000).
- The Community of Inquiry model states that "social presence is a direct contributor to the success of the educational experience" (Garrison, Anderson, & Archer, 2000, p. 4). The presence of "others" and the sense of belonging affect student engagement (Oomen-Early & Murphy, 2009).
- Taking the above theories and models into consideration, the following interactive activities were shared and applied across various subjects:

- Group discussion conducted via collaborative note-taking on OneNote/ Google form. Students can jot down important notes as a team and contribute ideas along the notes. All the changes and social presence can be seen and observed by the group members as well as lecturer in the real time basis.
- Collaborative platform such as Slido was used to encourage students to respond or brainstorm ideas. Students are able to see the answers in a live mode and feel the social presence. Students' memory is further enhanced when key ideas are summarized and shown in the platform.
- Setting up live polls before and during/after each lesson to test students' understanding on concepts before and after explanations. The questions are pre-typed in the poll on Blackboard Collaborate Ultra before it is launched and students interact directly.
- Gamification and interactive activities implemented through a one-stop interactive platform, Nearpod. Once the slides are uploaded to the platform, educational games, formative assessment and discussion wall (similar to Padlet) were added in between slides to deepen engagement with students. The best part is we do not need open other tab/platform to launch the activities. Students can also view everything live at the same time through their own device. The overall educational experience was enhanced with cognitive, teaching and social presence (Garrison, et al., 2000).

## Observable Findings

- After applying the FTP and teaching practices, there was improvement on OLSS, class engagement and satisfaction in the survey conducted a year later in 2021 (n=92).
- Due to unequal sample sizes, Welch's t-test was applied to compare the changes after implementation of the teaching strategies.
- The overall students' OLSS is significantly better than pre-implementation as shown in Table 1. Improvement is observed on all dimensions of OLSS including *technology use self-efficacy* ( $t(206) = -3.062, p = .002$ ), *online learning task self-efficacy* ( $t(199) = -3.190, p = .002$ ), *instructor interaction and communication self-efficacy* ( $t(189) = -2.215, p = .028$ ), and *self-regulation and motivation efficacy* ( $t(206) = -2.423, p = .016$ ).

Table 1: Reported Values for Four Dimensions of Online Learning Self-Efficacy

Online Learning Self-efficacy	Before implementation M (SD)	After implementation M (SD)
Technology use self-efficacy	3.84 (0.88)	4.16 (0.77)
Online learning task self-efficacy	3.68 (0.89)	4.02 (0.81)
Instructor interaction and communication self-efficacy	3.66 (0.88)	3.91 (0.86)
Self-regulation and motivation efficacy	3.28 (1.09)	3.59 (0.95)

Notes: M: Mean, SD: standard deviation

- The results before (M=3.60, SD=0.91) and after (M=3.93, SD=0.86) implementations of teaching practices also increase class engagement ( $t(192) = -2.908, p = .004$ ) while the pre- (M=3.12, SD=1.10) and post-evaluation (M=3.72, SD=1.03) of student feedback indicate that the teaching strategies adopted resulted in an improvement on overall satisfaction on online learning ( $t(194) = -4.432, p = .000$ ).
- Based on my observation, a better engagement level was found between students and lecturers as well as among online students themselves. Less questions/concerns were raised in the FTP and the atmosphere of online class was seen to be very much different as students became active in responding.
- The use of live polls encourages back-channel conversation including student-to-student conversations on top of front-channel (texts in the chat box) while team discussion is more productive using collaborative note-taking. Gamification and interactive activities were observed to increase engagement and resulted in more interesting sessions while students' understanding can be tracked through activities.

## Conclusion & Recommendations

- Instructor's role is critical in achieving students' satisfaction on online learning, hence we need to ensure the strategies we applied in class are supporting the three dimensions of class engagement, i.e. cognitive, behavioural and emotional.
- This research can be used to inform educators on ways to positively influence class engagement and to assist students to build confidence in their ability to learn online. The reflection and analysis of the strategies adopted suggest educators can implement change in teaching practices by incorporating fun and collaboration in learning, promoting students' sense of belonging, and planning for more student participation.
- Moving forward, I believe blended learning and hybrid teaching model would be sustainable in a long-run. Integrating e-learning into our education has become indispensable after the pure e-learning experience.

## Key References

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