Rethinking Learning & Teaching, The Blended Ways

New Classroom Design for Universitas Pelita Harapan

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ABSTRACT

In the past two years, the COVID-19 pandemic has abruptly changed many things, consequently in the academic field as well. It questioned on how educational institutions should conduct teaching and learning. Universitas Pelita Harapan (UPH) had been strategizing on these issues since the beginning, starting from developing an academic approach for significant learning called M-Flex, to the design of physical aspects. Blended Learning comes as one the best option that synergize significant learning model and the designed physical space. This paper will discuss on how UPH strategizing in these matters. The methods will combine quantitative research for collecting data and qualitative research for gaining insights from UPH community and translating it into physical design for the new classroom that adapt significant learning and the new normal condition. Thus, this paper will show UPH's new classroom design as well as the research behind it as answers to the new ways of teaching and learning, in which are the blended ways.

Keywords: Significant Learning, M-Flex, Blended Learning, Combined Methods, New Classroom Design.



INTRODUCTION

In the past two years, the COVID-19 pandemic has abruptly changed many things, consequently in the academic field as well. The perplexing situation, even after 2 years and though many said that we already entered new normal, befuddled the very essence on how educational institutions should conduct teaching and learning. Universitas Pelita Harapan (UPH) had been strategizing on these issues since the beginning, starting from developing M-Flex (Sommers, 2021), an academic approach for significant learning to the design of physical aspects that accommodate the M-Flex. Blended Learning (https://www.blendedlearning.org/ models/) comes as one the best option that synergize M-Flex significant learning model and the designed physical space that will give the best teaching and learning experience for the students as well as for the lecturers. This paper will discuss on how UPH strategizing in these matters. The methods used in this research combine quantitative research for collecting data and qualitative research (Creswell and Clark, 2007) for gaining insights from UPH community, and translating it into physical design for the new classroom that adapt to M-Flex significant learning and the new normal condition (Niemeyer, 2002; Lang and Witty, 2022). Thus, this paper will show UPH's new classroom design as well as the research behind it as answers to the new ways of teaching and learning, in which are the blended ways.

LITERATURE REVIEW

The terms significant learning derived from Fink (2013), where Fink described it as an intersection between 6 aspects of learning: foundational knowledge, application, integration, human dimension, caring and learning how to learn (see the details below):

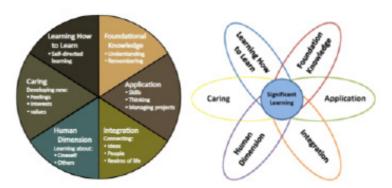


Image 1 Fink Learning Taxonomies and Significant Learning (Fink, 2013)

Universitas Pelita Harapan translated Fink significant learning into Multi Flexible Learning (M-Flex) (Sommers, 2021), in which describe as follows: 1) Utilizing resources to increase active teaching strategies when interacting with students; 2) Maintain flexibility in the teaching and learning process and, 3) Promote significant learning.





Image 2 UPH Multi Flexible Learning (M-Flex) (Sommers, 2021 inspired by Fink, 2013)

M-Flex would operate well with blended learning approach. Blended learning itself has many definitions, however, in this research it will use the definitions from Blended Learning Universe (BLU) (https://www.blendedlearning.org/models/), which is: a formal education program in which student learns in part online, with some element of control over time, place, path or pace of their own learning, in part in a physical space away from home and along the learning path it will use all modalities (i.e.: technology, educational tools, etc.) to provide an integrated and significant learning experience. There are at least 5 model of blended learning, namely:

- 1) Station Rotation, which allows students to rotate through stations on a fixed schedule, where at least one of the stations is an online learning station.
- 2) Individual Rotation, which allows students to rotate through stations, but on individual schedules set by a teacher or software algorithm.
- 3) Flipped Classroom, which flips the traditional relationship between class time and homework. Students learn at home via online coursework and lectures, while teachers use class time for fruitful discussion or guided projects.
- 4) Flex, in which this model lets students move on fluid schedules among learning activities according to their needs, using online learning as its core. Teachers provide support and instruction on a flexible, as-needed basis while students work through course curriculum and content. Thus, students have a high degree of control over their own learning.
- 5) Enriched virtual, in which allows students to complete most of the coursework by online at home or outside of school, and occasionally attend face-to-face learning sessions scheduled.

METHODOLOGY

The methods used in this research combine quantitative research for collecting data and qualitative research (Creswell and Clark, 2007) for gaining insights from UPH community. These combined approaches will give comprehensive insights to the design team when the team interpreting the data into physical design for the new classroom. The classroom should be able to respond to what M-Flex learning aimed, in which: active teaching strategies, flexibility and promote significant learning (Sommers, 2021). Thus, the design methods used by the team are in accordance with Niemeyer (2002) argumentation that students needed more than just a simple space to learn, in which it had to be smart and interactive classroom with hi-tech equipment to stimulate the learning experience. The design should



also grasp the blended learning models, especially the potentials to transcend beyond the traditional physical space, according to Lang and Witty, 2022).

Data Collection

The data collection was gathered using questionnaire with 13 Faculty in UPH (i.e.: School of Design, Faculty of Nursing, Conservatory of Music, Faculty of Liberal Arts, Faculty of Applied Science and Technology, School of Business, etc.) and 298 respondents, mainly lecturer participated. The questionnaire was designed to measured existing and future conditions using the 4 measurements in design thinking prototype making: problems, potentials, interaction and hopes (Brown, 2008; Brown and Katz, 2009). The existing conditions measured the difficulties and potentials or advantages conducting online or blended learning during almost 2 years' time of pandemic. The future conditions measured what type of class that faculty members are going to conduct after the pandemic (onsite, hybrid or blended), what blended type that faculty members are going to opt (station rotation, individual rotation, flipped classroom, flex or enriched virtual) (https://www.blendedlearning.org/models/), what aspects that faculty members deemed most important for conducting blended learning and, what faculty members think can achieved in conducting blended learning.

RESULT & DISCUSSION

From the existing conditions we could see that 55% theory class with 45% other classes model (studio, laboratory, others) were conducted 54.6% full online. Interaction (73.8%), student enthusiasm (69.1%) and network (67.7%) were 3 main problems facing by the lecturers, while on the other hand, there were online class advantages: space flexibility (79.8%), everything can be recorded (73.8%) and time flexibility (51.6%). The measurement of future needs shown 83.6% lecturers prefer to have blended learning (combination online and offline) with flipped classroom approach (45.6%) and technology that can enhanced interaction (71.8%) with great network connection (76.8%). In terms of what Blended learning can achieved, the lecturers saw mostly from the time (77.2%) and space (60.7%) flexibility, while it can also increase partnership and intake.

Several important insight statements recorded from lecturers and staffs are gathered qualitatively from the questionnaire were:

'Students are conditioned to actively study before, during and after lectures' (most Faculty in UPH)

'Meetings can be more effective in distributing things that are not understood yet by the students or lecture materials that need to be validated' (Teacher's College)

'Technology will help to reach and wider scale of partnership' (Faculty of Economic and Business)

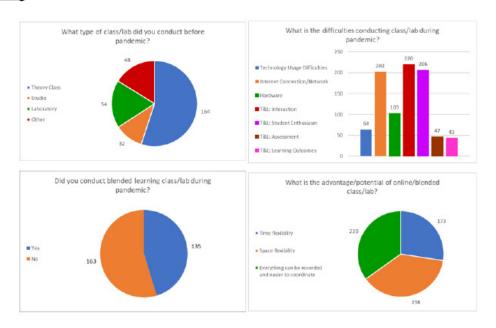
Blended Learning can make learning more fun, interactive, and meaningful. In the long term, students will remember that this BL course conducted is useful for everything they do, both academically and professionally, as the materials can always be accessed anytime and anywhere, even after they have graduated



(Faculty of Liberal Arts)

The insight statements collected from all the lecturers and staffs, then was dissected from its repetitiveness to mold the key findings. Some of the key findings are optimum learning time, expanding the scale of reach and boundless accessibility.

Existing



Future Needs

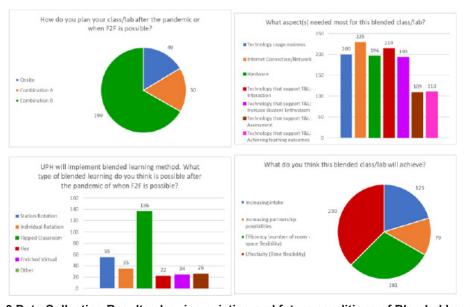


Image 3 Data Collecting Results showing existing and future conditions of Blended Learning in UPH (UPH Classroom Task Force, 2022)



Design Translation

Utilizing the data collected, the UPH Classroom Taskforce team started to design the physical class needed by translating the data into 3 smart class categories: (Niemeyer, 2002; Lang and Witty, 2022)

- Every classroom needed to be equipped with smart TV to made it into on-site collaborative class. The smart TV used as means of technology that enhanced students' interaction and fruitful discussion adopting station rotation blended learning model.
- 2) Every Faculty needed to have one smart classroom that has capability to have hybrid learning, where onsite and online teaching and learning can be done simultaneously. The class would use high-tech standard of smart classroom to enrich the interaction experience and possible to achieve significant learning. It will cater the possibility of expanding the scale of reach, in terms of the number of students that can participate and the number of external, even international partnership and collaboration. The class will be responding to the station rotation, flex and enriched virtual blended learning models.
- 3) Complementary to the hybrid learning smart classroom is the lecturer station to conduct online learning. This station is basically a support system for blended learning, including flipped classroom blended learning model.

Below is the design prototype produced:

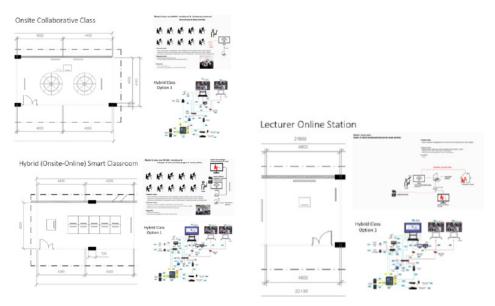


Image 4 Layout and Schematic Design of: Onsite Collaborative Class, Hybrid (Onsite-Online)
Smart Classroom and Lecturer Online Station (UPH Classroom Task Force, 2022)

CONCLUSION

The paper aimed to show on how blended learning will be new ways of teaching and learning even after the pandemic, as it already changes the landscape of how one conduct teaching and learning (Lang and Witty, 2022). Hence, there were several exciting new ways in blended learning that can be concluded from this paper:



- Teaching and learning will be not limited with physical boundaries. Therefore, it will expand beyond geographical constraints and make teaching and learning accessible for everyone. It is also opening unlimited possibilities to build partnership and connect to everyone, or everything needed to cultivate experiential learnings.
- 2. Technological advancement, though still not ideal and requires continuous research, is showing amazing improvements on the interaction problems, in which very much needed in the teaching learning engagement process.
- 3. Blended learning makes ways for individual development to be counted, where students can grow in their own pace and excel where they should be while at the same time organized and acknowledged by the lecturer.

There are enormous things that are not covered by this research, as it is only a glimpse of blended learning potentials materialized into smart classroom design discussed in this paper. It is acted as a start to rethink our ways of conducting teaching and learning to produce the experiential and significant ones. Further research area that can be conducted is on how to increase experience, especially in terms of active interaction within the online learning technology area.

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