



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PROGRESSIVE EDUCATION & DEVELOPMENT



[www.hrmars.com](http://www.hrmars.com)

ISSN: 2226-6348

## Online Teaching Vs Face to Face (F2F) - Insight from Lecturers and Students of Manipal International University

Shanti Gopal Nair, Nur Zulaikha Mohamed Sa'dom

To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v11-i3/15128>

DOI:10.6007/IJARPED/v11-i3/15128

**Received:** 13 July 2022, **Revised:** 16 August 2022, **Accepted:** 29 August 2022

**Published Online:** 14 September 2022

**In-Text Citation:** (Nair & Sa'dom, 2022)

**To Cite this Article:** Nair, S. G., & Sa'dom, N. Z. M. (2022). Online Teaching Vs Face to Face (F2F) - Insight from Lecturers and Students of Manipal International University. *International Journal of Academic Research in Progressive Education and Development*, 11(3), 1610–1625.

**Copyright:** © 2022 The Author(s)

Published by Human Resource Management Academic Research Society ([www.hrmars.com](http://www.hrmars.com))

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licences/by/4.0/legalcode>

Vol. 11(3) 2022, Pg. 1610 - 1625

<http://hrmars.com/index.php/pages/detail/IJARPED>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at  
<http://hrmars.com/index.php/pages/detail/publication-ethics>



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PROGRESSIVE EDUCATION & DEVELOPMENT



[www.hrmars.com](http://www.hrmars.com)

ISSN: 2226-6348

## Online Teaching Vs Face to Face (F2F) - Insight from Lecturers and Students of Manipal International University

Shanti Gopal Nair

School of Management and Business, Manipal International University, Negeri Sembilan,  
Malaysia.

Nur Zulaikha Mohamed Sa'dom

School of Management and Business, Manipal International University, No.1 Persiaran MIU,  
71800 Nilai, Negeri Sembilan, Malaysia

Corresponding Author's Email: [nurzulaikhamohamedsadam@yahoo.com](mailto:nurzulaikhamohamedsadam@yahoo.com)

### Abstract

The purpose of this study is to explore the effectiveness of teaching methods used during face-to-face and online classes in Manipal International University (MIU). Lecturers need to constantly work on enhancing their skills in order to create competent graduates who can cope in this highly technological age. Much emphasis has been put on student-centred learning; however, only a small percentage of lecturers make an effort to evolve from being sages who know all to facilitators who discover methods to maximize learning. Fifty-two students and fifty-one academicians from Manipal International University, Nilai, Malaysia participated in this research by responding to an online questionnaire. The findings of this research clearly indicate that there is a need to analyse students' learning styles and diversify teaching methods. Online courses are becoming increasingly popular and education providers are required to meet the demands of the current generation by offering more online courses; however, students and lecturers are not ready for traditional classroom education to be completely replaced by online programmes. Blended learning which provides a combination of both online and traditional classes seems to be the best choice for private universities to fulfil the needs of learners with different learning styles.

**Keywords:** Teaching Methods, Face-To-Face Classes, Online Classes, Academicians, Students, Private Universities

### Introduction

The purpose of this study is to explore the effectiveness of face-to-face (F2F) and online teaching methods used by lecturers in private universities. The target population are students and academicians from Manipal International University (MIU), Nilai, Malaysia. MIU is a member of the Manipal Global Education Group, and it is a full-fledged Malaysian university which offers programmes in the fields of Science, Engineering, Management and Business. It

has a student population of nearly one thousand and academic staff population of one hundred.

Lecturers, particularly in Malaysia, have been urged to enhance their skills in order to create graduates who are competent (Imran, 2015). The teaching methods used by lecturers in face-to-face classes in universities have seen tremendous changes over time. The roles played by lecturers have been affected by the vast amount of information which is readily available on the internet. Therefore, lecturers are under tremendous pressure to change with time and improve pedagogical practices (Lin et al., 2015).

In the highly technological and fast-paced society that we are living in, it has become necessary to re-think the way lessons are delivered and learned. Universities need to produce graduates whose skills meet the needs of the industry in order to be competitive in the job market (Weligamage, 2009). Hence, there is an urgent need to identify the employers' perspective on the skills and attributes of potentially employable graduates. Much emphasis has been put on student-centred learning; however, only a small percentage of lecturers are making an effort to evolve from being sages who know all to facilitators who discover methods to maximize learning. When using a lecture method about 80% of the presented content is forgotten within 8 weeks (Weligamage, 2009). The objectives of this study are to:

- Determine whether there are significant differences in the extent of use of online teaching delivery and face to face (F2F) classes in private universities.
- Determine whether there are significant differences in terms of effectiveness of on-line teaching delivery and face to face classes in private universities.
- Measure the perception of lecturers and students towards teaching methods (online teaching and F2F classes) in private universities.

### **Literature Review**

In the current demanding business environment, numerous challenges are faced to remain competitive; therefore, innovation in teaching is important for both individual and organisational success (Imran, 2015). There is an immense amount of studies carried out on how teaching methods can be improved to enhance the learning experience of students in face-to-face and online classes. However, current research efforts have overlooked the importance of understanding the expectations of students in the technological age. There is a need to understand how students perceive the effectiveness of methods used in online-classes and face-to-face classes.

When the advantages presented by educational software are analyzed in comparison to traditional teaching and learning methods, attention should be paid to the final beneficiaries who are students and lecturers who are the key players in the development and usage of educational software (Beldiman, 2017).

Gaining a deeper understanding of how lecturers have an impact in private academic institutions can in turn improve the quality of education provided. This knowledge will help develop lecturers who are able to improve their teaching methods and practice innovation when imparting knowledge to students. The success of academic institutions lies solely in the

hands of lecturers and this success heavily depends on teaching innovation. The motivation to be innovative and explore various teaching methods is necessary. Academicians have to be committed to provide a conducive learning environment which encourages creation of active minds, interaction with peers and construction of new visions (Bidabadi et al., 2016).

#### *Learning Styles of Students*

Students have various learning styles; some students prefer the lecture method whereas others prefer task based, discovery style or project-based style, to name a few. It is essential to keep this in mind when choosing teaching methods in universities. The success of students is linked directly to the relationship between the learning style of students and the teaching methods chosen by lecturers (Rogers & McNeil, 2009).

Students strongly believe that universities need to upgrade their information and communication technology to create a conducive learning environment which prepares them for the future jobs (Reynolds, 2017). Due to students' preference for engaging learning methods, universities have to be prepared for collaborative learning. The next challenge is to think of solutions for the sharing of rich content throughout the university such as lecture capture and web casting. Investment must be made to create an infrastructure which supports this new wave in order to transform the students' educational experience.

According to a survey conducted by Bartholel (2013) the number of respondents who felt traditional courses offered greater educational value than online courses was nearly equal to the number who preferred the online approach. However, the percentage of those who thought traditional courses offered better job opportunities was much larger. Most respondents stated that online courses created passive learners as virtual labs can never substitute the actual experience of carrying our experiments. Results of the survey also showed that human interaction played a major role in learning and online forums are in not a good substitute. Another drawback mentioned is that online courses encouraged procrastination. The benefit of online courses, though, is that the reach is wider, and it caters to the needs of people who are differently abled (Bartholel, 2013).

#### *Lecture Method*

The preferred choice of delivery in universities is the lecture method. Lecturing is a direct way of passing information to students and the main reason for this is that lecturing allows greater control over the delivery of content as lecturers are the main source of information (Abdulbaki et al., 2018).

Learners are expected to be obedient recipients of knowledge and they are not required to provide any output. Depending on lecturers alone, without expecting any feedback from students, has lost its effectiveness (Bidabadi et al., 2016). Due to this reason, lectures are known to create learners with poor motivation as they are merely required to be good note-takers instead of solving problems using critical thinking skills. Most students are deprived of the opportunity to share their thoughts and defend their personal opinions when the lecture method is chosen.

Most academicians in private universities resort to using the lecture method to deliver content especially when handling large classrooms. In most cases, this is because lectures are easy to plan and can be utilised to deliver any form of content (Abdulbaki et al., 2018). Lessons

can be planned quickly as lecturers only need to rely on themselves. Little thought has to be put in about how the students can be involved in the learning process. Most lecturers rely on PowerPoint slides which are easier to prepare than supplementary teaching aids which need to be prepared if other methods are chosen.

#### *Online Courses*

There is a tremendous transformation in higher education from the Industrial Age to the Information Age as traditional classroom learning is changing to an environment where an education free of distance is taking place (Konyu-Fogel et al., 2013). In this network environment, the outcomes are more achievement based; therefore, there is a paradigm shift from the old to new teaching style in multiple levels.

Online education is set to grow exponentially, and online learning communities will continuously be formed. Lecturers need to be adaptable and prepared to deliver online lectures. Therefore, the new paradigm needs lecturers to consider innovative teaching methods which are suitable for the current tech-savvy students. Lecturers now cannot only fulfil the requirement of being knowledge providers as they need to create active students who are able to independently discover knowledge and apply the knowledge gained efficiently.

Beldiman (2017) states that facilitating learning and providing a novel framework which is better than the traditional method should be the main objectives of educational software. Well organised information which is easily accessible should be prioritised. For academicians, educational software should prove to be a didactic instrument that is flexible to use and full of new opportunities. Due to this, learners will have the advantage of gaining from discovery learning as the focus in online classes is on learning by doing and not memorising.

However, Blau et al (2017) report that students evaluated online courses lower than face-to-face courses and this may cause a detrimental effect to the success of online courses. Students' may not be willing to opt for online courses due to low teaching evaluations of lecturers who conduct the classes. Due to this factor, it is necessary to maintain the quality of online classes by imparting the same level of knowledge and showing an equal amount of commitment.

The delivery of online courses is unique compared to the traditional delivery methods used in a face-to-face classroom; therefore, the issues which arise in ensuring successful delivery may also be different. To help students succeed, lecturers need to strive to fulfil the needs of all students by combining a mixture of approaches and teaching methods (Rogers, & McNeil, 2009). Lecturers need to continuously analyse how well the delivery method chosen suits students' learning style and create a more conducive learning environment for students.

#### *Other Teaching Methods*

Universities have become business oriented. They are affected by high expectations and changing demands from the student population (Fahimirad et al., 2016). All stakeholders expect a more wholesome teaching and learning experience which caters to the needs of industry's expectations of having more outcome-based performance.

Effective teaching involves good planning with the students' needs in mind. The outcome of lessons seems to be far from satisfactory in universities due to the lack of innovation. Therefore, academicians need to diversify teaching methods in order to maximise student participation and involvement. Learner-centered teaching methods have repeatedly proven to give better results than the traditional teacher-centered approach.

As shown in the 'Wheel of Instructional Choice' (Figure 1), there are twenty-eight teaching methods which can be used by lecturers. Vikoo in Dorgu (2015) states that the three main categories in which teaching methods fall under are:

- 1) Cognitive Development Methods which include discussion method, questioning method, team teaching method, recitation method and field trip method
- 2) Affective Development Methods which include modelling method, simulation method, dramatic method and role-playing method
- 3) Psychomotor Development Methods which include inquiry method, discovery method, process approach method, demonstration method, experimentation method, programmed learning method, assignment method, project method, microteaching method and mastery learning.

These teaching methods can be combined and developed further after analysing the content which needs to be delivered, the number of students and the capability of students. Research has proven that the most effective approach is the mixed method, where the focus is student centred together with lecturer centred (Bidabadi et al., 2016). However, the main barriers to using the mixed method are lecturers' behaviour, lecturer's outlook and institutions' regulations. Most times, self-imposed procedures can complicate the delivery of knowledge which then deprives students and lecturers of creativity (Fahimirad et al., 2016).

#### *Locke's Goal-Setting Theory & Vroom's Expectancy Theory*

Locke's Goal-setting Theory and Vroom's Expectancy Theory have been selected to analyse their effectiveness in influencing the teaching methods chosen by the lecturers. These goal-setting theories have proven to be extremely useful in predicting the satisfaction level of people and how they affect their styles and attitudes.

Locke and Latham (2016) stress that performance is affected by goals as they assist in focusing attention and effort on goal-relevant activities, serve as an energizing function, encourage persistence and affect action. Goals also form a basis for motivation; therefore, behaviour is directed according to the motivation level of individuals. However, two conditions, which are goal acceptance and goal commitment, must be fulfilled in order for goals to influence performance (Wong and Low, 2018). This theory shows that the motivation level of academicians to change their teaching style can be influenced by leaders in academic institutions. Lecturers must be clear about the goals set to enhance the teaching and learning experience. Regular feedback regarding performance and task completion can help to further reinforce understanding of the expected behaviour.

Vroom's Expectancy Theory stresses that individuals make choices and are motivated to put in effort, with the expectation that performance will give desirable rewards (Purvis et al., 2015). Vroom posits that people give importance to personal gains and are motivated to perform only when they perceive that there are benefits in performing well. These benefits

include both intrinsic and extrinsic motivation. Lloyd and Mertens (2018) state that people's motivation force is related to the following positive factors:

- 1) Effort – employees put in effort to enjoy material goods and maintain social status
- 2) Performance – employees gain confidence when they have experience to achieve goals set by organisations and they believe they will be paid accordingly.
- 3) Reward – monetary rewards provide intrinsic value for employees to perform better. Wages provide a sense of security and stability.

According to Wong and Low (2018) motivation tends to influence behaviour unconsciously and cause people to behave in a specific manner to satisfy their lower-level needs and when that is done, they strive to fulfil higher-level needs. Similarly, employees tend to work well when physiological needs are fulfilled, a safe and secure environment is provided, and a competitive compensation and benefits package is induced. These are necessary to increase employees' motivation at work. Therefore, these theories reinforce the belief that leaders will be able to change lecturers' performance by setting clear goals, giving timely feedback, and providing a competitive reward system.

### **Research Methodology**

The focus of this research is to analyse the effectiveness of teaching methods. Since the focus is also on the benefits of methods used in online and traditional face-to-face classes, the main target groups in this research are students and lecturers, as they play a fundamental role in development and usage of educational software (Beldiman, 2017).

Therefore, fifty-two students and fifty-one lecturers from Manipal International University, a private university in Nilai, Malaysia, were selected to participate in this research. This respondent size is suitable to provide a  $\pm 10\%$  accuracy for a population size of lecturers and students in Manipal International University. This sample size has been determined by using the Kreijce and Morgan Table (Kreijce & Morgan, 1970). This size is large enough to detect an association between variables.

To understand respondents' opinions of the of teaching methods chosen by academicians, an online questionnaire was designed and distributed to respondents through WhatsApp and email. Reliable data could be collected quickly by using this method and a reliable response rate was achieved to further enhance understanding of the information gathered.

Using a facilitated approach, participants were required to respond to the extent of use and effectiveness of the following twenty-eight teaching methods in online and traditional classes:

Lecture	Group study	Pictures, posters and newsletters	Computer-assisted instruction	Oral presentation	Lecture-Discussion	Observation
Individualised Instruction	Exhibits	Contests	Distance Programmes	Questioning	Guest Lectures	Computer Software
Practical sessions	Videos	Brainstorming	Mentorship	Cooperative Learning	Projects	Academic Games
Case Study	Debates and Forums	Demonstrations	Independent Study	Problem Solving	Role Plays	Tutorials

Figure 1: Wheel of Instructional Choice

The questionnaire has been adapted from the research of Han (2014). Content validity of questionnaires were assessed by three senior lecturers. A score sheet was provided to evaluate the validity of each question out of 10 according to the level of appropriateness, and wording. Face validity of the amended questionnaire were assessed by distributing the questionnaire to twenty respondents to check understandability, layout and length. A descriptive, correlational design was utilised to analyse the extent of use and effectiveness of teaching methods by conducting a survey. The questionnaires were administered online by invitation; therefore, convenience nonprobability sampling was used. A Likert scale ranging from 1 to 5 (1=strongly disagree, 2=agree, 3=unsure, 4=agree, and 5=strongly agree), was used for all the questions. The strength and direction of the relationships between the variables were analysed by the using the summary provided by Google Forms.

## Results and Findings

### *Respondents profile*

Based on Table 1, 49.5% of the respondents were lecturers while 50.5% were students. Half of the respondents are 18-25 years old (50%), while the percentages of the remaining respondents are 26-35 years old (23.3%), 36-45 years old (10.7%), 46-55 years old (7.8%) and 55 years old and above (7.8%). In terms of level of education, 29.1 % of the respondents are high school graduates and diploma holders, while the remaining have bachelor's degree (25.2%), master's degree (35%) and doctorate degree (10.7%).



Table 1  
*Demographic profiles of the respondents*

Demographic variables	No. of respondents = 103	(%)
<i>Lecturer/ students</i>		
Lecturer	51	49.5
Student	52	50.5
<i>Age</i>		
18-25	52	50.5
26-35	24	23.3
36-45	11	10.7
46-55	8	7.8
Over 55	8	7.8
<i>Education</i>		
High school/ Diploma	30	29.1
Bachelor	26	25.2
Master	36	35
Doctorate	11	10.7

*Data Analysis and Result*

To analyze the data, descriptive statistics, factor analysis and correlation analysis using SPSS were applied. The descriptive statistics were first measured, followed by factor analysis and correlation analysis. The descriptive statistics of the variables, which include mean and standard deviation were analysed.

The descriptive analysis was performed to describe the characteristics of constructs and variables within a setting (Hair et al., 2011). As depicted in Table 2, all mean values are within the range of 3.095-3.860. This indicates that, on average, the response for all the observed variables is within the range of 3 to 4. The value of standard deviation also can be considered as low, which is in the range of 0.539 to 0.975 which is an indication that most of the numbers are less spread out or close to the average.

Table 2  
*Descriptive statistic of continuous variable*

Variable	Mean	Standard deviation
PE	3.484	0.539
OL_EOU	3.095	0.975
OL_EOM	3.333	0.869
F2F_EOU	3.860	0.796
F2F_EOM	3.851	0.729

\*PE = perception towards teaching method, OL\_EOU= Online class \_extent of use, OL\_EOM= Online class \_effectiveness of teaching method, F2F\_EOU= Face to face class extent of use, F2F\_EOM = Face to face \_effectiveness of teaching method

As illustrated in Table 3, all mean values are within the range of 2.76 -3.74. This indicates that on average, the response for the all observed variables is within the range of 2.7 to 4. The highest mean for OL\_EOU is Lecture (3.74), indicates that lecture is the most used teaching method for online classes. While the lowest mean is OL\_contest (2.76), indicates that contest is the least used. The highest mean for OL\_EOM is OL\_videos (3.60), suggests that teaching method by using video is the most effective for online classes. Whereas the lowest mean is OL\_exhibit (3.07). suggests that exhibit is the least effective teaching method for online class.

Table 3

*Descriptive statistic OL\_EOU and OL\_EOM*

Variable (OL_EOU)	Mean	Variable (OL_EOM)	Mean
OL_lecture	3.74	OL_lecture	3.34
OL_groupstudy	2.97	OL_groupstudy	3.43
OL_poster	3.26	OL_poster	3.49
OL_computerassisted	3.43	OL_computerassisted	3.32
OL_oralpresentation	3.05	OL_oralpresentation	3.30
OL_lecturediscussion	3.17	OL_lecturediscussion	3.28
OL_observation	2.95	OL_observation	3.10
OL_individualisedinstruction	2.94	OL_individualisedinstruction	3.25
OL_exhibits	2.83	OL_exhibits	3.07
OL_contests	2.76	OL_contests	3.06
OL_distanceprogrammes	2.83	OL_distanceprogrammes	3.35
OL_questioning	3.33	OL_questioning	3.45
OL_guestlectures	2.57	OL_guestlectures	3.20
OL_computersoftware	3.20	OL_computersoftware	3.50
OL_practicalsession	2.95	OL_practicalsession	3.23
OL_videos	3.30	OL_videos	3.60
OL_brainstorming	3.22	OL_brainstorming	3.23
OL mentorship	2.93	OL mentorship	3.18
OL_cooperativelearning	3.06	OL_cooperativelearning	3.29
OL_projects	3.30	OL_projects	3.37
OL_academicgames	2.99	OL_academicgames	3.38
OL_casestudy	3.34	OL_casestudy	3.44
OL_debatesandforum	2.96	OL_debatesandforum	3.34
OL_demonstrations	2.94	OL_demonstrations	3.23
OL_independentstudy	2.88	OL_independentstudy	3.14
OL_problemsolving	3.38	OL_problemsolving	3.33
OL_roleplays	2.91	OL_roleplays	3.15
OL_tutorials	3.44	OL_tutorials	3.57

As showed in Table 4, all mean values are within the range of 2.91- 4.41. This indicates that, on average, the response for all observed variables is within the range of 2.9 to 4.5 The highest mean value for F2F\_EOU is F2F\_lecture (4.41). This indicates that lecture is the most used teaching method for F2F classes. While the lowest mean is F2F\_roleplays (2.91) which indicates that roleplays is the least used. The highest mean for F2F\_EOM is F2F\_oralpresentation (4.39). This suggests that teaching method by using oral presentation is

the most effective for F2F classes. Whereas the lowest mean is F2F\_distance programmes suggests that distance programmes is the least effective teaching method for online class.

Table 4

*Descriptive statistic of F2F\_EOU and F2F\_EOM*

Variable	Mean		Mean
F2F_lecture	4.41	F2F_lecture	4.28
F2F_groupstudy	4.12	F2F_groupstudy	4.13
F2F_poster	3.86	F2F_poster	3.87
F2F_computerassisted	3.58	F2F_computerassisted	3.90
F2F_oralpresentation	4.23	F2F_oralpresentation	4.39
F2F_lecturediscussion	4.17	F2F_lecturediscussion	4.15
F2F_observation	4.02	F2F_observation	4.07
F2F_individualisedinstruction	3.94	F2F_individualisedinstruction	3.92
F2F_exhibits	3.75	F2F_exhibits	3.80
F2F_contests	3.57	F2F_contests	3.84
F2F_distanceprogrammes	3.02	F2F_distanceprogrammes	3.45
F2F_questioning	3.93	F2F_questioning	4.10
F2F_guestlectures	3.48	F2F_guestlectures	3.78
F2F_computersoftware	3.45	F2F_computersoftware	3.72
F2F_practicalsession	3.89	F2F_practicalsession	4.01
F2F_videos	3.30	F2F_videos	3.95
F2F_brainstorming	3.22	F2F_brainstorming	4.13
F2F_mentorship	2.93	F2F_mentorship	3.88
F2F_cooperativelearning	3.06	F2F_cooperativelearning	3.91
F2F_projects	3.30	F2F_projects	4.18
F2F_academicgames	2.99	F2F_academicgames	3.86
F2F_casestudy	3.34	F2F_casestudy	4.09
F2F_debatesandforum	2.96	F2F_debatesandforum	4.09
F2F_demonstrations	2.94	F2F_demonstrations	4.11
F2F_independentstudy	3.74	F2F_independentstudy	3.98
F2F_problemsolving	3.38	F2F_problemsolving	4.16
F2F_roleplays	2.91	F2F_roleplays	3.88
F2F_tutorials	3.34	F2F_tutorials	4.26

## Exploratory Factor analysis (EFA)

The responses of constructs perception of delivery method were subjected to exploratory factor analysis (EFA) to assess its dimensionality. The main objective of EFA is to define the fundamental and basic structure among variables in the analysis (Hair et al., 2009). It is also to generate new instruments to measure the facets of constructs (Bryne, 2010). From the analysis, three factors have been extracted. According to the interpretation and meaning of the items, the factors were categorized as 'perception towards online class' (factor 1), 'perception towards blended learning (F2F and online class)' (factor 2) and 'perception of the

effectiveness of teaching methods on learning' (factor 3). All items loaded in these three factors fall under the acceptable range of between 0.520 – 0.718, indicating a well-defined factor structure (Hair et al., 2006). The summary of the result of EFA of perception towards teaching method was summarized in Table 5.

Table 5  
*Results of EFA on Perception towards teaching method*

Items	Factor 1	Factor 2	Factor 3
<b>Factor 1 : Perception towards online class</b>			
PE7: Computer aided lessons are very important.	0.601		
PE8: Teachers need to develop some proficiency in dealing with distance learning	0.667		
PE9: Online classes are as effective as traditional face-to-face classes.	0.692		
PE10: The teaching methods used in online classes are as effective as those used in face-to-face classes.	0.629		
PE11: Using computers makes the learning process more interesting.	0.597		
PE13: Online classes should be included in all courses in private universities. (blended learning).	0.709		
PE14: Face-to-face classes should be conducted less frequently than online classes.	0.624		
<b>Factor 2: Perception towards blended learning (F2F and online class)</b>			
PE1: Some teaching methods are better than others.		0.590	
PE2: It is important to diversify teaching methods.		0.718	
PE3: Teachers need to consider students' learning styles when planning lessons.		0.520	
PE4: Diversified teaching methods improve students' understanding.		0.648	
<b>Factor 3: Perception of the effectiveness of teaching methods on learning</b>			
PE5: Teaching methods are not as important as content.			0.694
PE6: Teaching methods do not affect students' learning skills.			0.570
PE12: Online classes are frustrating due to the lack of personal attention.			0.639

*Bivariate analysis-Pearson correlation analysis*

As illustrated in Table 6, all the correlation is significant at the p value < 0.01. A p-value of 0.01 means that there is only 1% chance that results from the sample occurred due to chance. Both OL\_EOU and OL\_EOM (0.705) and F2F\_EOU and F2F\_EOM (0.689) has a strong positive correlation. This implies that OL\_EOU has a strong positive relationship with OL\_EOM. Also, F2F\_EOU positively correlate with F2F\_EOM.

Table 6

*Pearson correlation*

	PE	OL_EOU	OL_EOM	F2F_EOU	F2F_EOM
PE	1				
OL_EOU	0.355**	1			
OL_EOM	0.462**	0.705**	1		
F2F_EOU	0.311**	0.275**	0.322*	1	
F2F_EOM	0.226**	0.265**	0.357*	0.698*	1

\*\* Correlation significant at the 0.01 level

\*PE = perception towards teaching method, OL\_EOU= Online class \_extent of use, OL\_EOM= Online class \_effectiveness of teaching method, F2F\_EOU= Face to face class extent of use, F2F\_EOM = Face to face \_effectiveness of teaching method

### Discussion and Research Implications

Most of the respondents have agreed that some teaching methods help to enhance learning experience more than others. This shows that classroom instruction can be improved by choosing a suitable strategy after carefully analysing the subject matter, classroom demographics and audience's needs. Diversifying teaching methods is essential in order to sustain the interest and motivation level of students. A decade ago, it was effective to focus on using two or three effective strategies in the span of a semester. This practice cannot be applied to the current generation due to the shortening attention span. People's cognitive abilities keep changing and can vary on different days. A study conducted by Microsoft Corporation study showed that technology has a negative impact on people's ability to remain focused (Schaum, 2016). After monitoring over 2,000 people aged 18 or older, it was concluded that people's attention span had dropped from twelve seconds to eight seconds. This would mean that people have a shorter attention span than a goldfish's average nine seconds. Therefore, diversifying teaching methods in the span of two hours is necessary to ensure that students' gain from attending classes.

The results also show that academicians need to invest time in analysing the students learning before starting a course. This has to be done to incorporate student-centred learning into teaching practices. Jamulia (2018) advises practitioners to pay attention to students' internal characteristics such as attitude, motivation, personal beliefs, personality, learning style, and learning strategies. The researcher also gives importance to external characteristics which are influenced by environmental factors, social background, physical differences, and past experiences. Conducting a short survey at the beginning of a course can help lecturers to identify the learning styles of students and diversify teaching methods to cater to their needs. The failure rate of students can be brought down greatly by paying attention to students' learning styles.

Teaching methods are considered to be as important as the content delivered. The goals, skills, and background knowledge of students are not similar; therefore, a mismatch between teaching and learning styles can result in their failure which then leads to frustration and lack of motivation (Jamulia, 2017). From the results of the survey, it can be seen that the respondents strongly feel it is important to design computer aided lessons. In the current technological age, computer aided lessons are becoming a necessity as they are a rapidly expanding spectrum. Examples of this method are drills, exercises, object visualization and

computer-facilitated communication (Arnold, 2000). Using this method can quickly increase students' access to information. Therefore, all lecturers need to upgrade their skills in not only delivering but also designing effective computer-aided lessons.

Most respondents are unsure about the effectiveness of online classes in comparison to traditional classes. This is mainly due to the lack of face-to-face interaction with lecturers. Participating in chats and discussion forums does provide an avenue for interaction but this cannot completely make up for the quality of interaction obtained in face-to-face classes. Having a lecturer to solve problems according to individual needs is still considered to be an important factor in improving learning experience.

Online learning is definitely a revolution in contemporary education, and it is inevitable that more brick and mortar universities will begin to offer such courses to remain competitive. Most respondents seem to understand the need to adapt to this evolution in education. Fifty-five percent of respondents have agreed that all courses need to include some form of online learning. However, they are clearly not ready to reduce the number of face-to-face classes. Being exposed to technical glitches could have contributed to the uncertainty regarding the quality of information delivered in online classes. Moreover, some subjects need hands-on experience which may not be feasible in online courses.

From the tabulated numbers, there is a clear indication that students and lecturers believe it is absolutely necessary to diversify teaching methods. Respondents also strongly feel that there is value in the listed teaching methods and that more lecturers are attempting to create interest in the course content by using different methods as frequently as possible. The extent of use for all the listed methods are much higher in the face-to-face courses. This could be because respondents find that lecturers find it easier to diversify teaching methods when facing students rather than during online classes even though there is an attempt to diversify methods in online classes. Also, respondents have a clear understanding that methods which work well in traditional face-to-face classes may not be effective in online classes. Therefore, lecturers need to keep this in mind when planning for online classes. Respondents have also indicated that methods which are considered to be more effective in online classes have not been utilised enough. Therefore, lecturers should try to include more videos, computer assisted exercises, projects and pictures to capture the interest of students.

### **Recommendations and Conclusion**

Previous studies have indicated that lecturing is not an effective form of teaching. However, respondents of this study strongly feel that lecturing is still an effective and relevant method which should continue to be used. However, respondents agree that lecturing should not be the only method that is used in the classroom as students have different learning styles and diversifying methods will be more effective. Similarities between this study and previous ones are that respondents are not convinced that online classes are totally effective. Due to this, online classes should be introduced while traditional classes are maintained. This calls for the introduction of blended learning to help students enjoy the advantages of both forms of learning.

In summary, this study attempts to reinforce the notion that the teaching methods adopted in higher academic institutions play an important role in determining whether students' have

a positive learning experience. There is a necessity to study the reasons behind the choice of teaching methods used by academicians at face-to-face classes and on-line classes in universities as academicians in Malaysia have been encouraged to enhance their teaching skills and structure meaningful classroom activities in order to meet the current market demands.

With technological advancement, online courses are becoming increasingly popular and education providers are required to meet the demands of the current generation. This study proves that online education needs to be presented but students and lecturers are not ready for traditional classroom education to be completely replaced by it. Online education may not be suitable for every student or lecturer. It may not also add quality to certain fields of study.

Blended learning which provides a combination of both online and traditional classes seems to be the best choice for private universities to fulfil the needs of learners with different learning styles. This will help learners to enjoy the flexibility and independence offered by online education. At the same time, traditional classes will provide the face-to-face interaction and social setting which can enhance students' communication skills.

Therefore, traditional education will still exist while more and more lessons will start to be delivered online. This will help lecturers to venture into using various methods to deliver content instead of solely relying on traditional methods which will not be able to hold the interest of students with short attention spans. Students have a thirst for participative learning and hopes to be exposed to innovative delivery. Predictability of delivery method causes boredom and lack of interest in subject matter. Students should walk into class with a sense of excitement and anticipation regarding how content would be delivered and how they would be expected to participate. Lecturers play an essential role in determining the success of academic institutions. Therefore, this study clearly gives a clear indication of how lecturers can change students' perception of the quality of education received in private universities.

## References

- Abdulkaki, K., Suhaimi, M., Alsaqqaf, A., & Jawad, W. (2018). The impact of using the lecture method on teaching English at university. *European Journal of Education Studies*, 4(5), 285-302.
- Arnold, D. N. (2000). *Computer-Aided Instruction*. Retrieved from: <http://autocww2.colorado.edu/~toldy2/E64ContentFiles/ComputersElectronics/ComputerAidedInstruction.html>
- Bartholel, J. (2013). I Was Pleasantly Surprised. *Scientific American*, 309(2), 72–73.
- Beldiman, C. M. (2017). Innovative teaching methods based on Information Technology. *Public Administration & Regional Studies*, 19(1), 25–30.
- Bidabadi, N. S., Isfahani, A. N., Rouhollahi, A., & Khalili, R. (2016). Effective teaching methods in higher education: Requirements and barriers. 4(4). *Journal of Advances in Medical Education and Professionalism*.
- Blau, G., Drennan, R. B., Karnik, S., & Kapanjie, D. (2017). Do Technological and Course-Related Variables Impact Undergraduates' Perceived Favorability and Willingness to Recommend Online/Hybrid Business Courses? *Decision Sciences Journal of Innovative Education*, 15(4), 349–369.

- Bryne, B. M. (2010). Structural equation modeling with AMOS basic concepts, applications, and programming New York.
- Dorgu, T. E. (2015). Different Teaching Methods: A Panacea for effective curriculum implementation in the Classroom.
- Fahimirad, M., Idris, K., & Kotamjani, S. S. (2016). Effective academic leadership of learning and teaching in Malaysian higher education. *International Journal of Human Resources Studies*. 6(4) 67-83.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F. (2009). *Multivariate data analysis*.
- Han, G. (2014). Perceptions of secondary school agriculture teachers regarding biomass production education in Iowa. *Iowa State University Capstones, Theses and Dissertations*.
- Imran, A. I. (2015). Communication factors influencing academicians' innovative working behaviour and its impact on their career advancement. *Open Library Telko University*.
- Jamulia, J. (2018). Identifying students learning style preferences at IAIN Ternate. *International Journal of Education*, 10(2), 121-129.
- Konyu-Fogel, G., DuBois, M. B., & Wallingford, V. (2013). Learning Communities and Team-Based Learning: Developing Management and Business Competencies. *Journal of Management Policy & Practice*, 14(5), 70–79.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*. 30.
- Lin, C., Ma, J., & Kuo, K. Y. (2015) Examining the efficacy of project-based learning on cultivating the 21 century skills among high school students in a global context. *Journal on School Educational Technology*, 11(1).
- Lloyd, H., & Mertens, D. (2018). Expecting more out of Expectancy Theory: History urges inclusion of the social context. *International Management Review*. 14(1)
- Locke, E. A., & Latham, G. P. (2016). *Building a Practically Useful Theory of Goal Setting and Task Motivation: A 35-Year Odyssey*.
- Purvis, R. L., Zagenczyk, T. J., & McCray, G. E. (2015) What's in it for me? Using expectancy theory and climate to explain stakeholder participation, its direction and intensity. *International Journal of Project Management*. 33(1).
- Reynolds, L. (2017). A vision of active learning: Universities are transforming their students' educational experience -- and it takes new solutions to answer their next-generation technology needs, as Sony's Damien Weissenburger explains to Lindsey Reynolds. *AV Magazine*, 24.
- Rogers, P. R., & McNeil, K. (2009). Student Learning Styles and Online Course Performance: An Empirical Examination of Student Success in Web-Based Management Courses. *Business Education Digest*, (18), 1–15.
- Schaum, C. A. (2016). *Is Technology Affecting Our Attention Span?* Retrieved from <https://sites.psu.edu/siowfa16/2016/10/18/is-technology-affecting-our-attention-span/>
- Weligamage, S. S. (2009). Graduates employability skills: Evidence from literature review. *Enhancing Employability through Quality Assurance - ASAIHL 2009*
- Wong, P. T., & Low, A. (2018). Improving Workplace Productivity: Applications of Maslow's Need Theory and Locke's Goal-Setting. *Psychology & Psychological Research International Journal*. 3(8).