The Effects of MS PowerPoint on Students at a Malaysian University in the English for Professionals (EFP) Classrooms

Received: 30/04/2022

Revision: 31/07/2022

Accepted: 01/08/2022

Online: 10/08/2022

Yim San NG ^{1*}, Abegunde Theophilus Ranti ¹

- ¹ Universiti Sains Malaysia, Malaysia
- * Correspondence: Yim San NG, Universiti Sains Malaysia, Malaysia. E-mail: ysng@usm.my
- * https://orcid.org/0000-0002-4178-5372
- doi:https://doi.org/10.54855/acoj.221343

Abstract

The use of Microsoft PowerPoint (a form of multimedia) presentations in classroom instruction has significantly increased globally on both online and offline platforms. This study examines the perception of "English for Professionals (EFP)" students toward the usage of MS PowerPoint in the classrooms for delivering lectures and the effects of MS PowerPoint on students' learning. Questionnaires were used to conduct a quantitative survey. Descriptive analysis was used to analyze the results of this quantitative research. The results illustrate the students' positive attitude toward lectures presented with MS PowerPoint slides. While the majority of the students were receptive, a significant percentage held an indifferent view. The implication is that while MS PowerPoint is a dominant tool in teaching, there is a need to understand the factors behind the neutral reception, whether they are in the tool itself, the application by the educators, or the expertise of the educators in developing the slides.

Keywords: MS PowerPoint, perceptions of students, students' learning

1. Introduction

Microsoft PowerPoint has been an impressive presentation program used widely around the world. It is used in many organizations, such as in the business or education sectors, to stimulate discussions, meetings, talks, or lectures. MS PowerPoint was created by Robert Gaskins and Dennis Austin in 1987 for Macintosh computers only. Microsoft acquired the PowerPoint software for \$14 million three months after it appeared (Wikipedia. 2022. "Microsoft PowerPoint." Wikimedia Foundation. Last modified 26 June 2022). At first, PowerPoint was created for business and commercial use; however, it quickly "penetrated the scientific area and education as well" (Szabo & Hastings, 2000, p.176). Nevertheless, MS PowerPoint can be interesting or boring depending on how the presenter uses it.

1.1 Statement of the Problem

According to Craig and Amernic (2006), MS PowerPoint had a profound effect on higher education as it changed much of how teachers engaged with students, and teachers should be aware of how this presentation software affects how teachers think about students. They further reiterated that it was important to review the effectiveness of PowerPoint given its widespread and largely uncritical acceptance, particularly in higher education institutions. This raises the

question of whether using MS PowerPoint during lectures impacts the learning outcomes of university students in Malaysia.

Based on internal records, about 95% of lectures in the "English for Professionals (EFP)" classrooms at a university in Malaysia have been delivered using MS PowerPoint. Although PowerPoint has been adopted as an educational tool for at least two decades, educators are still faithful users of this presentation tool. A lecturer's most important task in class is to make sure that new knowledge is effectively transferred to the students because knowledge transfer affects learning. For this reason, more research is necessary to study the effectiveness and productivity of MS PowerPoint when used to support student learning.

Osman, Mohd carried out a study. Noor, Rouyan, and Hat (2022) concluded that PowerPoint-produced content could improve student comprehension in learning the Arabic language. Incidentally, Fauzi and Hanifah (2018) advised educators to take into account the PowerPoint tool for enhancing teaching and learning when their study revealed that the teaching and learning process becomes more active when students use PowerPoint presentations for speaking activities. Rosmiati and Siregar (2021) recommended that students use Prezi and PowerPoint presentations as interactive learning tools. The researchers mentioned above looked into student comprehension, students' active participation, and students interaction by means of PowerPoint. This research aspires to explore another angle, which is the effects of PowerPoint from the student's point of view and how this old-fashioned presentation tool affects their learning process. In short, this study sought to determine whether lectures presented through MS PowerPoint successfully reached their intended audience.

1.2 Objectives of the Study

To examine the perceptions of "English for Professionals (EFP)" students toward the usage of MS PowerPoint for delivering lectures in their classroom.

To examine the relationship between MS PowerPoint usage among the "English for Professionals (EFP)" students and their learning.

1.3 Significance of the Study

The results of this research were expected to provide benefits for various parties, such as researchers, academicians, school administrators, and organizations involved in imparting knowledge through teaching. Additionally, the outcome of this study could effectively help educators improve their usage of MS PowerPoint to facilitate the learning and teaching process. It could also give significant information to school administrators, academicians, and policymakers to detect any defects in the use of MS PowerPoint by lecturers in the classroom, as well as to devise ways to enhance its use to optimize the objectives of learning effectively.

2. Literature review

MS PowerPoint is a complete presentation program that allows teachers to produce professional-looking presentations in the EFL classroom (Segundo and Salazar, 2011). Educators commonly use Google Slides, Prezi, or Microsoft PowerPoint software in Malaysian classrooms to present their lessons on big screens. MS PowerPoint, which is used more often than other alternative presentations, has become a popular trend at every level of educational institutions. It is widely used at Malaysian universities by lecturers to present their lectures. In her study on Vietnamese students' perspective on online microteaching, Pham Ngoc Kim Tuyen (2022) also suggested MS PowerPoint as one of the useful tools to aid online learning. Different studies have shown that technology-based teaching and learning in schools has become an important part of the Malaysian education system as it has developed new ways to reinforce teaching and learning. Furthermore, it enhances learning by providing a better understanding of the subject matter through PowerPoint visuals, which may help increase student engagement. Ozaslan and Maden (2013) validated in their study that students learned better if materials were presented through some visual tools because PowerPoint made the content more appealing, drawing the students' attention easily.

Not only is MS PowerPoint professional-looking, as stated by Segundo and Salazar (2011), Fatema (2014) found that using PowerPoint presentations actually operated as a powerful pedagogical tool in English classes. In line with Fatema (2014), Yukiko and Wang (2015) asserted that teaching with PowerPoint, at its best, can get students' attention, create a connection between the professor and students, and increase spontaneity interactivity. Zouar (2015) further supported the positive outcome of using PowerPoint in classrooms as the vast majority of students who participated in a similar survey demonstrated that the use of PowerPoint in the classroom was a source of excitement, motivation, learning, and attraction. Consequently, Zouar's survey attested to Harrison's (1999) report, which claimed MS PowerPoint enhanced instruction and motivated students to learn. Additionally, the multimodal learning theory (teaching concepts with multiple modes of application), evolving along with technology, blends well into PowerPoint presentations to reinforce students' learning. Girón-García and Gargallo-Camarillas (2020) observed that the digital learning environment addressed in their study titled "Multimodal and Perceptual Learning Styles: Their Effect on Students' Motivation in a Digital Environments," seemed to promote students' sensory preferences (visual, auditory, kinaesthetic, and tactile), as well as their positive motivation.

Conversely, the results of Hossein & Abdus's (2008) survey concluded that students who received PowerPoint lecture notes perceived the instructor as less receptive to student concerns, did not use class time efficiently, and was less effective in teaching. Moreover, Kosslyn et al. (2012) cautioned that it is worth noting that presentation techniques designed to compensate for poorly designed slides (such as reading aloud slides with minuscule text) may sometimes backfire – causing the audience to lose interest and tune out. Even more baffling, in the context of the 21st century, was a charge leveled by the French writer Franck Frommer in his book published in 2012, "How PowerPoint Makes You Stupid." This book examines how our culture has become more "efficient" and how language has become less human.

2.1 Research Questions

The survey was designed to answer the following research questions in order to meet the study's objectives:

- a. What are the perceptions of English for Professionals (EFP) students toward MS PowerPoint usage by their lecturers in delivering lectures?
- b. To what extent do MS PowerPoint presentations influence students' learning processes?

3. Methods

3.1 Respondents

The respondents were undergraduates enrolled in a Malaysian university's "English for Professionals (EFP)" program. Students from the first to the third year of their studies made up the group. The research was open to all EFP students. Respondents were given a survey form designed by the researchers to complete with a five-point Likert scale.

Only 157 people responded to the survey, despite the fact that 180 questionnaires were handed out. Final-year (third-year) students had poor participation. The percentage of males and females who took part in the study was 27.4 percent and 72.6 percent, respectively, according to the demographics of the respondents. Female participation in the EFP program was higher than male participation based on the existing enrolment of the Language school. It was also highlighted that more than half of the respondents were first-year students. The first, second, and final years' percentages were 52.2 percent, 33.1 percent, and 14.6 percent, respectively. The above statistical distributions are shown in the table below. The responses were tallied, computed, analyzed, and documented once the questionnaires were collected.

Table 1 Frequency and percentage of gender distribution.

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	43	27.4	27.4	27.4
Female	114	72.6	72.6	100.0
Total	157	100.0	100.0	

3.2

Table 2. Frequency and percentage of students based on year of study.

Year of Study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Year 1	82	52.2	52.2	52.2
	Year 2	52	33.1	33.1	85.4
	Year 3	23	14.6	14.6	100.0
	Total	157	100.0	100.0	

Research Design

To collect data, the researchers used descriptive research and the survey approach. A questionnaire was the primary tool employed. The questionnaire's responses were kept anonymous so that respondents would be more receptive to answering the questions. The focus of the study was the respondents' perception of the usage of MS PowerPoint to deliver lectures and the relationship between MS PowerPoint and the respondents' learning process. The survey results were processed by computing each survey item using the SPSS software version 21.0 in order to complete the statistical analysis. Following the analysis, the results and conclusions were derived.

3.3 Research Instrument

The Likert scale, an established rating system, was used in this study to measure respondents' perceptions or opinions. It was designed to allow respondents to remain impartial with the "neutral" scale instead of forcing them to select an option that does not align with their beliefs. Any scale lacking a neutral option can skew results and call the reliability of survey data into doubt. This reliability rating system is suitable for deeper insight into people's thoughts and feelings. The questionnaire was formulated into three sections. The first section consisted of demographic data such as age, gender, and year of studies at the university. Section 2 examined respondents' perceptions of lecturers' use of MS PowerPoint presentations in the classroom, while Section 3 examined the impact of MS PowerPoint on learning. The 5-point Likert Scales used to interpret the constructs were 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, and 5= Strongly Agree. The data was presented in the form of a cumulative percentage (%).

3.4 Results/ Findings

Students' perception of the use of MS PowerPoint

The table below shows the perception of "English for Professionals (EFP)" undergraduates on the use of MS PowerPoint in delivering lectures in the classrooms. Table 3 shows the frequency distribution of the students' responses regarding their perception of the use of MS PowerPoint by lecturers in their various classes.

Table 3 The frequency and percentage of the student's perception.

Students' perception on MS PowerPoint	Strongly Disagree Freq. (%)	Disagree Freq. (%)	Neutral Freq. (%)	Agree Freq. (%)	Strongly agree Freq. (%)
1. MS PowerPoint is enjoyable	1 (0.6%)	5 (3.2%)	53 (33.5%)	72 (45.6%)	26 (16.5%)
2. MS PowerPoint presentation is easy to follow	1 (0.6%)	3 (1.9%)	20 (12.7%)	92 (58.2%)	41 (25.9%)
3. MS PowerPoint presentation is interesting	1 (0.6%)	6 (3.8%)	57 (36.1%)	68 (43%)	25 (15.8%)
4. MS PowerPoint presentation holds attention	1 (0.6%)	9 (5.7%)	72 (45.6%)	57 (36.1%)	18 (11.4%)
5. MS PowerPoint presentation is boring	14 (8.9%)	48(30.4%)	69 (43.7%)	22 (13.9%)	4 (2.5%)
6. MS PowerPoint presentation requires extensive note- taking	7 (4.4%)	41 (25.9%)	66 (41.8%)	41 (25.9%)	2 (1.3%)
7. I prefer the lecturers without PowerPoint presentation.	55 (34.8%)	55 (34.8%)	38 (24.1%)	9 (5.7%)	0 (0%)
8. MS PowerPoint presentation is more beneficial for English learners	3 (1.9%)	13 (8.2%)	45 (28.5%)	73 (46.2%)	23 (14.6%)

Table 3 above shows that more than half of the respondents agreed or strongly agreed that MS PowerPoint was enjoyable, but 33.5% chose a neutral stand. More than three-quarters of the respondents said that MS PowerPoint presentations were easy to follow. A high number of the respondents were neutral or unsure whether MS PowerPoint was interesting. Nevertheless, the majority of the respondents still agreed or strongly agreed with this. A total of 45.6% of the survey participants were neutral, while 47.5% agreed or strongly agreed that the MS PowerPoint presentation held their attention. Around 40% of the respondents disputed or strongly disagreed that MS PowerPoint was boring, while 43.7% were neutral. In the statement on whether MS PowerPoint required extensive notetaking, 41.8%, were neutral, about 30% either disagreed or strongly disagreed, and about 28% agreed or strongly agreed. The table further shows that a majority (about 70%) of the respondents disagreed or strongly disagreed that they would prefer the lecturers to teach without MS PowerPoint. More than 60% agreed or strongly agreed that MS PowerPoint presentations were more beneficial for English language learners.

Students' Learning Process via MS PowerPoint

Table 4 below presents the frequency distribution and the percentage of students' responses on whether the use of MS PowerPoint facilitates learning.

Table 4 Students' Learning Process via MS PowerPoint

Learning process via MS PowerPoint	Strongly Disagree	Disagree Freq. (%)	Neutral Freq. (%)	Agree Freq. (%)	Strongly agree
	Freq. (%)				Freq. (%)
1. MS PowerPoint presentation stimulates my thinking.	3 (1.9%)	13 (8.2%)	64 (40.5%)	64 (40.5%)	13 (8.2%)
2. MS PowerPoint presentation makes me take better notes during lectures.	1 (0.6%)	5 (3.2%)	25(15.8%)	98 (62%)	28 (17.7%)
3. Notes from MS PowerPoint presentations help me to study and review for course exams.	1 (0.6%)	1 (0.6%)	11 (6.9%)	85 (54.6%)	59 (37.3%)
4. MS PowerPoint helps me grasp the lecture points easily.	-	2 (1.3%)	39 (24.7%)	84 (53.2%)	32 (20.3%)
5. MS PowerPoint helps memory retention of the lecture (long term memory).	1 (0.6%)	11 (7%)	47 (29.7%)	78 (49.4%)	20 (12.7%)
6. I was less motivated to attend class when MS PowerPoint were used during lectures	32 (20.3%)	61 (38.6%)	48 (30.4%)	15 (9.5%)	1 (0.6%)
7. MS PowerPoint slides help me emphasize key points during lectures.	1 (0.6%)	1 (0.6%)	11 (6.9%)	85 (53.8%)	59 (37.3%)
8. I have a positive attitude towards MS PowerPoint presentations.	1 (0.6%)	3 (1.9%)	34 (21.8%)	93 (59.6%)	24 (15.4%)

The percentage of respondents who chose neutral and agreed that MS PowerPoint presentations stimulate thinking were the same at 40.5% each. The percentages of the respondents who disagreed and strongly agreed were also the same at 8.2% each. As many as 62% of the respondents admitted that MS PowerPoint presentations allowed them to take better notes during lectures. Over 90% of the respondents agreed or strongly agreed that notes from MS PowerPoint presentations helped them study and revise for exams. 83.5% agreed or strongly agreed that MS PowerPoint helped them grasp the lecture easily. More than half of the respondents agreed or strongly agreed that MS PowerPoint helped memory retention, whereas 29.7% were neutral. When MS PowerPoint was utilized during lectures, more than half of the respondents disagreed or strongly disagreed that they were less motivated to attend class. Over 90% agreed or strongly agreed that MS PowerPoint slides helped to emphasize key points during lectures. 59.6% agreed, 15.4% strongly agreed, 21.8% neutral, and 2.5% disagreed or strongly disagreed that MS PowerPoint had a positive effect on them.

4. Discussion

4.1 Students' perception

The findings are *organized* according to the study's objectives. One of the purposes of the study was to reflect on the perception of EFP students over MS PowerPoint usage by lecturers for delivering a lecture in classrooms. Based on the findings, EFP students agreed that MS PowerPoint presentations were enjoyable, easy to follow, interesting, and beneficial for English learners. However, the EFP students were unsure if the MS PowerPoint presentations held their attention in the classroom, whether it was boring, and if the MS PowerPoint required extensive notetaking. The results further reveal that EFP students strongly disagreed that they would prefer the lecturers to teach without an MS PowerPoint presentation.

In accord with the findings of this study, MS PowerPoint presentations stimulated the interest of EFP students and subsequently eased their learning process. In the same direction, with regards to pedagogical usage, Manju's (2012) findings verified that the objective of MS PowerPoint presentation should be engaging and help students comprehend and provoke thoughts. The EFP students' satisfaction level was high with lectures delivered with the aid of PowerPoint. Nouri's (2005) research affirmed this pattern of students' perception, which found that PowerPoint presentations could improve students' attitudes towards instructors and their teaching. Nonetheless, this study does not correlate completely with Yukiko and Wang's (2015) findings on getting students' attention, as 45.6% of the EFP students expressed uncertainty when asked whether PowerPoint holds students' attention.

4.2 Students' Learning

The results indicate that PowerPoint presentations helped students learn better. The data analysis illustrates that the EFP students agreed that MS PowerPoint presentation stimulated their thinking, allowed them to take notes better during lectures, helped them to study and review course exams, helped them to grasp lectures easily, and helped with memory retention from lectures (long term memory), and assisted in emphasizing key points during lectures. It also showed that they had an optimistic outlook on the employment of MS PowerPoint. The EFP students disagreed that they were less motivated to attend classes when MS PowerPoint was used during lectures. In fact, the use of MS PowerPoint actually increased the students' motivation. This finding supported the study of Anime, Bebachaiba and Guemide (2012), in which their survey had proven that using technology in class could be a highly motivating factor for students. Sadoudi (2016) further pointed out that MS PowerPoint contributed to making EFL lectures more engaging, interactive, and motivating. In parallel to this study, Ibrahim (2018) explained that students instructed with PowerPoint presentations outperformed their peers who were taught using conventional instruments such as blackboards and chalk. Most EFP students also discovered that the use of MS PowerPoint helped them learn better, which is consistent with Ozaslan and Maden's research (2013). Likewise, this study correlates with Girón-García and Gargallo-Camarillas's (2021) findings on positive motivation in the digital environment.

4.3 Implications

In general, students' capacity to absorb lessons that enhance learning is frequently reflected in good classroom instruction. Despite the fact that PowerPoint is an age-old presentation program, lecturers have continued to depend heavily on it in the English for Professionals classrooms, yet students are still able to support a fairly satisfactory learning process.

The following are the study's implications:

While the majority of students have a positive perception of MS PowerPoint presentations, it is noted that a significant percentage of the students hold neutral views on their usage. The reasons are not clear from this survey and may need further research to understand the issues raised by this group. This research has some gaps. For example, the percentage of respondents giving neutral responses to the following statements is high: "MS PowerPoint is interesting" (36.1%), "MS PowerPoint holds attention" (45.6%), and "MS PowerPoint is boring" (43.7%). Although the percentage of respondents who have a negative perception of MS PowerPoint is not high, finding out the reasons for the neutral responses would help in understanding the issues involved with a view to further improvements.

On the learning process of students, only a small group of respondents indicate that MS PowerPoint does not help students' learning process. It would be useful to find out whether any particular reason affects this group. There is a need to address the group where MS PowerPoint use is not significantly helpful in the learning process, as 29.7% of the respondents selected "neutral" with regards to helping with memory retention, as well as 30.4% also ticked "neutral" on MS PowerPoint helping with motivation to attend classes. Understanding the underlying causes of the neutral or negative responses is important, whether they are related to the technology itself, how it was used by the educators or their skill in creating the presentations. The findings imply that lecturers could continue using MS PowerPoint to supplement teaching and make headway in further making improvements to their PowerPoint slides, in addition to looking for ways to improve by understanding the issues highlighted above.

5. Conclusion

According to the findings, EFP students felt that PowerPoint presentations were effective in the English proficiency classes. The students were willing to use MS PowerPoint presentations and preferred lectures in PowerPoint. The findings of this study could serve as a springboard for additional investigation. PowerPoint, as the name implies, is certainly an effective device to support learning and teaching. Whether one agrees that slide software is a tool for conveying information in a clear and engaging manner or sees that even thoughtful use cannot avoid an inexorable cognitive style that oversimplifies material and fosters passivity, it is impossible to deny that it has had transformative repercussions for education (Hill, Arford, Lubitow, & Smollin, 2012).

The effect of using MS PowerPoint can be further explored using both quantitative and qualitative techniques whereby the researcher can divide students into experimental and control groups with the help of an interview. The analysis of students' gender and the lecturers' perceptions could also provide useful information to the research.

5.1 Scope and Limitations

This study was conducted among the "English for Professionals (EFP)" students at a Malaysian university. The scope of this study covered the EFP students' perception of the use of MS PowerPoint by their lecturers in the classroom and the effects of MS PowerPoint on the student learning process. The respondents were the "English for Professionals" students from the first year to the final year (third year). As this is only a pilot study, the samples were limited to only the EFP students. A larger sample size that includes undergraduates from more degree courses could have generated more accurate results. In addition, there was a low participation rate of the final (third) year students in the survey questionnaire, which might have resulted in inaccurate or disproportionate data.

References

- Anime, B. M., Benachaiba, C., & Guemide, B. (2012). Using Multimedia to Motivate Students in EFL Classrooms: A Case Study of English Master's Students at Jijel University, Algeria. *Malaysian Journal of Distance Education*, 14(2), 63-81.
- Craig, R., & Amernic, J.H. (2003). PowerPoint Presentation Technology and the Dynamics of Teaching. *Innov High Educ* (2006) 31: 147–160. Springer. Retrieved from https://link.springer.com/article/10.1007/s10755-006-9017-5
- Fatema, SL (2014). The Impact of Using PowerPoint on Students' Learning and Motivation in Secondary Schools. *Procedia Social and Behavioral Sciences*, 98, 1672 1677 Retrieved from https://core.ac.uk/download/pdf/82348198.pdf
- Girón-García, C., & Gargallo-Camarillas, N. (2020). Multimodal and Perceptual Learning Styles: Their Effect on Students' Motivation in a Digital Environment. *The EuroCALL Review*, 28(2), 23-38. https://doi.org/10.4995/eurocall.2020.12758 Retrieved from https://files.eric.ed.gov/fulltext/EJ1288572.pdf
- Hill, A., Arford, T., Lubitow, A., & Smollin, L. (2012). "I'm Ambivalent about It": The Dilemmas of PowerPoint. The New Press
- Harrison, A. (1999). Power Up! Stimulating your Students with PowerPoint. Learning and Leading With Technology, 26(4), 6-9.
- Hossein, N. (2008). The Effects of PowerPoint Lecture Notes on Student Performance and attitudes. Retrieved from https://www.aejournal.com/ojs/index.php/aej/article/download/99/69
- Ibrahim, R. (2018). The Effect Of Using Powerpoint Presentations In Academic Achievement Of Social And National Studies In The Fifth Grade Students At-Risk For Learning Disabilities. *International journal of research*, 6(3), 191-202. Retrieved from http://oaji.net/articles/2017/1330-1524376263.pdf
- Jamieson, S. (2017, 27 September). *Likert scale. Encyclopedia Britannica*. https://www.britannica.com/topic/Likert-Scale

- Kosslyn, S.M., Kievit, R. A., Russell, A. G., & Shephard, J.M. (2012). *PowerPoint* presentation flaws and failures: a psychological analysis. Frontiers in Psychology Journal. Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2012.00230/full
- Manju, MP (2012). *PowerPoint Use in Teaching*. Retrieved from http://www.cs.iit.edu/~cs561/spring2012/PowerPoint/ChenQ.pdf
- Microsoft PowerPoint. (2022). Retrieved 26 June, 2022, from https://en.wikipedia.org/wiki/Microsoft_PowerPoint
- Pham, N. K. T. (2022). Vietnamese Students' Perspectives on Online Micro-Teaching (OMT) as a Technique in English Teacher Education in the 4.0 Era. AsiaCALL Online Journal, 13(1), 40-72. Retrieved from http://eoi.citefactor.org/10.11251/acoj.13.01.003
- Ozaslan, E.N., & Maden, Z. (2013). The use of PowerPoint presentations at the department of foreign language education at middle east technical university. *Middle Eastern & African Journal of Educational Research*, Issue 2(1), 38-45.
- Sadoudi, Y. (2013). The effects of using PowerPoint presentations, during lectures, on EFL students' motivation and attitudes: Case study: Master 1 AL & ELT University of Bejaia (Doctoral dissertation, University of Bejaia). Retrieved from http://www.univ-bejaia.dz/dspace/bitstream/handle/123456789/5707/The%20effects%20of%20using%20 PowerPoint%20presentations%2C%20during%20lectures%2C%20on%20EFL%20students%27%20motivation%20and%20attitudes.pdf?sequence=1&isAllowed=y
- Segundo, E. & Salazar, D. (2011). The efficacy of using power point presentations to improve grammar and vocabulary learning among students of the intermediate II level (Regular program) of El Cultural Centro Peruano Americano in Trujillo, Peru. Repositorio institucional, PIRHUA- Universided de Piura
- Szabo, A., & Hastings, N. (2000). Using IT in the undergraduate classroom: should we replace the blackboard with PowerPoint? *Computers & Education*, 35 (3) 175-187. Pergamon.
- Thorne, S., & May, S. (2017). Language, Education and Technology. (3rd Ed.). Springer
- Yukiko I-S., & Wang S. (2016). College-based case studies in using PowerPoint effectively. *Cogent Education Journal*, Vol.3, 2016- Issue 1. Retrieved from https://www.tandfonline.com/doi/full/10.1080/2331186X.2015.1127745
- Zouar, A. (2015). Exploring Students' Perceptions of using PowerPoint in Enhancing Their Active Participation in the EFL Classroom Action Research Study. *Journal of Literature, Languages and Linguistics*. ISSN2422-8435, Vol. 5, 2015.

Biodata

Yim San NG is an English language teacher. She has taught for 33 years at various levels in the Malaysian Primary Schools, Secondary Schools and university. She holds a BA in English

language and literature studies and an MA in Linguistics and English language. Her research interests are learner autonomy and blended learning.

Abegunde Theophilus Ranti is a student at Universiti Sains Malaysia pursuing the English for Professionals degree. He holds a BSc. in Computer Science from the University of Ado Ekiti. He is also a web designer. His area of interest includes Applied Linguistics.