



STUDENTS' PERCEPTION OF THE USEFULNESS OF PODCAST-BASED FLIPPED INSTRUCTIONAL MODEL IN ENHANCING MICROSOFT WORD APPLICATION SKILLS IN BUSINESS EDUCATION

Augustina Chinweoke Anyigor-Ogah (Ph.D)

*Department of Business Education,
Faculty of Education,
Ebonyi State University, Abakaliki, PMB 53. Ebonyi State, Nigeria
Email: austking4real@yahoo.com
08066828128*

Abstract

This paper analysed students' perception of the usefulness of the podcast-based flipped instructional model in enhancing Microsoft word application skills in Business Education. The survey research design was used. The population of the study consisted of 84 postgraduate students of Business Education, Faculty of Education, Ebonyi State University, Abakaliki. The study was a census survey. Two research questions and two corresponding hypotheses guided the study. The questionnaire was used to collect data. Cronbach Alpha reliability procedure was used. The instrument yielded a coefficient of 0.86. Eighty-four (84) instruments were administered and collected. Data collected was analyzed using mean and standard deviation for research questions while hypotheses were tested at 0.05 level of significance using t-test. The findings of the study showed positive perception highlighting its usefulness in working with text and working with object Microsoft word application skills. The test of the hypotheses proved that there is no significant difference in the perception of students on the usefulness of the podcast-based flipped instructional model in enhancing working with text and working with object Microsoft word application skills based on gender. In conclusion, flipped instructional model stands as a methodological alternative to improve skill acquisition in Microsoft word application skills in Business Education. The recommendation among others was that training Institutions should collaborate with the employers of labour on developing content and instructional strategies for improving working with text and working with object Microsoft word application skills in business education.

Introduction

Keywords: Podcast-Based Flipped Instructional Model, Working with Text, Working with Object, Usefulness, Perception, Business Education

In today's world, all job requirements especially in the business world normally outline some Information and Communication Technology (ICT) skills required from the applicants. One of the ICT skills in Microsoft Word application skills, which is learned from Microsoft. Microsoft is a word processing application package. It is mostly utilized for the production of information in text form even though its features allow for the insertion of graphics and numeric information. Amah in Ayigor-Ogah (2022) defined Microsoft word as a computer programme and a versatile tool a user can use to enter and manipulate text; graphics and tables displayed on the monitor and then instruct the printer to produce a hard copy. Microsoft word is a software application package that enables its users in arranging various kinds of documents. Supporting this, Ubani in Egbunefu, Amadi and Aruchi (2018) defined Microsoft word package as a word processing that is designed to enable users to type, edit, store, and generally process their documents. It is a practical computer application used to create



letters, reports, newsletters, tables, brochures, and web pages. It can help users to add pictures, tables, and charts to documents and enable the checking of spelling and grammar in such documents. According to Ellis (2020), the Microsoft word application package permits users to draft letters, write books, and create other word-centric documents on a computer. Microsoft Word programs are typically designed with the author in mind, offering tools and user interfaces that make writing easier, such as edit functions (eg, cut, copy, paste, find, replace, et, Cetera.), checking spelling and grammar, formatting documents and the likes (Ellis, 2020).

Microsoft Word application skills are crucial as they constitute the basic skills that will usher students into effective use of other software applications. Microsoft Word application skills according to Ogbonna, Ibezim and Obi (2019) refer to what is required to use an application to create professional documents. These skills are to create letters, electronic emails (emails), organization reports, and other documents and can help an individual to create and organize attractive and readable documents. Microsoft applications skills enable users to be capable of creating, storing and printing documents. It is not like a typewriter; it has some fantastic features that enhance Business Educators' job performance.

Based on this study Microsoft word application skills can be classified into two, namely working with text and working with object. Working with text Microsoft word application skills has to do with the handling of text, letters, and words in word processing. This entails formatting text, indents and tables, line and paragraph spacing, text basics, and using find and replace. While working with objects Microsoft word application skills have to do with aligning, ordering, and grouping objects, charts, shapes, tables, and text boxes. All these word processing skills have to be inculcated in the learners for effective performance in the new millennium work environment and as well for them to impart the knowledge to the younger generation. Thus, the podcast-based flipped instructional model could be helpful in imparting the relevant skills. Bergmann and Sams, in Anyigor-Ogahand Okoli (2022) stated that the podcast-based flipped instructional model moves the lecture outside the classroom via technology and keeps homework and exercises with concepts inside the classroom via learning activities. The flipped instructional model is a 'flip' of the ordinary classroom, an instructional setting in which students (perceived as passive recipients of knowledge) receive instructional setting in class time, and practice or another supplemental work is assigned to be completed by the student at home. (Lave in Anyigor-Ogah, 2022).

In the podcast-based flipped instructional model, the lecture delivered outside the class hours came in the form of a podcast, which is usually created by the lecturer or the instructor. Podcasting refers to the 'distributions of audio/video files in digital formats' (McGarr in Adeeb & Diab, 2019). The podcast is then distributed online to students. Using the internet to provide podcast lectures of class lessons has a two-side benefit for students. It allows some students who were absent from class due to illness or many other reasons, a way to stay caught up with the class. The podcast also allows a student to watch the lecture as many times as needed.

The podcast-based flipped instructional model, which partly depends on technology, is a viable option since we are in the digital era. In particular, using the podcast-based flipped instructional model in teaching working with text and working with object word processing skills using Microsoft word application may help lecturers to reduce lecture time, and increase the time in enhancing the students' Microsoft word application skills. This study is based on a new method of learning which encourage students to be more involved in the process of learning. This study is significant as there are no published studies related to working with text and working with object Microsoft word application skills.

In this sense, there are different studies that have analyzed the students' perceptions regarding the implementation of the flipped instructional model. Jeong, Canada, and Gonzalez, (2018) on performance and perception regarding the use of a flipped instructional model with 153 students from the University of Extremadura (Spain) during two academic years (2014/2015 and



2015/2016) found a higher performance when implementing this methodology linked to its positive perception. In turn in another study, students' perception of the flipped model with 30 undergraduate students in a General English class at Can Tho University. The result highlighted that the students have considerably positive perceptions of the flipped model (Thi & Cakmak, 2018). Analyzing the perception in a sample of 1800 undergraduates students from Universities in East-West Nigeria regarding the utilization of flipped classrooms for learning, the results perceived flipped classrooms to be useful and easy to use for learning (Onajah, Olumirin, Adegbija & Babalola, 2019). Nevertheless, it should also be noted that the study of the relationship between perception and academic performance does not always produce positive results. The work of Baker, Goodboy, Bowman, and Wright (2018) reflects how students' results do not improve with the use of PowerPoint despite a positive perception of its implementation.

Perception includes the vision and opinion of the participants about the potential of the flipped instructional model, so despite finding studies that confirm that a positive perception has a favorable impact on the results, it is not enough to have only a favorable opinion about a methodology, strategy, or resources to ensure that the academic performance will be positive. With respect to the analysis of perception, different variables have been studied that can influence these perceptions, such as the sex and status of the participants. In this regard, the researchers found studies that emphasize a better perception by women (Asad, Ali, Churi, & Moreno-Gurro 2022; Jeong, et al, 2018; Thi & Cakmak, 2018; Onajah, et al, 2019; Baker, et al, 2018; Gomez-Carrasco, Monteaguto-Fernandez, Moreno-Vera, & Sainz-Gomez, 2019; Chiquito, Castedo, Santos, Lepez, & Alarco, 2020), and others in which no significant differences were found, although men show better perceptions Osterlie & Kjelaas, 2019; Haghghi, Jafarigohar, Khoshsima, & Vahdany, 2019; Colomo-Magana, A., Colomo-Magana, E., Gullen-Gamez, & Aziza 2022).

Statement of the Problem

Many believed that Microsoft word application skill is a predictor of skill acquisition in computing, yet students are facing difficulties in understanding the skills probably because of the use of inadequate teaching methods. The case becomes explicit when they attempt to apply many commands in Microsoft word application skills working with text and working with object during professional practice after graduation. More so, to improve students' skill acquisition in Microsoft word application which is taught in the Word Processing course, the instructional process needs to shift from teacher-centered methodologies to flexible, innovative, learner-centered, and technology-enhanced especially now that technology is in everyone's home and life. One of the new teaching methods that have the characteristic mentioned above is the flipped instructional model. Therefore, to build students' skills in Microsoft word application (Word Processing), lecturers should be encouraged to diversify the teaching and learning process using modern techniques that are learner-centered, interactive, and activity-based such as flipped instructional model. Without empirical evidence on this assumption, expected beneficiaries may doubt the claim. Thus, the need to determine the perception of students on the usefulness of podcast-based flipped instructional model in enhancing working with text and working with object Microsoft word application skills in business education.

Research Questions

The following research questions guided the study.

1. What are the perceptions of students on the usefulness of podcast-based flipped instructional model in enhancing working with text Microsoft Word application skills in business education?



2. What are the perceptions of students on the usefulness of podcast-based flipped instructional model in enhancing working with object Microsoft Word application skills in business education

Hypotheses

The following hypotheses will be tested at a 0.05 level of significance:

HO₁: There is no significant difference in the mean responses of the respondents on the usefulness of the podcast-based flipped instructional model in enhancing working with text Microsoft Word application skills in business education based on gender.

HO₂: There is no significant difference in the mean responses of the respondents on the usefulness of the podcast-based flipped instructional model in enhancing working with object Microsoft Word application skills in business education based on gender.

Methodology

A descriptive survey design was adopted for the study. The area of the study was Ebonyi State Nigeria. The population of the study was 84 postgraduate students (12 PGDE, 37 Masters, and 35 Ph.D) of the Business Education, Faculty of Education, Ebonyi State University Abakaliki. A structured questionnaire with 40-item statements was administered to 84 respondents, 44 males, and 40 females. The questionnaire consisted of 84 items according to research questions on a 4-point rating scale of Very Useful, Useful, Useless, and Very Useless. The instrument was validated by three experts; two from business education and one from Measurement and Evaluation, all from Ebonyi State University, (EBSU) Abakaliki. The instrument was also subjected to a reliability test and yielded a reliability coefficient of 0.87.

84 copies of the instrument were administered and collected. Mean and standard deviation was used to answer the research questions, while the hypotheses were tested using a t-test. Decisions on the research questions were based on the grand mean in relation to the real limits of numbers. Therefore, items with mean ratings of 0.50-1.49 were rated Very Useless, those with 1.50 – 2.49 were rated Useless, items with mean ratings of 2.50 – 3.49 were rated Useful and those with 3.50-4.00 were rated Very Useful. For hypotheses, if the calculated t-value is equal or greater than the critical t-value, it will be rejected. If otherwise, it will be accepted.

Results

Research Question 1

What are the perceptions of students on the usefulness of podcast-based flipped instructional model in enhancing working with text Microsoft Word application skills in business education?

Table 1: Respondents Mean Ratings on the Usefulness of Podcast-Based Flipped Instructional Model in Enhancing Working with Text Microsoft Word Application Skills in Business Education

S/N	Variables	X	SD	REMARK
1	Using insertion point to add text	2.97	0.89	Useful
2	Selecting text	3.03	0.75	Useful
3	Delete text	2.89	0.68	Useful
4	Copy and move text	3.11	0.67	Useful
5	Copy and paste text	3.06	0.64	Useful
6	Undo and redo text	3.14	0.69	Useful
7	Superscript text	3.06	0.73	Useful
8	Change font size	3.17	0.75	Useful
9	Change font	3.06	0.68	Useful
10	Change font colour	3.12	0.44	Useful



11	Use bold, italic and underline command	3.05	0.46	Useful	Source: Field Work (2022)	
12	Highlight text	3.08	0.42	Useful		
13	Change text cases	3.08	0.47	Useful		
14	Change text alignment	3.06	0.49	Useful		
15	Find and replace text	3.01	0.53	Useful		
16	Indent text using tab key	3.07	0.46	Useful		
17	Indent text using indent marker	3.14	0.51	Useful		
18	Format line spacing	2.62	0.73	Useful		
19	Format paragraph spacing	3.27	0.83	Useful		
20	Format text with hyperlink	2.76	0.63	Useful		
Grand		3.04	0.65	Useful		Research

Data in Table

ch Question 2

What are the perceptions of students on the usefulness of the podcast-based flipped instructional model in enhancing working with object Microsoft Word application skills in business education?

Table 2: Respondents' Mean Ratings on the Usefulness of Podcast-based Flipped Instructional Model in Improving Working with Object Microsoft Word Application Skills in Business Education

S/N	Items	X	SD	REMARK
21	Insert a picture from a file	3.01	0.53	Useful
22	Change text wrapping settings	3.85	0.65	Very Useful
23	Insert a blank table	3.04	0.67	Useful
24	Convert an existing text to a table	3.38	0.66	Useful
25	Add a row or column	3.07	0.49	Useful
26	Delete a row or column	3.01	0.42	Useful
27	Apply border to a table	3.31	0.56	Useful
28	Change cell size	3.02	0.60	Useful
29	Merge and split cells	3.38	0.74	Useful
30	Insert a text box	3.45	0.59	Useful
31	Resize a text box	3.24	0.48	Useful
32	Move a text box	3.56	0.65	Very Useful
33	Crop an image	3.23	0.52	Useful
34	Add a border to a picture	3.29	0.57	Useful
35	Change the shape style	3.40	0.60	Useful
36	Insert a symbol	3.06	0.45	Useful
37	Change shape outline	3.07	0.46	Useful
38	Align two or more objects	3.06	0.66	Useful
39	Group an object	2.67	0.92	Useful
40	Rotate or flip an object	3.13	0.59	Useful
Grand		3.01	0.59	Useful

Sources: Field Work 2022



The data in Table 1 reveal that items 2 and 12 had a mean rating of 3.65 and 3.48 and items 1, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 15,16,17,18,and 20 had a mean rating from 2.67 to 3.45 with a grand mean of 3.01. This indicates that the podcast-based flipped instructional model was rated useful in enhancing working with object Microsoft word application skills in business education by the respondents.

Test of Hypotheses

HO₁: There is no significant difference in the mean responses of the respondents on the usefulness of the podcast-based flipped instructional model in enhancing working with text Microsoft Word application skills in business education based on gender.

Table 3: Summary of t-test Analysis of the Mean Responses of the Respondents on the Usefulness of Podcast-Based Flipped Instructional Model in Enhancing Working with Text Microsoft Word Application Skills in Business Education

Variables (Gender)	NO	Mean	SD	DF	t-cal	t-crit	Decision	Sig
Male	44	3.06	0.57	82	0.84	1.99	Uphold H ₀	NSd
Female	40	3.04	0.58					

Sources: Field Work 2022

Keys: X= Mean; SD = Standard Deviation, DF=Degree of Freedom; t-Cal= t-Calculated Value; t-Crit= t-Critical Value; Sig= significance; NSd= No Significant Difference

Table 3 above reveals a t-calculated value of 0.84 and a t-critical of 1.99 at 82 degrees of freedom. From the table, since the t-calculated is less than the critical t-value, we uphold the null hypothesis and conclude that the respondents do not differ significantly in their opinion regarding the usefulness of the podcast-based flipped instructional model in enhancing working with text Microsoft word application skills in Business Education.

HO₂: There is no significant difference in the mean responses of the respondents on the usefulness of the podcast-based flipped instructional model in enhancing working with object Microsoft Word application skills in business education based on gender.

Table 4: Summary of t-test Analysis of the Mean Responses of the Respondents on the Usefulness of podcast-based Flipped Instructional Model in Enhancing working with Object Microsoft Word Application Skills in Business Education

Variables (Gender)	NO	Mean	SD	DF	t-cal	t-crit	Decision	Sig
Male	44	3.16	0.46	82	1.49	1.99	Uphold H ₀	NSd
Female	40	3.15	0.62					

Sources: Field Work 2022

Keys: X= Mean; SD = Standard Deviation, DF=Degree of Freedom; t-Cal= t-Calculated Value; t-Crit= t-Critical Value; Sig= significance; NSd= No Significant Difference

Table 4 above reveals a t-calculated value of 1.49 and a t-critical of 1.99 at 82 degrees of freedom. From the table, since the t-calculated is less than the critical t-value, we uphold the null hypothesis and conclude that the respondents do not differ significantly in their opinion regarding the usefulness of the podcast-



based flipped instructional model in enhancing working with object Microsoft Word application skills in Business Education.

Discussion of Findings

The result in Table 1 showed that working with text Microsoft Word application skills in business education was perceived useful by the respondents in Ebonyi State, Nigeria. This finding is in line with Onojah, et al (2019) who found that flipped classroom is useful and easy to use for learning. Jeong, et al (2018) found that flipped classrooms on performance and perception regarding the use showed a higher performance when implementing this methodology linked to its positive perception. The test of hypothesis (H_{O1}) in Table 3 proved that there are no significant differences in the mean responses of the respondents on the perception of students on the usefulness of podcast-based flipped instructional model in enhancing working with text Microsoft Word application skills in business education based on gender. The findings are in agreement with Asad, et al (2022) who found that there is no significant difference in the opinion of male and female respondents on the usefulness of the flipped methodology.

The result in Table 2 shows that working with object Microsoft word application skills was perceived as useful by the respondents in Ebonyi State, Nigeria. The findings are in agreement with Thi & Cakmak, (2018) who found that the students have considerably positive perceptions towards the flipped instructional model for learning. Also, the test of hypothesis (H_{O2}) in Table 4 proved that there is no significant difference in the opinion of male and female respondents on the perception of the usefulness of podcast-based flipped instructional model in enhancing working with object Microsoft Word application skills in business education based on gender. The findings are in agreement with, Colomo-Magana, et al (2022) who found that there is no significant difference in the opinion of male and female respondents on the usefulness of flipped methodology.

Conclusions

Based on the findings of the study, it was concluded that the podcast-based flipped instructional model improves working with text and working with object Microsoft word application skills in business education was perceived as relevant by the respondents. This implies that business education graduates need working with text and working with object Microsoft word application skills to be able to use Microsoft word features effectively for the production of reports and other documents. Also, it was concluded that gender does not significantly affect respondents' mean ratings on the usefulness of the podcast-based flipped instructional model in improving working with text and working with object Microsoft word application skills in business education.

Recommendations

Based on the findings of the study, it was recommended:

1. Training Institutions should collaborate with the employers of labour on developing content and instructional strategies for improving working with text Microsoft word application skills in business education.
2. Business education should develop programmes that would assist Business Education graduates to update their working with object Microsoft Word application skills.

References

- Adeeb, M. J. & Diab, B. M. (2019). The effect of flipped classroom model on students' achievement in the New 2016 Scholastic assessment test mathematics skills. *The Journal of Social Sciences Research*, 5(3), 769-777. <https://doi.org/10.32861/jssr.53.769777>
- Anyigor-Ogah, A. C. (2022). *Effect of the flipped instructional model on business education students' interest and achievement in word processing* (Unpublished Ph.D. Thesis). Department of Business Education, Ebonyi State University, Abakaliki.
- Anyigor-Ogah, A. C. & Okoli, B. E. (2022). The effect of the flipped instructional model on business education students' interest and achievement in Word Processing. *Asian Journal of Research in Education and Social Sciences*. 4(2), 151-161.
- Asad, M. M., Ali, R. A., Churi, P. & Moreno-Gurro (2022). Impact of flipped classroom approach on students' learning in post-pandemic: A survey research on public sector schools. *Education Research International*, 2022, 1-12. Doi: <https://doi.org/10.1155/2020/1134432>



- Baker, J.P.; Goodboy, A.K.; Bowman, N.D.; Wright, A. A. (2018). Does teaching with PowerPoint increase students learning? A meta-analysis. *Computers & Education*, 126, 376–387, doi:10.1016/j.compedu.2018.08.003..
- Chiquito, M.; Castedo, R.; Santos, A.; López, L.M.; Alarcon, C. (2020). Flipped classroom in engineering: The influence of gender. *Computer Applications in Engineering Education*, 28(1), 80–89, doi:10.1002/cae.22176.
- Colomo-Magana, A., Colomo-Magana, E., Gullen-Gamez, F. D. & Aziza (2022). Analysis of prospective teachers' perceptions of the flipped classroom as a classroom methodology. *Societies*, 12(4), 98. Doi: 10.3390/soc/50c/2040098.
- Egbunefu, C., Amadi, E. A., & Aruchi, N. (2018). Microsoft word application skills need of business education graduates for job performance and economic diversification in Rivers State. *International Journal of Innovative Education Research*, 6(3), 58-65.
- Elis, C. (2020). The best free word processor 2020: alternatives to Microsoft word. Retrieved from <https://www.teacheradar.com>
- Gómez-Carrasco, C.J.; Monteagudo-Fernández, J.; Moreno-Vera, J.R.; Sainz-Gómez, M. (2019). Effects of a gamification and flipped-classroom program for teachers in training on motivation and learning perception. *Education Science.*, 9, 299, doi:10.3390/educsci9040299.
- Haghighi, H.; Jafarigohar, M.; Khoshsima, H.; Vahdany, F. (2019). Impact of the flipped classroom on EFL learners' appropriate use of refusal: Achievement, participation, perception. *Computer Assisted Language Learning*, 32(1), 261–293, doi:10.1080/09588221.2018.1504083.
- Jeong, J. S.; Cañada, F.; González, D. (2018). The Study of Flipped-Classroom for Pre-Service Science Teachers. *Education Science*, 8, 163, doi:10.3390/educsci8040163.
- Ogbonna, C. G., Ibezim, N. E. & Obi, C. A. (2019). Synchronous versus asynchronous e-learning in teaching word processing: An experimental approach. *South African Journal of Education*. 39(2), 13 – 83. <https://doi.org/10.15700/saje.V39n2a1383>
- Onojah, A.O., C., Olumorin, C.O., Adegbija, M.V., Babalola T.O.B. (2019). Perception of undergraduate students on the utilization of flipped classroom for learning in South-West Nigeria. *Malaysian Journal of Distance Education*, 21(1), 95-112. <https://doi.org/1021315/mjde2019.21.1.6>
- Thi, Q., Tran, T. (2017). Students' perceptions of flipped model Facebook for educational purposes. *International Journal of Research. & Mathematics in Education.*, 7(3), 07-14. Retrieved from www.iosjournals.org
- Tse, W.S.; Choi, L.Y.; Tang, W.S. (2020). Effects of video-based flipped class instruction on subject reading motivation. *British Journal of Education & Technology.*, 50, 385–398, doi:10.1111/bjet.12569. *Education Sciences*, 10, 275 18 of 19