STUDENTS' PERCEPTION TOWARD ENGLISH ONLINE LEARNING OF $1^{\rm ST}$ YEAR CADETS OF PALEMBANG AVIATION POLYTECHNIC: CHALLENGES AND BARRIERS

A Thesis by

WULAN WIDIYA RAHAYU

Student's Number 17044100113

English Education Study Program



FACULTY OF TEACHER TRAINING AND EDUCATION UNIVERSITY
OF TRIDINANTI PALEMBANG

2022/2023

STUDENTS' PERCEPTION TOWARD ENGLISH ONLINE LEARNING OF 1ST YEAR CADETS OF PALEMBANG AVIATION POLYTECHNIC: CHALLENGES AND BARRIERS

A Thesis by

WULAN WIDIYA RAHAYU

Student's Number 1704410013 English Education Study Program

Faculty of Teacher Training and Education

Approved by

Advisor I

Advisor II

Yuyun Hendrety, M.Pd

NIDN: 0213079601

Rahma Dianti, M.Pd

NIDN: 0208078301

Certified by

Dean of Faculty Teacher Training and Education

Nyayu Lulu Nadya, M.Pd

NIDN: 0209058702

This thesis was defended by the writer in the Final Program Examination and was approved by the examination committee on:

Day : Friday

Date: September 30, 2022

Examination committees

Signature/Date

1. Yuyun Hendrety, M.Pd

(Chairman)

2. Rahma Dianti, M.Pd

(Member)

3. Heru Setiawan, M.Pd

(Member)

Palembang, September 2022

Dean of Faculty Teacher Training and Education

Nyayu Lulu Nadya, M.Pd

NIDN: 0209058702

DEDICATIONS

This thesis is dedicated to me, myself and I

Thank you for being tough and tirelessly fought so far.

The day after today, all the late nights and early mornings are paid off.

"MOTTOS"

"The Seeking of Knowledge is Obligatory for Every Moslem" (Al-Tirmidhi, 74)

"You Educate a Man; You Educate a Man.

You Educate a Woman; You Educate a Generation"

(Brigham Young)

ACKNOWLEDGEMENT

Alhamdulillah, all praises be to Allah SWT for blessing, opportunity, health, and merciful. Blessing and salutation be given to Prophet Muhammad SAW, (peace be upon him) and his family. The researcher could finish this research as the requirement for the Bachelor Degree of Education Degree (S.Pd)at Faculty of Teacher Training and Education of English Education Study Program at Tridinanti University Palembang.

The researcher realizes that it would be impossible for her when the process of the study until finishes her study without many contributions, supports and helps from the other. The researcher would like to express her deep gratitude and appreciation to the following:

- 1. Dr. Ir. Hj. Manisah, M.P., Rector of Tridinanti University Palembang.
- 2. Nyayu Lulu Nadya, M.Pd., Dean of Faculty of Teacher Training and Education.
- 3. Nurulanningsih, M.Pd., and Yuyun Hendrety, M.Pd., Dean Assistants of Faculty of Teacher Training and Education.
- 4. Jenny Elvinna Manurung, M.Pd., Head of English Education Study Program and Nita Ria, M.Pd., Secretary of English Education Study Program.
- 5. My advisors, Mrs. Yuyun Hendrety, M.Pd. as the first advisor and Rahma Dianti, M.Pd. as the second advisor who already gave time, guided and advised patiently during the arrangement of this research.
- 6. My entire lecturers of Faculty of Teacher Training and Education of English Education Study Program at Tridinanti University Palembang.
- 7. My beloved Parents (Katino & Djumikem), Brother and Sister (Agus & Yanti), Husband (Ahmad Siradjuddin, S.H.) and my lovely children (Rais, Sophia, Khalid & umar) who always support me in everything.
- 8. My gank (Asmiranda, Dhea, Rizka, Rindang, and Suci) and especially Berti Artika Sari as my partner in consulting, revising and accompanying me in doing the thesis.

Finally, the researcher realize that this thesis might still need some improvements, therefore I hope this thesis will be useful for all readers.

Palembang, September 2022

Wulan Widiya Rahayu

PERNYATAAN

Saya menyatakan dengan sebenar-benarnya bahwa seluruh data, informasi, interpretasi serta pernyataan dalam pembahasan dan kesimpulan yang disajikan dalam karya ilmiah ini, kecuali yang disebutkan sumbernya adalah merupakan hasil pengamatan, penelitian, pengelolaan serta pemikiran saya dnegan pengarahan dari pembimbing yang ditetapkan.

Apabila ternyata didalam naskah skripsi ini dapat dibuktikan terdapat unsur-unsur jiplakan, saya bersedia skripsi ini digugurkan dan gelar akademik yang telah saya peroleh (S-1) dibatalkan, serta diproses sesuai dengan peraturan perundang-undangan yang berlaku (UU) No. 20 tahun 2003, pasal 25 ayat 2 dan pasal 70.

Palembang, September 2022

Mahasiswa

Wulan Widiya Rahayu

NPM.1704410013

ABSTRACT

This research aimed to find out students' perception about challenges and barriers faced by 1st year cadets of Palembang Aviation Polytechnic during English online learning. This research used cross sectional survey design involving 113 cadets of Palembang Aviation Polytechnic by using intact sampling. Questionnaire was used as the technique for collecting data while percentage and descriptive analysis were used for analyzing the data. The result showed that cadets have positive perception toward English online Learning between challenges and barriers. In challenges, identity became the challenge for 1st year cadets of Palembang Aviation Polytechnic in English Online Learning with the moderate level. It might happen because of the new learning environment system that is firstly applied due to the pandemic of Covid-19. Meanwhile, in barriers, all the aspects influenced the 1st year cadets of Palembang Aviation Polytechnic toward English Online Learning from the highest to the lowest degree as follows: time/interruption, infrastructure/support services, motivation, technical, and social.

Keywords: Challenges, Barriers, English Online Learning, Palembang Aviation Polytechnic.

TABLE OF CONTENTS

COVERi
APPROVAL PAGEii
EXAMINER'S LEGITIMACYiii
DEDICATIONiv
MOTTOSv
ACKNOWLEDGEMENTS vi
LETTER STATEMENT vii
ABSTRACTviii
TABLE OF CONTENTSix
LIST OF TABLESx
LIST OF FIGURExi
LIST OF APPENDICESxii
CHAPTER I: INTRODUCTION
1.1. Background of the Research1
1.1. Background of the Research1 1.2. The Problems of the Research4
_
1.2. The Problems of the Research4
1.2. The Problems of the Research4 1.2.1. The Limitation of the Problem4
1.2. The Problems of the Research
1.2. The Problems of the Research
1.2.1. The Limitation of the Problem
1.2.1. The Limitation of the Problem

TABLE OF CONTENTS

2.3. Role of ICT in ELT	10
2.3.1. The Advantages of Integrating ICT in ELT	10
2.3.2. The Disadvantages of Integrating ICT in ELT	11
2.4. Online Learning	12
2.4.1. The Advantages of Integrating ICT in ELT	12
2.4.2. Advantages and Disadvantages of Online Learning	13
2.4.2.1 Advantages	13
2.4.2.2 Disadvantages	14
2.4.3. Trends of Online Learning in English Language Teaching	
2.4.4. Online Learning in Covid-19 Pandemic	15
2.4.5. Challenges in Online Learning	
2.4.6. Barriers in Online Learning	17
2.5. Previous Related Studies	
CHAPTER III: RESEARCH METHOD 3.1. Research Design	21
3.2. Operational Definition	
3.2.1. Students' Perception	
3.2.2. Challenges	
3.2.3. Barrries	
3.2.4. English Online Learning	
3.3. Population and Samples	
3.3.1. Population	
3.3.2. Samples	
3.4. Technique dor Data Collection	
3.4.1. Questionnaire	
3.4.2. Validity	
3.4.2. Validity	20 28
THE TREMANDING	

TABLE OF CONTENTS

3.5. Technique for Data Analysis	29
3.6. Percentage of Analysis	30
3.7. Descriptive Analysis	30
CHAPTER IV: RESEARCH FINDING AND INTERPRETATION	
4.1. Research Findings	31
4.1.1. Challenges	31
4.1.1.1. Learners' Expectation	31
4.1.1.2. Learners' Readiness	34
4.1.1.3. Identity	40
4.1.2. Barriers	43
4.1.2.1. Time/Interruption	43
4.1.2.2. Infrastructure/Support Service	45
4.1.2.3. Motivation	48
4.1.2.4. Prerequisite Skills	50
4.1.2.5. Technical	52
4.1.2.6. Social	53
4.2. Interpretation	55
CHAPTER V: CONCLUSION AND SUGGESTION	
5.1. Conclusion	58
5.2. Suggestion	58
REFERENCES	60
APPENDICES	65

LIST OF TABLES

Table 1. Population of the Research	23
Table 2. Sample of the Research	24
Table 3. Degree of the Means	26
Table 4. Questionnaire Item Specification	27
Table 5. Classification of Reliability	29
Table 6. Reliability Statistics	29
Table 7. Aspect: Learners' Expectation	32
Table 8. Aspect: Learning Style	35
Table 9. Aspect: Cultural Differences	37
Table 10. Aspect: Technical Skills	38
Table 11. Aspect: Identity (Isolation)	40
Table 12. Aspect: Identity (Participation)	42
Table 13. Aspect: Time/Interruption	43
Table 14. Aspect: Infrastructure/Support Service	45
Table 15. Aspect: Motivation	48
Table 16. Aspect: Prerequisite Skills	50
Table 17. Aspect: Technical	52
Table 18. Aspect: Social	53

LIST OF FIGURE

Figure 1 : The Development of ICT in English Language Teaching

LIST OF APPENDICES

- Appendix A. Research Questionnaire
- Appendix B. r-Table Distribution Significance of 5%
- Appendix C. Questionnaire Item Validation
- Appendix D. The Reliability of the Questionnaire
- Appendix E. The Result of Questionnaire Validating by Validators
- Appendix F. The Validity of the Questionnaire by Validators
- Appendix G. The Result of the Mean Data from Questionnaire
- Appendix H. The Result of Questionnaire from Google Form
- Appendix I. Documentation of Collecting Data from Zoom Meeting
- Appendix J. Permission Letter for Try Out
- Appendix K. Permission Letter to Collect the Data
- Appendix L. Acceptance Letter for Collect the Data
- Appendix M. Thesis Consultation Card

CHAPTER I

INTRODUCTION

This chapter discusses background of the research, the problems of the research, the limitation of the problem, the formulation of the problems, the objectives of the research, and the significances of the research.

1.1 Background of The Research

Technology is often regarded as a trend in the 21st era. It plays a crucial role in our lives nowadays which becomes a basis growth of economy (Nagasubramani, 2018). Without technology, everything will run slow. Technology makes our jobs easier and saves time. The impact of technology can be felt not only in economic sector but also education sector. Nowadays, education has been globalised by computer technology (Ally, 2004; Zondiros, 2008). According to Tinio (2002), the reformation of 21st century education requires teachers and students have skills that are needed in this new world which include digital age literacy. Integration of technology in education is one of our keys assets, as effective use of technology can make learning meaningful (Kirschner, 2015). Technology utilization positively affects education in the process of knowledge acquisition and assimilation for both teachers and students. It can promote active learning, collaborative learning, cooperative learning, creative learning, integrative learning and evaluative learning (Tinio, 2002).

Further, to engage and prepare students for successful learning in 21st century, the young generation need to cope with the 21st century skills such as:

collaboration, communication, content, critical thinking, creative innovation and confidence (Hirsh-Pasek, et.al., 2020). Teachers and students prefer to use technology on their learning process to conventional ones since the use of advanced technology tools makes the teaching and learning easier. It is clear that technology has shifted the way students learn from teacher centered to student centered learning.

In addition, in language teaching context, the utilization of technology is not a new thing. Technology has been around in language teaching for decades, such as: language laboratory, tape recorder, and video (Dudeney & Hockly, 2007). The development of technology usage in language classroom has been started from using computer-based technology up to internet-based technology. Mofareh (2019) argued that the application of modern technology becomes a considerable advance in English language teaching. He found that technology usage contributed positive outcomes in English language teaching in the clasroom. Moreover, Information and Communication Technology (ICT) is defined as any technology used to support information gathering, processing, distributing, and using (Beckinsale & Ram, 2006). Technology helps teachers to connect with learners in systematic and advanced way.

Starting from 2020 up to 2021, Indonesian government required the schools and colleges to implement online learning activity due to pandemic. Toquero (2020) stated that the pandemic has forced schools and colleges around the world to close campuses so students could follow social distancing measures. Therefore, during pandemic outbreak, Palembang Aviation Polytechnic has adopted online learning system since 2020. All learning subjects are taught

through online learning including English subject. All cadets at Palembang Aviation Polytechnic were used Internet during learning processes.

Online learning in a pandemic is the solution (Basilaia & Kvavadze, 2020; Laprairie & Hinson, 2006; Taha et al., 2020). It can minimize the risks of virus transmission between one another. Beside that, many schollars confirm that online learning has some advantages. The use of online learning is really convenient because it can be used anywhere and anytime (Bourne et al., 2005; Means, 2010; Nakamura et al., 2018; Ozyurt et al., 2013). In addition, Lee (2010) claimed that utilising e-learning can increase interaction and learning efficiency by empowering students to communicate more with faculty and colleague and to access more learning materials. It is in line with Fedynich et al. (2015) who revealed that the teachers-students interaction have a significant impact on online learning satisfaction.

In spite of the fact that online learning contributes many advantages, it may also pose some problems too. The transformation from conventional to online learning is linked to various obstacles and challenges at that point (Crawford, et al., 2020). Kusumo, et al., (2012) divided two major problems of implementation of online learning in Indonesia, i.e. infrastructure support and cultural problems. Further, most higher education levels in Indonesia have limited or no experience of online learning especially when lecturers lack of knowledge in using online applications (Lubis et al., 2018; Zaharah et al., 2020). Moreover, Orlando & Attard (2015) stated that teaching with technology is not one size fits all approach as it depends on the types of technology in use at the time and also the curriculum content being taught. Ali & Ahmad (2011) found that some issues

arise from online learning. They found traditional education more effective than online learning. further, there are two problems exist caused by online learning. First, the effect and efficiency of online learning (McPherson & Bacow, 2015). Second, ability to teach digitally effectively, based on a set of learning objectives that guide teachers and educational priorities (Liguori & Winkler, 2020). Online learning is effective in digitally advanced countries (Basilaia & Kvavadze, 2020). Recently in many countries including Indonesia, online learning becomes a solution for learning process during pandemic outbreak. This is also the reason why schools in Indonesia are being required to learn online. For Palembang Aviation Polytechnic, since it was the first time to implement online learning therefore it may also pose some challenges and barriers.

In this research, observation was used in preliminary research. The researcher gets the information related to challenges and barriers toward English online learning from the document of evaluation report. It showed that, there were some issues influenced 1st year cadets of Palembang Aviation Polytechnic related to the challenges and barriers during English online learning.

Based on the elaboration above, the researcher conducted a research entitled "Students' Perception Toward English Online Learning of 1st Year Cadets of Palembang Aviation Polytechnic: Challenges And Barriers". This research was aimed at exploring students' perceptions about challenges and barriers during English online learning in the academic year of 2020/2021.

1.2 The Problems of the Research

1.2.1 The Limitation of the Problem

This research limited the investigation on the challenges and barriers faced by 1st year cadets of Palembang Aviation Polytechnic during English Online Learning.

1.2.2 The Formulation of the Problems

Based on the problems limitation above, the problems of this research were:

- 1. What were the challenges faced by 1st year cadets of Palembang Aviation Polytechnic during English online learning?
- 2. What were the barriers faced by 1st year cadets of Palembang Aviation Polytechnic during English online learning?

1.3 The Objectives of the Research

In the light of the problems of the research, the research objectives were:

- To describe the challenges faced by 1st year cadets of Palembang Aviation Polytechnic during English online learning.
- To describe the barriers faced by 1st year cadets of Palembang Aviation Polytechnic during English online learning.

1.4 The Significances of the Research

The results of this research are expected to contribute the advantages for the following groups:

1. For Students

The research is expected to help students to be more aware towards the challenges and barriers faced during English online learning process and they can start to prepare for the preventive action to deal with challenges and barriers from English online learning process.

2. For teachers

The research is expected to provide valuable information about the challenges and barriers during English Online Learning. Moreover, the research is expected to help teachers for mapping strategies for English Online Learning process.

3. The researcher herself

The research is expected to help improving both knowledge and experience in conduct a scientific-research and in English teaching and learning process especially for mapping strategies by considering challenges and barriers toward English Online Learning.

4. For other researchers

The research is expected to get valuable input that help researchers to conduct further research.

References

- Adhiyanti, N. S., Kurniawan, F. B., & Putri, N. I. (2012). E-Learning Obstacle Faced by Indonesian Students. *The International Journal of Computer, The Internet Management*.
- Ali, A., & Ahmad, I. (2011). Key Factors for Determining Student Satisfaction in Distance Learning Courses: A Study of Allama Iqbal Open University. *Contemporary Educational Technology*.
- Ally, M. (2004). *The Teory and Practice of Online Learning*. Canada: Athabasca University.
- Amalia, W. (2018). The Implementation of Leraning Media Based on ICT in Mathematical Learning Process in Elementary School. *Jurnal Silogisme*, 128-133.
- Ammanni, S., & Aparanjani, U. (2016). The Role of ICT in English Language Teaching and Learning. *International Journal of Scientific and Engineering Research*, 1-7.
- Anwariningsih, A. H., & Ernawati, S. (2013). Development of Interactive Media for ICT Learning at Elementary School Based on Student Self Learning. *Journal of Education and Learning*, 121-128.
- Arkorful, V., & Abaidoo, N. (2014). The Role of E-Leraning, The Advantages and Disadvantages of its adoption in Higher Education. *International Journal of Education and Research*, 397-410.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to Research in Education *th Edition*. Belmont, CA USA: Wadsworth Cengage Learning.
- Basilaia, G., & Kvavadze, D. (2020). Transition to Online Education in School during a SARS-Cov-2 Coronavirus (COVID-19) Pandemic in Georgia. *Pedagogical Research*, 1-9.
- Beckinsale, M., & Ram, M. (2006). Delivering ICT to Ethnic Minority Businesses: An Action Research Approach. *Environment and Planning C Government and Policy*, 847-867.
- Bourne, J., Harris, D., & Mayadas, F. (2005). Online Engineering Education: Learning Anywhere, Anytime. *Journal of Engineering Education*, 131-146.
- Cakici, D. (2016). The Use of ICT in Teaching English as a Foreign Language. *Paticipatory Educational Research (PER)*.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Method in Education 6th Edition*. 2 park Square, Milton Park, Abingdon, Oxon OX14 4RN: Routledge.

- Crawford, J., Henderson, K. B., Rudolph, J., Glowatz, M., Burton, R., Magni, P. A., & Lam, S. (2020). Covid-19: 20 countries' higher education intra period digital pedagogy responses. *Journal of Applied Learning and Teaching*, 9-28.
- Creswell, J. W. (2011). Educational Research Fourth Edition. Pearson.
- Darinskaia, L. A., & Molodsova, G. I. (2019). *Modern Technologies for Teaching and Learning in Socio-Humanitarian Disciplines*. Russia.
- Dianti, R., & Atmanegara, Y. (2018). The Implementation of ICT Integrated ELT Across Curriculum 2013 in Senior High Schools In Palembang. *English Community Journal*, 217-224.
- Dudeney, G., & Hockly, N. (2007). *How to Teach English with Technology*. Pearson Longman.
- Fabito, B. S., Trillanes, A. O., & Sarmiento, J. R. (2021). Barriers and Challenges of Computing Students in an Online Learning Environment: Insights from One Private University in the Philippines. *International Journal of Computing Sciences Research*, 441-458.
- Fedynich, L. V., Bradley, K. S., & Bradley, J. (2015). Graduate Students' Perceptions of Online Learning. *AABRI Journals*, 1-13.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education 8th Edition*. New York: The McGraw Hill Companies.
- Gautam, P. (2020, October 10). Advantages and Disadvantages of Online Learning. Diambil kembali dari E-Learning Industry: https://elearningindustry.com/advantages-and-disadvantages-online-learning
- Gull, J. (2020). The Integration of ICT in ELT A Systematic Literature Review on the use of Information and Communication Technologies in English Language Teaching. *English Educational Linguistics*, 7-8.
- Hijazi, D., & Alnatour, A. (2021). Online Learning Challenges Affecting Students of English in an EFL Context during Covid-19 Pandemic. *International Journal of Education and Practice*, 384.
- Hirsh-Pasek, K., Hadani, H. S., Blinkoff, E., & Golinkoff, R. M. (2020). A New Path of Education Reform: Playful Learning Promotes 21st Century Skills in Schools and Beyond. *Big Ideas*, 7-8.
- Hockly, N., & Dudeney, G. (2018). Current and Future Digital Trends in ELT. *REL C Journal*, 49(2), 164-178.
- Indrakusuma, A. H., & Putri, A. R. (2016). *E-Learning 1 (Teori dan Desain.* Tulungagung: STKIP PGRI Tulungagung.

- Kebritchi, M., Santiague, L., & Lipschuets, A. (2017). Issues and Challneges for Teaching Successful Online Learning Courses in Higher Education: A Literature review. *Journal of Educational Technology System*, 4-29.
- Kirschner, P. A. (2015). Do We Need Teachers as Designers of Technology Enhanced Learning. *Artilce in Instructional Science*, 309-322.
- Kusumo, N. S., Kurniawan, F. B., & Putri, N. I. (2012). e-Learning Obstacle Faced by Indonesian Students. *International Journal of the Computer, the Internet and Management*, 1-4.
- Laprairie, K. J., & Hinson, J. M. (2006). When Disaster Strikes, Move Your School Online. *Journal of Educational Technology Systems*, 209-214.
- Lee, M. C. (2010). Explaining and Predicting Users' Continuance Intention toward e-Learning: An Extension of the Expectation Confirmation Model. *Computers and Education*, 506-516.
- Liguori, E., & Winkler, C. (2020). From Offline to Online: Challenges and Opportunities for Entrepreneurship Education Following the Covid-19 Pandemic. *Entrepreneurship Education and Pedagogy*, 346-351.
- Loeb, S., Dynarski, S., MCFarland, D., Mrros, P., Reardon, S., & Reber, S. (2017). *Descriptive Analysis in Education : A Guide for Researchers*. Washington DC, US: US DEpartement of Education.
- Lubis, A. A., Nopriansyah, Halim, A., Nasution, S. S., & Yusuf, M. (2018). Students' Experiences of Learning English in Indonesia: Some Effective and Ineffentive Ways. *Abjadia: International Jurnal of Education*, 3 (2), 100-111.
- Lubis, A. H. (2018). ICT Integration in 21st Century Indonesian English Language Teaching: Myths and Realities. *Cakrawala Pendidikan*, 11-21.
- Mahaptra, M., & D., R. (2004). *Information Technology Applications in Libraries* : a Textbook for Beginners. Bhubaneshwar.
- Mahyoob, M. (2020). Challenges of E-Learning during the Covid-19 Pandemic Experienced by EFL Learners. *International Peer Reviewed Journal*, 351-362.
- McPherson, M. S., & Bacow, L. S. (2015). Online Higher Education: Beyond the Hype Cycle. *Journal of Economic Perspectives*, 135-154.
- Means, B. (2010). Technology and Education Change: Focus on Student Learning. *Journal of Research on Technology in Education*.
- Meenakshi. (2013). Importance of ICT in Education. *IOSR Journal of Reserach & Method in Education*, 3-7.

- Mofareh, A. A. (2019). The Use of Technology in English Language Teaching. *Frontiers in Education Technology*, 168-180.
- Muilenburg, L. Y., & Berge, Z. L. (2005). student barriers to online learning: A Factor Analytic Study. *Routledge*, 30-49.
- Muray, J. (2014, February 19). *13 Reason for and 3 Aigainst Technology in the Classroom*. Diambil kembali dari JacquiMurray.net: https://jacquimurray.net/2014/02/19/13-reasons-for-and-3-against-technology-in-the-classroom/
- Mustofa, M. C., M., S. L., & Fauzan, R. (2019). Formulasi Model Perkuliahan Daring sebagai Upaya Menekan Disparitas Kualitas Perguruan Tinggi. *Walisongo Journal of Information Technology*, 151-160.
- Nagasubramani, R. R. (2018). Impact of Modern Technology in Education. Journal of Applied and Advances Research, S-33-S35.
- Naidu, S. (2006). *E-Learning: A Guidebook of Principles, Procedures and Practices Revised Edition*. New Delhi: Commonwealth Educational Media Center for Asia.
- Nakamura, Y., Yoshitomi, K., & Kawazoe, M. (2018). Distance Learning, E-Learning and Blended learning in Mathematics Education. *Distance Learning, E-Learning and Blended learning in Mathematics Education*.
- Nicol, D., & Coen, M. (2003). A Model for Evaluating the Institutional Costs and benefits of ICT Initiatives in Teaching and Learning in Higher Education. *Research in Learning Technology*, 46-60.
- Nwachukwu, D. O. (2004). *Technology Development in Nigeria*. Aba: Ridden Publishing House.
- Orlando, J., & Attard, C. (2015). Digital Natives come of age: the reality of today's early career teacher using mobile devices to teach mathematics. *Mathematics Education Research Journal*, 107-121.
- Ozyurt, O., Ozyurt, H., Baki, A., & Guven, B. (2013). Integration in Mathematics classroom of an adaptive and intelegent individualized e-learning environment: Implementation and Evaluation of UZWEBMAT. *Computer in Human Behavior*.
- Pazzaglia, A. M., Stafford, E. T., & Rodriguez, S. M. (2016). Survey Methods for Educators: Analysis and Reporting of Survey Data (Part 3 of 3). Washington DC, US: REL Northeast & Island.
- Polytechnic, P. A. (2021). *Capaian Kinerja Tahun 2021 Triwulan II*. Palembang, Indonesia: Palembang Aviation Polytechnic.
- Qifu, W. (2013). A Study of Barriers to Online Learning in Distance Education in China. Nottingham: The University of Nottingham.

- Rosmaladewi, & Amirullah, A. (2019). The Impact of Information Technology on EFL Teachingin Indonesia. *ELT Worldwide*, 19-26.
- Setuju, Ratnawati, D., Wijayanti, A., Widodo, W., & Setiadi, B. R. (2019). ICT-based Learning Media Development. *Journal of Physics: Conference Series*, 1-6.
- Suryani, A. (2010, Juni). ICT in Education: Its Benefits, Difficulties and Organizational Development Issues. *jhs: Jurnal Sosial Humaniorah*.
- Swan, J. G. (2017). The Challenges of Online Learning: Supporting and Engaging the Isolated Learner. *Journal of Learning Design*, 20-30.
- Taha, M. H., Abdalla, M. E., Wadi, M., & Khalafalla, H. (2020). Curriculum Delivery in Medical Education during an Emergency: A Guide Based on the Responses to the COVID-19 Pandemic. MedEdPublish.
- Taherdoost, H. (2016). Sampling Methods in Research Methodology: How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management (IJARM)*, 20-23.
- Tinio, V. L. (2002). ICT in Education. New York: Stephen Browne.
- Tjokro, S. L. (2009). *Presentasi yang Mencekam*. Jakarta: Elex Media Komputindo.
- Toquero, C. M. (2020). Challenges and Opportunities for Hugher Education amid the Covid-19 Pandemic: The Philippine Context. *Pedagogical Research*, 2-5.
- Uhomoibhi, J. O. (2006). Implementing e-learning in Northern Ireland: Prospects and Challenges. *Campus-Wide Information Systems*.
- Yusuf, A. M. (2017). Metode Penelitian: Kuantitatif, Kualitatif dan Penelitian Gabungan. Jakarta: Kencana.
- Zaharah, Kiriliva, G. I., & Windarti, A. (2020). Impact of Corona Virus Outbreak toward Teaching and Learning Activities in Indonesia. *Jurnal Sosial & Budaya Syar-i*, 269-282.
- Zondiros, D. (2008). Online, Distance Education and Globalisation: Its Impact on Educational access, inequality and exclusion. *European Journal of Open, Distance and E-Learning*.