INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 13, Issue 4, (2023) E-ISSN: 2222-6990

The Perception of Students and Teachers towards Using Myeconomics in Learning Principles of Economics in Vocational Colleges, Malaysia

Zi Jian Oh[1], Mustapa Hj Kamar[2], Marina Rahman[3], Siti Khadijah Ahmad Ramli[4], Syaiffuldin Mohamad[4] and Hwei Chin Chin[5]

[1]Department of Business Management, Batu Lanchang Vocational College, Penang, Malaysia, [2]Ministry of Education, Technical Vocational Education and Training Division, Putrajaya, Malaysia, [3]Quality Assurance Sector of Tun Hussein Onn Vocational College, Johor, Malaysia, [4]Department of Business Management, Port Dickson Vocational College, Negeri Sembilan, Malaysia, [5]Department of Business Management, Butterworth Vocational College, Penang, Malaysia

Email: ohzijian@gmail.com

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v13-i4/16833 DOI:10.6007/IJARBSS/v13-i4/16833

Published Date: *05* April 2023

Abstract

Principles of Economics is perceived as a challenging subject by Business Management students in vocational colleges in Malaysia. The nature of the subject, which is largely theoretical, encompasses mathematics, finance, business, psychology, and law proves to be demanding for vocational students who are more inclined towards hands-on subjects. They also seem to lack interest in the subject. As a result, students' performance in Principles of Economics is considered average. To attract their interest, myEconomics is created which applies the concept cartoons. Using this approach, difficult concepts of economics are discussed in illustrative and relaxed manners so that students can grasp the gist of the ideas faster compared to when they refer to their textbooks which are in a textual form. This study aims to describe myEconomics and the perception of teachers towards using it in teaching and of students in learning Principles of Economics. When myEconomics was introduced and tested among teachers and students from 47 vocational colleges in Malaysia, the responses were collected by using survey and interview methods and the findings showed that myEconomics could serve as an instructional and learning tool for Principles of Economics in vocational colleges. This helps lecturers explain and students recall important economics concepts faster, improve and strengthen their understanding since they learn a challenging subject in a comical and colourful medium. On top of that, students will be able to gauge their own understanding immediately because myEconomics gives them the opportunities to access online assessments which have been prepared at the end of a topic using Quizziz.

Interestingly, myEconomics is unique as it is written in Bahasa Malaysia, a language that is used to teach and formally asses the subject in vocational colleges. Therefore, it has the potential to be used as a complete reference for Diploma in Business Management students in vocational colleges when it has included all of the topics in Principles of Economics.
Keywords: Principles of Economics, Myeconomics, Instructional and Learning Materials, Vocational College

Introduction

Principles of Economics is considered a challenging subject for business program students, especially those in vocational colleges. It is a theoretical subject that encompasses mathematics, psychology, law, finance, and some statistics. For students to be able to understand the concepts and apply the formulas in solving economic problems, they need to be good at some basic numerical skills, especially mathematics. Economic concepts and mathematical elements such as graphs and statistics are the main skills in economics subjects. A study by Johnston et al (2000), found that economics subjects are difficult subjects for high school and university students in Melbourne, Australia, too.

While Economics is mandatory for business students as it is required in the program standard, vocational students' entry level does not impose such a requirement. Vocational students are known as students who are more inclined towards hands-on ability and their learning is mostly supported by their practical work and demonstration of physical materials. As a result, subjects that involve calculations and abstract concepts in the business program can become demanding for them, and one of the subjects of such concern is Economics. For the purpose of this article, Principles of Economics is referred to as the subject while economics is used to refer to the field in general.

Students were observed and they seemed to have lacked interest in the subject. Their performance in a written test and final examination showed average achievement. Relating the concepts that they have learned earlier to a new situation is not easy for teachers too because they need to re-teach the abstract before the numbers and graphs make sense for the students. Besides, their lack of interest can also be related to their reading materials. The suggested reference books are written in English, and most economics textbooks available in the market are also in English. It seems to the researchers that vocational students are struggling with two major issues in the Principles of Economics: language and content. If these two issues are not dealt with, our business vocational students may not perform well too in other related subjects. Researchers such as Johnston et al (2000) who do research on economic learning suggest that teachers who teach economics to teach well, especially to students who are new to the subject in order to develop their critical thinking and encourage them to contribute ideas during the learning process.

This concern has led the Principles of Economics teachers in vocational colleges to innovate an alternative, myEconomics, so that students will be able to grasp the economic concepts without overcoming the language hurdle. The use of technology in teaching Economics has been more widespread recently, and the industry's rapid growth has the potential to alter education. The changes in the education landscape have dawned on many educators to come up with new learning content, teaching, and assessment methods. The shift has presented a challenge for teachers to try new pedagogical methods to attract attention and more effective learning. To demonstrate how active-learning approaches and technology can be used to enhance student learning, raise awareness of the complexities of the real world, and improve the acquisition of numerous learning outcomes, more study is

required. This is true despite the variety of techniques taught in economics classes (Sierra & Suárez-Collado, 2022).

Economics education has long been familiarized with the traditional "chalk and talk" teaching techniques. However, teachers must replace the traditional methods of instruction with more cutting-edge ones that enable students to participate in the learning process more successfully (Saidon et al., 2022). The significance of the study is to integrate the innovation of comic-based materials as an e-learning application namely myEconomics to bring a fun-learning experience to students, develop reading and writing skills, strengthen motivation, ease the teachers' task, and reduce the language barrier that students face. Therefore, this study is to introduce myEconomics as a medium in teaching and learning Economics to improve students' understanding while examining the perception of students and teachers of using it. On top of that, the students and teachers will benefit from the creation of myEconomics. The use of e-comics in Economic education suits students' media experience better than traditional text-based learning as its content contains short messages in a meaningful context. With the use of myEconomics, students are able to understand economic concepts; recall important economic concepts faster; foster further reading in economics; and gauge their understanding of topics they have learned immediately. Besides, myEconomics can also be used as instructional material for Principles of Economics lecturers in vocational colleges.

Literature Review

In Malaysia, vocational colleges have been given the responsibility of providing high-quality education, particularly to young people, and of preparing them with knowledge and skills for the demands they may confront once they enter the working world. Hence, in order to address the needs of students for learning and services while also boosting students' enrollment, it is critical to have a comprehensive digital strategy that can propel true digital transformation (Ngafeeson, 2022). By conducting several types of lectures both before and after the COVID-19 pandemic, the teachers have created an innovative e-learning tool that can profoundly impact how satisfied students are with the online learning experience (Nurkhin et al., 2022).

The quality of education at school must be ensured through effective and pleasurable learning. The key to producing top-notch human resources is high-quality education. The thoroughness and consistency of education in all facets of life is one of the markers (Rahmatullah & Inanna, 2017). Comics and cartoons are favourites of all clusters of society, especially students, but this scenario is sometimes unacceptable to parents because they think that such reading materials will negatively affect the development of their children's minds. This can be understood for the reason that cartoons have a strong and effective appeal to children because the content satisfies their imagery and fun aspects. A comic is a tool that can aid students in their learning (Saputro, 2015). It contains messages that can spark an interest in learning and should be channelled and matched with the need for instruction. When used as a teaching tool, it can effectively serve as a visual communication medium because the context refers to the interaction between students and learning resources (Ntobuo et al., 2018). The comic is a platform for information delivery that is engaging because it tells a tale through images that inspire readers to want to learn more (Negrete, 2013).

MyEconomics

MyEconomics uses cartoons that depict connected participants in economic activities. The comic's narrative is diverse and selected to attract students' interest in the subject matter. It discusses commonplace events that are thematically presented, such as consumption, production, money, and other everyday economic actions that are typically carried out in early infancy. These factors are combined to make comics an effective and efficient teaching tool since they are presented in an engaging and imaginative way that taps into students' curiosity about what they learn. Because the narrative, the literary structure, the figures and colours, and the principles of photography are all integrated into one medium, the comic is an attractive educational tool (Rahmatullah et al., 2020). A comic book can be utilized for two-way learning: as a teaching tool and as a learning resource that students can use on their own (Saputro, 2015).

Comics originated as a single illustration or one-panel cartoon and were then joined in a series by two or more cartoons that shared a common theme or plot. To tell the tale of the comics, the text is added to speech balloons and placed next to an image, which is referred to as a panel (Trinova et al., 2013). With that in mind, myEconomics was created using the concept cartoons with the purpose of simplifying difficult economics concepts for vocational students in vocational colleges, Malaysia. These concepts are discussed in illustrative, conversational, and relaxed layouts so that students can grasp the gist of the economic concepts without fear of the usual text-laden economic books that they have to read. MyEconomics is designed to be an alternative to increase students' interest in economics subjects, especially among students in vocational colleges.

The researcher created myEconomics using Pixton and Quizizz applications available on the website. Pixton is used as a tool to create comics by adding objects, texts, and images. The team also included summative practices consisting of questions built through Quizizz, an online assessment tool, to test students' understanding of every topic in myEconomics. The innovation strives to provide a simple yet meaningful delivery of difficult economics concepts into fun and engaging learning. In myEconomics, the visual image's effect transmits sensations, sentiments, and emotions that are good for inspiring students to study and serve as a learning resource. Students are motivated and drawn to learning waves after reading myEconomics and testing their understanding through its online assessments. Due to Quizizz's ease of use, superiority over paper-based in-class exercises, ability to minimize test anxiety, and other factors, students believe using Quizizz improves their learning and want to utilize it in future classes (Zhao, 2019).

MyEconomics is a digital comic book in PDF form. Figure 1 shows myEconomics cover page. It is developed using a combination of two applications: Pixton and Quizizz (Figure 2). Pixton is used to fuse together the illustrations of cartoon images and texts (Figure 3), while Quizziz is put to use for developing interactive teaching materials and summative practices. A preview of the Quizizz URL as well as the QR code are placed in the last part of each comic topic (Figure 4). Students find it easy to answer the questions by scanning the QR code or clicking on the provided URL link. Since myEconomics is PDF-shaped, it is easy to share and download through the WhatsApp, Telegram and Google Classroom applications (Figure 5). These three platforms are the most commonly used media among vocational colleges students for online and self-access learning.

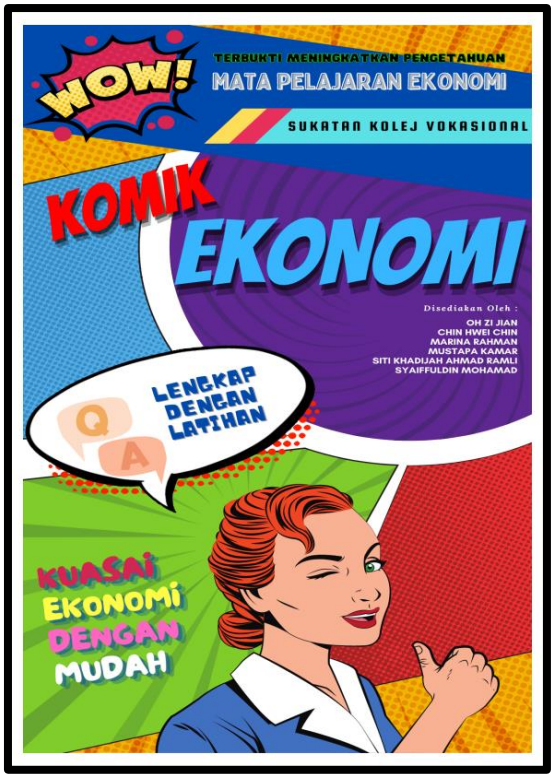

Figure 1 : MyEconomics cover page

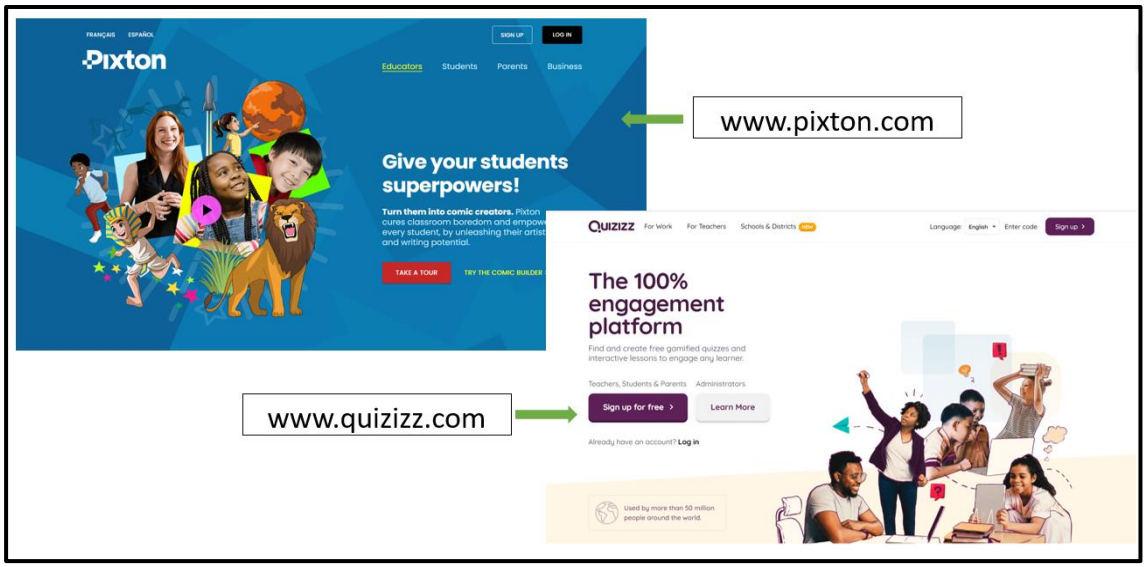

Figure 2 : Pixton and Quizizz applications

Figure 3 : Samples of comic strips in MyEconomics

Figure 4 : QR Code and URL links of Quizizz for summative practices

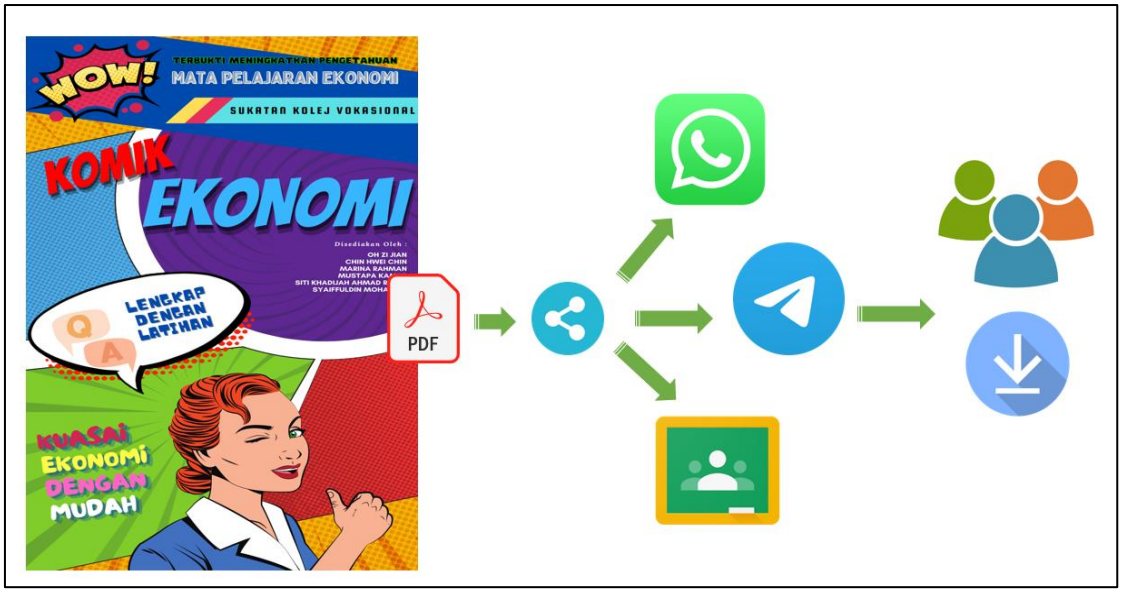

Figure 5 : MyEconomics in PDF Format, Easy To Share And Download

Students and Teachers' Perceptions Towards myEconomics

The component of active learning and pedagogical innovation included in myEconomics offers some intriguing findings that help to increase the adoption of digital skills in settings related to higher education (Sierra et al., 2022). Furthermore, it is very beneficial, enhancing students' educational experiences by improving their general learning and digital skills. It is useful in assisting students to acquire the range of economics-related abilities demanded from graduates of the Business Management programme. The use of a multimedia component as an addition to student attendance in the economics course proved successful (Wei et al., 2016). The application of peer learning using concept cartoons has improved students' performance and critical thinking (Khoo & Fitzgerald, 2017). Using virtual classrooms has a statistically significant negative impact on students' learning outcomes. On the other hand, traditional classrooms in person produced better learning results. Additionally, the hybrid strategy outperformed the use of online virtual classrooms by itself (Xing & Saghaian, 2022). Integrating media can help students learn and comprehend economics terminologies, process the information for long-term retention, and develop a greater interest in the field of economics to boost economics literacy (Zakaria et al., 2019).

METHODS

Research Instrument

To gather data for this study, a survey method was used. The researcher collaborated with lecturers from 47 vocational colleges to gather accurate data, minimize bias, and improve the quality of the data collected (Creswell, 2015; Sekaran & Bougie, 2010). In this study, survey methods were used to measure the effect of using digital comics on students' understanding of Microeconomics, a subject taught in the first semester for Diploma in Business Management in vocational colleges. This study was conducted on 148 respondents from vocational colleges located all over Malaysia. A survey questionnaire was modified based on the previous literature review.

Sample

In order to collect 148 survey questionnaires from teachers and students at vocational colleges, this study used convenient sampling. Due to the researcher's ease of access to these teachers and students and their willingness to participate in the study, this sampling strategy was used (Kivunja, 2015). Respondents voluntarily provided their answers to the questionnaires in the surveys.

Instrument

A list of questionnaires with 9 study-related questions was provided to respondents as the research instrument and used to compile the data for the study. The questionnaires had two sections (A and B). In Part A, there are two questions on demographic data, and in Part B, there are seven questions on how people feel about myEconomics, which Oh et al. modified 2022. A five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), was utilised in this series of surveys.

Pilot Study

To check the structured instrument's validity and make sure the respondents could understand it and that it was appropriate for the context, a pilot study was carried out. Reliability, according to Mail and Noordin (2015), is the capacity of specific indicators or variables to have been relied upon again. The idea of measurement and the validity of a study are closely intertwined. According to Sekaran and Bougie (2010), a reliability coefficient value close to 1 is regarded as having a high level of reliability, while a value of 0.6 is regarded as having a low level of reliability, a value of 0.7 is acceptable, and a value of 0.8 is regarded as having a good level of reliability. The structured instrument's dependability was tested in a pilot study with 30 respondents to make sure it met the required standards. The analysis's findings demonstrated that Cronbach's Alpha's reliability coefficient is strong, coming in at 0.989. The adopted questionnaire is therefore suitable for use in the real study, according to the researchers.

Data Analysis

SPSS (Statistical Package for the Social Science) version 26.0 was used to analyse the survey's data. In order to investigate how students and teachers in vocational colleges reacted to myEconomics, descriptive analysis was employed to get the mean.

Findings and Discussion

Findings

A total of 148 respondents answered the questionnaires. The analysis of the results has shown in the table as follows.

Table 1
Respondent's demographic

Demographic	Factor	Frequency	Percentage
Status	Student	54	36.5
	Teacher	94	63.5
State	Pulau Pinang	43	29.1
	Perlis	3	2.0
	Kedah	7	4.7
	Perak	10	6.8
	Pahang	11	7.4
	Selangor	4	2.7
	Melaka	10	6.8
	Negeri Sembilan	27	18.2
	Johor	9	6.1
	Kelantan	2	1.4
	Terengganu	1	0.7
	Sarawak	9	6.1
	Sabah	12	8.1
		148	100.0

Table 2
The result of the perception of student and teacher towards myEconomics

	Item	Mean score
1	myEconomics is engaging.	4.66
2	myEconomics is suitable as a teaching aid.	4.64
3	myEconomics is able to enhance my understanding about the course.	4.64
4	myEconomics facilitates the learning and teaching process for students and teachers.	4.57
5	myEconomics helps me to understand the important concept in visual.	4.59
6	The visual in myEconomics has triggered interest in further reading.	4.59
7	myEconomics is easily accessible.	4.68
8	myEconomics has increased the students' motivation towards Principle of Economics course.	4.65
9	myEconomics encourages students to do self-revision and evaluation.	4.62

"1" = Strongly disagree, "2" = Disagree, "3" = Neutral, "4" = Agree, "5" = Strongly agree

The empirical test shows that the lowest mean was for the question "myEconomics facilitates the learning and teaching process for students and teachers." (mean = 4.57); this indicates that the teachers and students might be saying that myEconomics does help their teaching and learning in theoretical part of Microeconomics, however, myEconomics has not solved the statistical and mathematical parts which are equally important in teaching and learning Economics. This may require another innovation to satisfy the calculation part. On

the other hand, the question with the highest mean, which is (4.68), and the question is "MyEconomics is easily accessible." (Table 2). This comes as to no surprise as internet access is convenient, myEconomics is friendly to download and compatible on their mobile phones.

Discussion

The results are consistent with a study by Khoo and Fitzgerald (2017) that demonstrated how the use of supportive teaching technologies like myEconomics has enhanced students' performance and critical thinking. Additionally, myEconomics is a helpful learning tool for students, providing them with a positive academic experience they choose in place of successful student learning results, similar to the research by (Xing and Saghaian, 2022). Additionally, myEconomics assisted teachers by including the elements of active learning and pedagogical innovation, which could promote the adoption of digital skills in contexts relevant to higher education (Sierra et al., 2022).

Conclusion

Overall, this study aims to attract and enhance students' interest in economics subject by using myEconomics which applies the concept cartoons. After using myEconomics in Microeconomics course, the respondents said that it could serve as an instructional and learning tool in vocational colleges. MyEconomics also helps students to understand the content easily and is eye-catching at the same time.

Contribution of the Study

These discoveries have given fresh ideas on how to teach Economics to Business students and have also helped to implement digitization in education as part of the conditions to become a developed nation. This study will also persuade educators to frequently use and employ mobile apps or systems in their instructions to get students involved in their lessons, just as myEconomics has demonstrated.

Limitation and Recommendation

Although Malaysian teachers and students are the focus of this study, it would be impossible to extend the use to the whole country's teacher and student population. Further feedback about myEconomics from students and teachers who are in Form Six, matriculation centres, and polytechnics should be gathered. Besides, more can be done in myEconomics so that it captures all of the topics in both Microeconomics and Macroeconomics which are taught in vocational colleges for Business Management students. Meanwhile, students' performance in the subject's final examinations can also be taken into account for researchers to conclude the impact of myEconomics.

Acknowledgment

Special thanks to my team members for contributing their time and effort in finishing the study.

Corresponding Author

Oh Zi Jian
Department of Business Management, Batu Lanchang Vocational College, Penang, Malaysia.
Email: ohzijian@gmail.com

References

Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Boston, MA: Pearson.

Zhao, F. (2019). Using Quizizz to Integrate Fun Multiplayer Activity in the Accounting Classroom. *International Journal of Higher Education, 8*(1).

Johnston, C. G., James, R. H., Lye, J. N. & McDonald, I. M. (2000). An evaluation of collaborative problem solving for learning Economics. *Journal of Economic Education, 31*, 13-29.

Khoo, Y. Y., & Fitzgerald, R. (2017). Peer learning with concept cartoons enhance critical thinking and performance in secondary school economics. *Journal of Economics and Economic Education Research, 18*(1), 1-13.

Kivunja, C. (2015). Innovative methodologies for 21st century learning, teaching and assessment: A convenience sampling investigation into the use of social media technologies in higher education. *International Journal of Higher Education, 4*(2), 1-26. doi:10.5430/ijhe.v4n2p1

Mail, R., & Noordin, R. (2015). *Penyelidikan peringkat sarjana: Pendekatan kualitatif sebagai alternatif*. Universiti Malaysia Sabah: Penerbit Universiti Malaysia Sabah.

Negrete, A. (2013). *Constructing a Comic to Communicate Scientific Information about Sustainable Development and Natural Resources in Mexico.* Procedia - Social and Behavioral Sciences, 103(November 2013), 200–209.

Ngafeeson, M. N. (2022). Northern Michigan University online campus: A case of digital transformation in higher education. *Journal of Information Technology Teaching Cases, 12*(2), 230-243. doi: 10.1177/20438869211056950

Ntobuo, N. E., Arbie, A., & Amali, L. N. (2018). The development of gravity comic learning media based on Gorontalo culture. *Jurnal Pendidikan IPA Indonesia, 7*(2), 246–251.

Nurkhin, A., Martono, S., Kardoyo, K., Muhsin, M., & Algifari, A. (2022). *The effect of the use of electronic learning aid on student satisfaction with online learning*. AIP Conference Proceedings, 1st International Conference on Technology, Informatics, and Engineering, (030024). Malang, Indonesia. doi: 10.1063/5.0094632

Oh, Z. J., Kamar, M. H., Rahman, M., Ramli, S. K. A., Mohamad, S., and Chin, H. C. (2022). The Perception of Students and Lecturers towards Using The OME System in Learning Business Finance in Vocational Colleges, Malaysia*. International Journal of Academic Research in Business and Social Sciences. 12*(6), 459 – 472. doi: 10.6007/IJARBSS/v12-i6/13986

Rahmatullah, & Inanna. (2017). *Identifikasi Nilai-Nilai Ekonomi Sebagai Dasar Merumuskan Materi Pengantar Ilmu Ekonomi Berjatidiri Bangsa*. Prosiding Seminar Nasional Lembaga Penelitian UNM, 700–704

Saidon, R., Bakar, J. A., Sharipudin, M. -N. S., & Zainal, Z. (2022). The Impact of Web 2.0 Tools on Economics Education. *Journal of Advanced Research in Applied Sciences and Engineering Technology, 28*(3), 287-298. doi: 10.37934/araset.28.3.287298

Saputro, A. D. (2015). *Aplikasi Komik sebagai Media*. Muaddib, 05(ISSN 2088-3390), 01.

Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (5th ed.). New York, NY: John Wiley & Sons Ltd.

Sierra, J., & Suárez-Collado, Á. (2022). Wealth and power: Simulating global economic interactions in an online environment. *International Journal of Management Education, 20*(2),100629. doi: 10.1016/j.ijme.2022.100629

Sierra, J., Yassim, M., & Suárez-Collado, Á. (2022). Together we can: enhancing key 21st-century skills with international virtual exchange. *Education and Training, 64*(6), 826-843. doi: 10.1108/ET-05-2021-0171

Trnova, E., Trna, J., & Vacek, V. (2013). The Roles of Cartoons and Comics in Science Education. *10th International Conference Hands-on Science 2013*. Educating for Science and through Science. Research Gate. pp. 240-244.

Wei, C. Y., Khoo, Y. Y., & Zakariya, Z. (2016). Application of lecturer's audio-video recording in economics course: A substitute or supplement to students' attendance. *International Journal of Academic Research in Business and Social Sciences, 6*(12), 24-32. doi: 10.6007/IJARBSS/v6-i12/2466

Xing, X., & Saghaian, S. (2022). Learning Outcomes of a Hybrid Online Virtual Classroom and In-Person Traditional Classroom during the COVID-19 Pandemic. *Sustainability (Switzerland), 14*(9), 5263. doi: 10.3390/su14095263

Zakaria, W. N. W., Abas, H., Masrom, M., Mohdali, R., & Mohamed, N. N. N. (2019). Mobile App for Learning Economics Terminologies. *International Journal of Academic Research in Business and Social Sciences, 9*(10), 191–202. doi: 10.6007/IJARBSS/v9-i10/6477