

LEARNING PACKAGE IN ARALING PANLIPUNAN GRADE 9 WITH INFOGRAPHICS

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Abstract

Learning package is a learning resources that is a big help not only to the students but also to the teachers. The learning package is a bunch of informative or learning materials coordinated for students. The method used in this study was descriptive method. This study aimed to develop a learning package in Araling Panlipunan 9 with infographics. Specifically, this study sought to answer the following objectives: 1. level of acceptability of learning package in Araling Panlipunan 9 with infographics in terms of parts with regards to: content, visual and knowledge; 2. level of acceptability of learning package in Araling Panlipunan 9 with infographics in terms of characteristics with regards to usefulness, accuracy, relevance and appeal to the target user; 3. significant difference between level of acceptability of learning package in Araling Panlipunan 9 with infographics in terms of parts and 4. significant difference between level of acceptability of learning package in Araling Panlipunan 9 with infographics in terms of characteristics.

Based on the results and interpretation of data, the researcher found the acceptability of the learning package in Araling Panlipunan with infographics in terms of parts with regards to content, visual and knowledge are highly acceptable. On the other hand, the acceptability of the learning package in Araling Panlipunan with infographics in terms of characteristics with regards to usefulness, accuracy, relevance and appeal to the target user are also highly acceptable. The level of acceptability of the learning package in terms of parts with regards to content, visual and knowledge are not significantly different. Also, the level of acceptability of the learning package with infographics with regards to accuracy, relevance and appeal to the target user are not significantly different except the usefulness.

The conclusions made from the study are: the significant difference between the acceptability of learning package in Araling Panlipunan 9 with infographics in terms of parts as rated by the group of respondents which predicts not significantly in terms of content, visual and knowledge. Therefore, the null hypothesis is accepted. The result of the analysis shows that acceptability of infographics in terms of characteristics as rated by the group of respondents respectively has no significant difference in terms of accuracy, relevance and appeal to the target user except for the usefulness. Therefore, the null hypothesis is partially rejected.

For the recommendation, the researcher suggests that the learning package in Araling Panlipunan 9 with infographics is intended to be a supplemental learning material.

Keywords: Learning package; Araling Panlipunan; Grade 9; infographics

1. Main Text

Introduction

Learning package is a learning resources that is a big help not only to the students but also to the teachers. The learning package is a bunch of informative or learning materials coordinated for students. This study aimed to develop a learning package in Araling Panlipunan 9 with infographics.

On the other hand, we can see infographics everywhere: traffic signs, subway maps, tag clouds, musical scores and weather charts are just a few examples, among a huge number of possibilities. This kind of material is a great help especially for the teachers of the subject, Ekonomiks 9 (Araling Panlipunan). This subject mostly displayed a lot of numbers and data. Students can also easily understand the lessons using the infographics because students nowadays are visual learners.

The Department of Education (DepEd) emphasizes the reception and execution of the Learning Resource Management and Development Systems (LDRMS) to give emphasis on the LDRMS jobs and obligations at all degrees of administration. This is a compliant with the Education Act of 2013, and as taught in DepEd Order (DO) No. 76, s. 2011 named "National Adoption and Implementation of LDRMS".

Infographics could be very fundamental in visual synopsis; in any case, this could conceal the significance of the content to help the most suitable conversation. In request to keep away from such cases the representation ought not rule a solid conversation furthermore, an engaging phrasing. Information that could intrigue the reader ought to rely upon clear and nitty gritty investigations. Knowledge ought to be introduced in such a manner to guarantee that the reader could track down instances of work as per his/her fields of interest. Knowledge should empower readers to comprehend the information by uncovering designs and by working with perusing. The plan material should uphold the reader to rehash the point through giving separating and search options. (Akkoyunlu & Kibar, 2014)

Understanding key concepts and topical issues in Economics using the skills and appreciation of social disciplines towards the formation of citizen critical, reflective, accountable, environmentally friendly, productive, fair, and humane citizens of the country and the world are the components of the Economics subject. (K to 12 Araling Panlipunan Gabay Pangkurikulum, 2016).

Learning packages contains different resource materials both for students and teachers. The learning package in this study includes lesson plan and the infographics in Araling Panlipunan 9.

These ideas were the one who pushed the researcher to do this study. The respondents of this study were Information Systems Technicians and the Araling Panlipunan Teachers. The researcher wants to know the acceptability of learning package in Araling Panlipunan with infographics.

Background of the Study

Learning Package as defined by Meeks (2016) is a written material created to teach a knowledge or capability. It could be independent or it might require many supporting guides like movies, books and tapes. It is an aide for learners to use in their learning. The learning package's parts are (1) the expressed idea, (2) pre-test, (3) social goals, (4) learning exercises, (5) journey exercises and (6) post-test.

On the other hand, Damyanov and Tsankov (2018) states that infographics incorporate three primary parts - visual components (colors, illustrations, signs, symbols, maps, and so forth), content components (realisms, perceptions, texts, references, and so on), and knowledge (conclusions, messages, etc.). Infographics reproduce content to pass on the information they convey. This is really accomplished through a mix of content, plan, and innovation.

Economics is taken by the Grade 9 students. They studied it from the 1st quarter to 4th quarter. The content of these quarters are: 1st quarter - Mga Pangunahing Konsepto ng Ekonomiks: Batayan ng Matalinong Paggamit ng Pinagkukunang Yaman tungo sa Pagkamit ng Kaunlaran, 2nd quarter - Maykroekonimiks, 3rd Quarter - Makroekonomiks and 4th quarter - Mga sektor Pang-ekonomiya at Mga Patakarang Pang-Ekonomiya Nito.

With these gathered data, the researcher knows that infographics can be used in teaching Economics because of its contents. The subject Economics is one of the complex subjects that the students take and this is the gap that the researcher saw. The researcher wants to know what the level of acceptability of the infographics is. Using infographics, the students can easily understand the topics in Economics. Also, the teachers can use this material to present the lesson in the simplest form.

Theoretical Framework

Fleming and Mills (2012) proposed four modalities that appeared to mirror the encounters of the students and educators. These are the VARK. VARK stands for Visual, Auditory, Read/Write and Kinesthetic. For using the infographics, the visual learning theory suits the most. This predisposition remembers the portrayal of data for maps, bug outlines, charts, diagrams, stream graphs, marked charts, and every one of the representative bolts, circles, progressive systems, and different gadgets that individuals use to address what might have been introduced in words. This mode might have been called Graphic as that better clarifies what it covers. It does exclude still pictures or photos of the real world, films, recordings or PowerPoint. It incorporates plans, whitespace, examples, shapes and the various organizations that are utilized to feature and pass on data. Whenever a whiteboard is utilized to draw a graph with significant images for the connection between various things that will be useful for those with a Visual inclination.

According to Hendrick (2014), metacognition theory alludes to higher order thinking which includes dynamic command over the mental cycles participated in learning. Exercises, for example, arranging how to move toward a given learning task, checking perception, and assessing progress towards making of an errand are metacognitive in nature. Since metacognition assumes a basic part in fruitful learning, it means quite a bit to concentrate on metacognitive action and improvement to decide how students can be educated to more readily apply their mental assets through metacognitive control. The expression "metacognition" is most frequently connected with John Flavell, (1979). As indicated by Flavell (1979, 1987), metacognition comprises of both metacognitive information and metacognitive encounters or guideline. Metacognitive information alludes to gained information about mental cycles, information that can be utilized to control mental cycles. Flavell further partitions metacognitive information into three classes: information on individual factors, task factors and procedure factors.

As cited by Lawless (2019), Jean Piaget, a Swiss Psychologist and trailblazer of Cognitive Learning Theory, inclined toward this student focused way to deal with instructing. He recommended that accommodation, assimilation, and equilibration are altogether essential to learning. The way that infographics can inspire cognitive theories from the receiver of the data can be associated with the gestalt hypothesis from Psychology.

All the learning theories stated above are observed by the researcher and are evident to the study. It is observed that students nowadays are visual learners which is related to the infographics. In connection, metacognitive and cognitive learning theory deals with higher order thinking skills which are coordinated to the learning package in Araling Panlipunan with infographics because of the different activities that can be found on the material.

Research Methodology

The respondents of this study were the forty (40) Social Studies private school teachers and thirty-two (32) different Information Systems Technicians in Lucban, Quezon. These teachers and Information Systems Technicians were from the schools to wit; Lucban

Academy, Casa del Niño Jesus de Lucban, Banahaw View Academy, Lucban Christian School, Good Shepherd Diocesan School – IFI Lucban and Southern Luzon State University – Laboratory High School. These teachers and Information Systems Technicians answered the two self-made questionnaires.

Before gathering data, the researcher made consent letters and signed by the adviser to conduct the study. After that, the researcher also developed a letter for the master teachers in Araling Panlipunan to ask for help in improving and organizing the questionnaires and learning package. After providing feedback, recommendations and suggestions the researcher reorganized the questionnaire and the learning package and presented it to the adviser. For data collection on the level of acceptability of the developed learning package, the researcher presented to the teachers the letter signed by the principals for the permission to the researcher to collect data in their school. The researcher conducted the study in the different schools in Lucban, Quezon. The researcher asked for the cooperation of the teachers and Information Systems Technicians (IT) in answering the questionnaires for the level of acceptability of the developed learning package. Self-made questionnaires are the main instrument of this study to assess the acceptability of the learning package in terms of parts and characteristics.

The researcher made two questionnaires to assess the acceptability of the learning package in terms of parts and characteristics. In terms of parts, it was assessed through visual, content and knowledge. For the characteristics, it was assessed in terms of usefulness, accuracy, relevance and appeal to the target users.

To find out the level of acceptance of teachers and Information Systems Technicians (IT) in terms of parts and characteristics of the learning, the researcher used the mean and Standard Deviation. To determine the significant difference of level of acceptability of the learning package in terms of parts and characteristics as rated by the group of respondents, the researcher used the T-Test formula.

Results and Discussion

In this study, the level of acceptability of learning package with infographics in Araling Panlipunan 9 in terms of Parts refers to the Content, Visual, and Knowledge.

The level of acceptability of learning package in Araling Panlipunan with infographics in terms of parts with regards to content as perceived by Teachers is 3.76 with “Highly Acceptable” as verbal interpretation while Information Systems Technicians is 3.79 with “Highly Acceptable” as verbal interpretation. This means that the contents and information in the learning package with infographics are clearly presented. This also implies that contents of the learning package with infographics are chronologically arranged.

Similarly, the study of Ramos (2021) discussed that exceptionally high appreciation to learning package was given by the educators since it passed in their teaching and proficient principles and it followed the right organization, content and design. Their appreciation considered their assertions that the learning package have catching stories, the learning exercises adhered to the rules in making evaluation with questions fit to the target students.

The level of acceptability of the learning package with infographics in terms of parts with regards to visual as perceived by Teachers is 3.66 with High as verbal interpretation while Information Systems Technicians is 3.72 with Highly Acceptable as verbal interpretation. This implies that the visual utilized in the learning package with infographics are clear and basic as well as the graphics used. This also means that the text style and dimension of the learning package with infographics are evident.

Similarly, the study of Awi et.al (2017) discussed that the purpose of their learning package design expects to choose an organization for planning learning instruments, system choice, approaches, learning techniques and learning assets. The content of the learning bundle is set in view of the nature and the grammar of the learning material is based metacognition coordinated in character training. The organization incorporates (1) Lecture plan alludes to the standard of the Education and Culture Minister of Indonesia Republic Indonesia No. 49 Year 2014; (2) Logic also, Set Textbook.

The level of acceptability of learning package in Araling Panlipunan with infographics in terms of parts with regards to knowledge as perceived by Teachers is 3.70 with “Highly Acceptable” as verbal interpretation while Information Systems Technicians is 3.80 with “Highly Acceptable” as verbal interpretation.

This means that the knowledge on the learning package with infographics can expand the focal point of learning of the students and it can expand the knowledge of the learners. This also implies that the lessons on the learning package in Araling Panlipunan with infographics are exact.

Similarly, the study of Blake et.al (2020) discussed that with regards to the digital learning package, it was concurred that the digital learning package ought to be enlightening, liberated from moving pictures except for installed video cuts (a 'variety and consideration in the working environment' thought), and facilitated on a discovered site.

In this study, the level of Acceptability of Learning Package with Infographics in terms of characteristics refers to the usefulness, accuracy, relevance and appeal to the target user.

The level of acceptability learning package in AralingPanlipunan with infographics in terms of characteristics with regards to usefulness as perceived by Teachers is 3.64 with “Highly Acceptable” as verbal interpretation while Information Systems Technicians is 3.81 with “Highly Acceptable” as verbal interpretation.

This indicates that the usefulness of the learning package with infographics are not difficult to utilize and comprehend and also, it is easy to plan and replicate. This also means that it can be utilized by the teachers and the learners.

Moreover, as per the study of Naderi (2013) states that based on the result of students' grades, it was indicated that educational advancement came about because of using the learning package that was improved from the pre-test in controlled group. Preliminary outcomes showed that these learning package altogether affect students' participation and educational advancement and improvement in rationale atmosphere inside the classroom.

The level of acceptability of learning package in terms of characteristics with regards to accuracy as perceived by Teachers is 3.62 with "Highly Acceptable" as verbal interpretation while Information Systems Technicians is 3.75 with "Highly Acceptable" as verbal interpretation.

This means that the accuracy of the lessons on the learning package is organized to give clear alignments to understanding. This also implies that the accuracy of the learning material is suitable to the period of development and learner's experiences and give adequate data to the fulfillment of objectives.

Similarly, findings from the study of Taurista et.al (2017) manifest in teaching – learning package including the schedule, lesson plan, and module covering two principal themes about cells and tissues, which are all organized based on guided-inquiry model and incorporation of local information. In connection to the master assessment and formative testing, the items yield a serious level of legitimacy, reasonableness, and adequacy, as confirmed by the result arriving at the above perspectives by 88.42% and the acquire score arriving at 0.78 showing the adequacy of the educating and learning package.

The level of acceptability of learning package in terms of characteristics with regards to relevance as perceived by Teachers is 3.72 with "Highly Acceptable" as verbal interpretation while Information Systems Technicians is 3.73 with "Highly Acceptable" as verbal interpretation.

This means that the learning package in Araling Panlipunan with infographics was easy to understand and the students can relate their prior knowledge to the new lessons. This also implies that the lessons in the learning package in Araling Panlipunan with infographics includes simple to complex knowledge.

Similarly, the result from the study of Sakshi (2021) as well as the other different studies, it is explained that e-learning package ought to be improved in the organizations as it is a promising option in contrast to the customary homeroom instructing, assisting society with pushing toward a dream of deep rooted and on-demand learning. It gives a thrilling and exceptionally successful opportunity for growth that can go past the degree of schooling and preparing one could insight in a classroom.

The level of acceptability learning package in terms of characteristics with regards to appeal to the target users as perceived by Teachers is 3.65 which means it is "Highly Acceptable" while Information Systems Technicians is 3.74 with "Highly Acceptable" verbal interpretation.

This means that the appeal to the target users of the learning package that the students can interface their prior knowledge to the lessons on it. This also means that it is fitting to the age, capacity, and level of comprehension of the Grade 9 Students and also urges the students to improve their higher – order thinking abilities.

Similarly, based on the results of the study of Aremu and Efuwape (2013) it is very well close that the level of acceptability and usefulness of the Microsoft Learning Content Development System learning package are high. Subjective satisfaction has most significant commitment to both student's acceptability and usefulness followed by self-adequacy, mentality has the least commitment. As discovered, users of new innovation frequently experience cognitive tension in figuring out the advantages of utilizing the new innovation, while as yet being impervious to change and vulnerability. Moreover, the user's current level of fulfillment with PC and innovation impacted their future use of new innovation and programming.

The result of the analysis shows that Acceptability of learning package in terms of Parts as Rated by the Group of Respondents with ($t = -0.407$), ($p = 0.686$) for content, ($t = -0.686$), ($p = 0.495$) for visual and ($t = -1.145$), ($p = 0.256$) for knowledge respectively has no significant difference.

The result of the analysis shows that acceptability of learning package in terms of parts as rated by the group of respondents got ($t = -2.195$), ($p = 0.032$) for usefulness which has a significant difference because the teachers and the Information Systems Technicians have a different perspective on using it while ($t = -1.328$), ($p = 0.495$) for accuracy, ($t = -1.134$), ($p = 0.893$) for relevance and ($t = -1.069$), ($p = 0.289$) for appeal to the target user respectively has no significant difference.

Conclusions

The significant difference between the acceptability of learning package in Araling Panlipunan with infographics in terms of parts as rated by the group of respondents which predicts not significantly in terms of content, visual and knowledge. This means that the perceptions of Teachers and IT are the same with regards to the content, visual and knowledge. Therefore, the null hypothesis is accepted.

The result of the analysis shows that acceptability of learning package in terms of Characteristics as Rated by the Group of Respondents respectively has no significant difference in terms of accuracy, relevance and appeal to the target user. There is significant difference between level of acceptability of learning package in terms of parts with regards to usefulness as rated by the group of

respondents. This means that there is a difference on the perception of Teachers and IT on using the material. Therefore, the null hypothesis is partially rejected.

Recommendations

In view of the findings and conclusions of the study, the following recommendations are given:

1. The learning package with infographics in Araling Panlipunan 9 is intended to be a supplemental learning material and can be introduced to the teacher to be used for teaching;
2. Learning package with infographics can be developed for another grade or another mark that can be used in teaching and learning;
3. The learning package can be a reference of the Grade 9 students in studying Araling Panlipunan;
4. Further investigation can be done in the future to improve more the present findings of the study.

References:

Adioma. (2018). How infographics can enhance business. 50-53.

Alyahya, D. (2019). Infographics as a Learning Tool in Higher Education: The Design Process and Perception of an Instructional Designer. *International Journal of Learning, Teaching and Educational Research* <https://doi.org/10.26803/ijlter.18.1.1>, 1-15.

Aremu, A., & Efuwape, B. (2013). A Microsoft Learning Content Development System (LCDS) Based Learning Package for Electrical and Electronics Technology-Issues on Acceptability and Usability in Nigeria, DOI:10.12691/education-1-2-2. *American Journal of Educational Research*, 2013, Vol. 1, No. 2,, 41-48.

Awi, Arsyad, N., Masrura, S. I., & Murtafiah. (2017). The Development of Learning Package Based on Metacognitive Strategies to Build the Students Character. *American Scientific Publisher*, 1-4.

Bach, B., Farinella, M., Riche, N., Rust, D., Wang, S., & Wang, Z. (2019). Comparing Effectiveness and Engagement of Data Comics and Infographics. *ACM Digital Library* DOI: <https://doi.org/10.1145/3290605.3300483>, 1-12.

Batini, C., Cabitza, F., Grosso, R., & Locoro, A. (2017). Static and interactive infographics in daily tasks: A value-in-use and quality of interaction user study. *Science Direct*, 240-257.

Bermingham, F., Blake, H., Johnson, G., & Tabner, A. (2020). Mitigating the Psychological Impact of COVID-19 on Healthcare Workers: A Digital Learning Package. *International Journal of Environmental Research and Public Health*, doi:10.3390/ijerph17092997, 1-15.

Braden, A. (2021, August 23). Webopedia. Retrieved from TechnologyAdvice: <https://www.webopedia.com/definitions/infographic/>

Bruce, M. E. (1971). Learning packages versus conventional methods of instruction . Iowa State University, 6-9.

Bystrova, T. (2020). Infographics As a Tool for Improving Effectiveness of Education” in Convention 2019. *KnE Social Sciences* DOI 10.18502/kss.v4i13.7710 , 152–158.

Capua, R. D. (2021). Ethnomathematical Practices Among Ifugao: Input To Learning Package In Plane And Solid Geometry <https://turcomat.org/index.php/turkbilmat/article/view/1702/1448>. *Turkish Journal of Computer and Mathematics Education*, 4113-4122.

Celik, E., Kaban, A., Yildirim, G., & Yildirim, Serkan. (2016). SHS Web Conferences, ERPA , 1 -9.

Copy Press. (2021). Retrieved from Google: <https://www.copypress.com/custom-design/infographic-design/>

Damyantov, I., & Tsankov, N. (2018). The Role of Infographics for the Development of Skills . *International Journal of Emerging Technologies in Learning (iJET)*, 13(01) <https://doi.org/10.3991/ijet.v13i01.7541>, 82–92.

Department of Education. (2017, April 24). Retrieved from depedpines.com: <https://depedpines.com/wp-content/uploads/2017/05/DepEd-Memo-82-2017-New-LRMDS-Rationalization.pdf>

DEPED. (2013). K to 12 Araling Panlipunan Gabay Pangkurikulum Disyembre 2013. Retrieved from https://docs.google.com/file/d/0B_TibwEltyeuckFIIdmU1dNidGs/edit?resourcekey=0-cWmGYL9jef7XFYne7v0hoQ

- Dueñas, A. N. (2021). Understanding gateway to medicine programmes, <https://doi.org/10.1111/tct.13368>. *The Clinical Teacher*, 558-564.
- Espiritu, J. A., & Ogerio, L. F. (2020). Resources, Practices and the Acceptability of Teacher-Made Learning Materials in Social Studies 9 (Economics). SSRN <http://dx.doi.org/10.2139/ssrn.3634204>, 1-18.
- Farley, A., & Moore, D. M. (1975). Utilizing Self-Instruction or Learning Packages: Teacher and Student Implications - <https://www.jstor.org/stable/44418313>. *Educational Technology Magazine*, 9-13. Retrieved from Utilizing Self-Instruction or Learning Packages: Teacher and Student Implications: <https://www.jstor.org/stable/44418313>
- Fauzi, M. (2017). The Use of Infographics as a Tool for Facilitating Learning. *Research Gate*, 2-6.
- Flemings Roland, M. D. (2012, June 14). The VARK Modalities. Chicago, Washington, United States of America. Retrieved from Google.com.
- Hendrick, C. (2014, September 22). Metacognition: An Overview, <https://learning.wellingtoncollege.org.uk/resources/metacognition-an-overview/>.
- Hernandez Jay, R. F. (2019). Information and Communication Technologies in Smes Mexican Companies . SSRN, 15-27.
- Inayati, R. H. (2018). The Analysis of the Difficulty in Learning Economics Subject Experienced By Students of Favored State Senior High Schools in City of Malang. *Knowledge E, Social Science*, 195-210.
- Infogram. (2021). Retrieved from Infogram.Com.
- Kim, C. (2018). An Interdisciplinary Approach to Understand Infographics. *Int J Journalism Mass Comm* 5: 133. , 1-3.
- Langer, J., Zeiler, M., & Zwinger, S. (2017). Acceptance and Usability of Interactive Infographics in Online Newspapers. 21st International Conference Information Visualisation DOI 10.1109/IV.2017.65, 176-181.
- Lawless, C. (2019, July 30). Applying Cognitive Learning Theory to Your Corporate Learning Strategy. Philadelphia, Pennsylvania, United States of America.
- Lazo, D. D., & de Guzman, M. D. (2021). Strategic Intervention Material: A Learning Approach in Teaching Economics during the Distance Education https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3861794. *International Journal of Computer Engineering in Research Trends*, 76-84.
- Mahmoud, N. F. (2015). The Effect of Self- Learning Package Versus Lecture Method on Students' Intended Learning Outcomes, DOI: 10.5829/idosi.wjns.2015.89.99. *World Journal of Nursing Sciences* 1 (3), 89-99.
- Meeks, G. (2016). *Creating a Culture of Learning*. Hamilton: Rowman & Littlefield Publishers.
- Milkova, S. (2022, June 2). Strategies for Effective Lesson Planning. An Arbor, Michigan, United States of America.
- Naderi, M. (2013). Effect of Designed Learning Package on Teaching: a Case Study. *International Journal of Bio-resource and Stress Management*, 655-657.
- Naparin, H., & Saad, A. (2017). INFOGRAPHICS IN EDUCATION: REVIEW ON INFOGRAPHIC DESIGN. *The International Journal of Multimedia & Its Applications (IJMA)* Vol.9, No.4/5/6.
- Narh, N. T., & Nantwi, W. K. (2022). ANIMATED INFOGRAPHICS AS A POTENTIAL TOOL IN VISUAL ART PEDAGOGY. *British Journal of Contemporary Education* DOI: 10.52589/BJCEZQIZRN0Y, 1-16.
- Noh, M., Fauzi, M., Jing, H., & Ilias, M. F. (2017). INFOGRAPHICS: TEACHING AND LEARNING TOOL. *Attarbawiy: Malaysian Online Journal of Education*, 58-63.
- Ozdal, H., & Ozdamli, F. (2017). The Effect of Infographics in Mobile Learning: Case Study in Primary School. *Journal of Universal Computer Science*, vol. 23, no. 12, 1257-1275.

- Pineda, C. S. (2020). Effectiveness of Validated Teaching-Learning Package in Projectile Motion for Grade 9 Science <https://www.jppipa.unram.ac.id/index.php/jossed/article/view/454/315>. *Journal of Science and Science Education (JoSSed)*, 26-29.
- Portana, H. V., Fronda, J. G., & Policarpio, D. T. (2021). Effectiveness and Acceptability of Instructional Materials in the Enhancement of Students' Academic Achievement. *International Journal of Advanced Engineering, Management*, 12-15.
- Provvidenza, C., Hartman, L. R., Carmichael, J., & Reed, N. (2019). Does a picture speak louder than words? The role of infographics as a concussion education strategy. *Journal of Visual Communication in Medicine*, DOI: 10.1080/17453054.2019.1599683, 1-12.
- Ramos, J. B. (2021). Development, Validation and Appreciation of Learning Package for Primary Learners, <http://pubs.sciepub.com/jitl/1/2/5>. *Journal of Innovations in Teaching and Learning*, 2021, Vol. 1, , 87-96.
- Sakshi. (2021). EFFECTIVENESS OF E-LEARNING PACKAGE IN THE DEVELOPMENT OF SCIENTIFIC CONCEPTS AMONG STUDENTS, DOI: <http://ijmer.in.doi./2021/10.10.105>. *International Journal of Multidisciplinary Educational Research*, 28-32.
- Sawangsri, B. (2016). Learning Package by Means of the Inductive Teaching with Group Process <https://files.eric.ed.gov/fulltext/EJ1092345.pdf>. *Universal Journal of Educational Research*, 618-621.
- Siricharoen, W. V., & Siricharoen, N. (2015). How Infographic should be evaluated? ICIT 2015 The 7th International Conference on Information Technology, 558-564.
- Taurista, K., Sari, M. S., & Rohman, F. (2017). Developing A Learning Package Covering A Topic On Cells And Tissues Based On Guided-Inquiry Model And Integration Of Local Knowledge. *Jurnal Pendidikan Sains* Vol. 5, Number 2, 32-37.
- Techopedia. (2013). Retrieved from Techopedia, Inc.: <https://www.techopedia.com/definition/27808/information-graphic-infographic>
- WebFx. (2021). Retrieved from WebFx, Inc: <https://www.webfx.com/content-marketing/services/infographics/>