# RAJAH'S QUEST: A GAMIFIED OFFLINE ASSESSMENT OF LEAST LEARNED COMPETENCY IN ENGLISH 8 IN THE POST-PANDEMIC PEDAGOGY

**ACTION RESEARCH** 

**CHRISTINE N. SOURIBIO** 

Teacher

February 2023

#### ABSTRACT

"Gamification is the process of using game thinking and game dynamics to engage audiences and solve problems", Zichermann (2011). The aim of this research is to facilitate the least-learned competencies in the English subject of students of Grade 8 in Tupi National High School for the academic year 2022-2023. With this, the researcher addressed the gap that had been created on the post-pandemic year through an assessment using a supplementary program which was later tested through a competency-based test (pre-test and post-test) evaluation for its effectivity. A gamified supplementary program was created and utilized by the students in Grade 8 SPED sections. To test the effectivity of the program, the researcher made an experiment with two sets of groups: control group (traditional teaching) and experimental group (traditional with GASP). After conducting the experiment for the supplementary program, a two-sample t-test was performed to compare the scores result between the students' competency-based test. The result of the control group; pretest  $\mu$ =25.74, which is interpreted as learned (see Appendix B), and post-test μ=33.32, interpreted as highly learned. While the experimental group pretest μ=29.74, also interpreted as learned, and post- test μ=50.93, which is interpreted as highly learned. Hence, the result shows that the mean of pretest in both groups showed that there is slight rise of level after the conduct of posttest in each group.

Keywords: gamification, offline assessment, digital learning

	TABLE OF CONTENTS	
CONTENT		PAGE
ABSTRACT		2
TABLE OF CONTENTS		3
	LIST OF FIGURES	
Figure 1. Conceptual Fi	ramework	13
	LIST OF TABLES	
Table 1. Paired Two Sar	nple for Pretest and Post Test	14
Table 2. Table of Correl	ation GASP Evaluation and	
Post test Result (Experi	mental)	14
	INTRODUCTION	
Context and Rationale		4
Research Questions		5
REV	IEW OF RELATED LITERATURE	
Related Studies		5
	ENTION & STRATEGY	9
AC	CTION RESEARCH METHODS	
Research Respondents		10
-		11
	nent	11
		13
R	ESULTS AND DISCUSSIONS	
Results and Discussion	.s	13
CONCLU	JSIONS AND RECOMMENDATIONS	
Conclusions		15
Recommendations		15
REFERENCES		17
	APPENDICES	
		0 :
	ata of Least Learned Competency	21
Appendix B. Learners'	Level of Achievement	22

#### **CONTEXT AND RATIONALE**

When the COVID-19 Pandemic arose, DepEd decided that LAMC should be tailored to a version that concentrates on the most essential learning competency (MELCs)-based curriculum. These are offered as the only resource for instruction and delivery of instructional strategy (DepEd, 2020). Although MELCs are provided for all schools, school division offices, and regional divisions, there are identified competencies in the curriculum considered least learned using the different modalities approach. However, Laguitao et al. (2021) underscore that there are least learned essential competencies (LLCs) in some subjects. For Migullas (2021), there are identified LLCs that must be given attention to and addressed by school stakeholders, especially the teachers.

In Tupi National High School (TNHS), teachers gathered information on the LLECs by identifying the lowest scores the students gained in every quarter. The data were gathered, and sadly, there were still no implemented programs to address the enhancement of these LLCs. Language teaching is teaching English as a subject and not a skill. Noviyenty (2018) explains that techniques in teaching language should circulate on the learners' cognition, metacognition, and social and affective aspects. Many strategies, like textbooks plus audio-visual and integration performance tasks (Manjula, 2018). Group activities like role-playing activities, group discussions, and games.

In identifying the LLCs by subject, the school surveyed the competencies with low scores in the performance tasks and summative tests. The data collected in creating the GASP was anchored with the identified LLCs in the English Quarter II school year 2021-2022 (see APPENDIX A).

The least learned essential learning competencies were identified from the MELCs through solving what grading and set of modules the students got the lowest performance standards and summative tests. Regardless of the learning modality used by the teachers, by subject/department, the data were consolidated, and a paper report was created.

In providing the GASP, the researcher created the mobile application containing the content of teaching the LLCs, identifying positive and negative messages conveyed in a text. This topic has two parts: positive and negative messages and transitional devices.

#### **Action Research Questions:**

- 1. What is the level of students' learned competencies in English 8 in the experimental and control groups in the competency-based test of LLC?
- 2. Is there any significant difference between the student's learned competency in English 8 in the experimental and control groups in the pretest and posttest?
- 3. Is there a significant relationship between the level of GASP evaluation and the student's learned competency in English 8 in the experimental group?

#### RELATED LITERATURE

#### **English Most Essential Learning Competencies**

On the verge of the COVID-19 Pandemic, the Department of Education produced a list of MELCs with the Bureau of Curriculum Development-Curriculum Standards Development Division (DepEd, 2021). Since the academic year has been shortened, it was made sure that the set criteria should be attained. These standards maintained the length of the learning process.

Additionally, the content of the English MELCs is composed of standards in each grade level. Each year level has these competencies to be achieved in one school year. It is simplified with corresponding code to monitor the accomplished learning competency. The MELCs is the shortened version of the K to 12 Curriculum. Still, it encompasses the macro skills needed for the learning development of the learners (DepEd, 2019).

These topics chosen to be taught in the following academic years emphasized the endurance of how it can be used to the next level of spiral progression. Without background knowledge, there is no progress. For Kashim, et al., (2017), their study on reading comprehension proved that without prior data, it results in unfamiliar vocabulary that causes the problem in learning. It means that their background knowledge affects the process of their language learning.

Moreover, additional studies on the improvement of the instructional materials to be used should be conducted that are anchored on the MELCs to improve the teaching of English subjects, especially now that the transition to post-pandemic era. For Ugwu (2015), the language teaching approach depends on

how it is applied in certain situations. As it turns out, many methods emerge from one mode to another to make the instruction effective.

The main focus of these competencies should consider the basic needs of the learners, DepEd (2020). Even though this contingency plan was implemented, it does not guarantee that the learning achievement was maintained. As a result, some studies proposed strategies for applying skill-based activities on the MELCs provided by the Department of Education. For instance, Lumanog (2021) stresses that the trend in the 21<sup>st</sup> century, skill-based training, should be incorporated into the teaching-learning environment. Her data showed an improvement in the performance of the grade 9 students in the posttest utilizing the skill-based program to achieve the required standard in the curriculum.

## Language Teaching during the COVID-19

When the outbreak emerged, the school system of the entire country was remodeled. Some international schools immediately implemented remote distance learning (online class, modular, tv, and radio-based instruction). Hancock (2021) explains that a transition to remote, distant teaching started with pedagogical training in online classes.

Also, Kamal (2021) underscores that distance learning has higher effectiveness results than traditional learning. It is because the learners are at home, and the teachers are not around to monitor their learning habits in performing their tasks.

However, in other countries, Guiamalon et al. (2021) indicate that a modular learning modality is the most commonly used in their region. The researchers recommended that even though teachers are prepared enough in technical elements, teachers should formulate a suitable plan and continue to implement sufficient strategies to meet the demands of new normal education.

Thus, continuous development of materials should be highly supported and encouraged. According to Flores (2022), there should be interdisciplinary learning, in which language connection is linked with literacy across the curriculum. Educators need to be aware that the objectives to be attained are compatible with the level of the learners' needs, keeping in mind that the differentiated strategies are anchored in the curriculum.

Moreover, there is a tool called Strategic Intervention Material in the conducted study by Maribay (2022), which showed how these types of programs helped in the remarkable increase of performance level in the identified least mastered competencies in English subject of grade 10 students. As a result, it came up that this type of instructional design is effective in the modality of distance learning which is being used during this time of Pandemic.

Furthermore, the innovation in using technology in the teaching and learning process resulted in enhanced vocabulary learning. For Muhammad et al. (2017), the immersion of mobile applications gave better results and has provided them with development in the learning process. Referring to this kind of approach, learners learn more when it involves the utilization of gadgets.

Hazaea and Alzubi (2016) also attest that employing mobile phone features significantly enhanced learners' text-analysis habits. There should be a study on how mobile application features should be thoroughly examined. More studies should be conducted in the Philippine context to intensify the shift from traditional to a more contemporary teaching style.

#### E-learning

E-learning is known as computer-assisted learning, which is very timely in this generation, where almost everybody uses technology. That is proved by the study conducted by Chitra (2018), where the activities are considered student-centered and collaborative learning. Digitally, students are skillful, and this makes them globally competitive. Even though this strategy is new, the learners can easily adapt to this new learning environment.

One of the instructional designs that can be used nowadays is the utilization of e-learning in education. Goyal (2012) highlighted the significance of e-learning and did not isolate the probability of it replacing the traditional teaching-learning process. There are pros and cons to using e-learning in education. However, it creates a big deal of making life easy for learners in studying. This e-learning may replace books like touch screen tablets, mobile phones, or portable laptops.

# Gamification and Game-based Learning

In an educational context, gamification introduces an interesting way of learning. It boosts the learners' focus since they are now hooked to the idea that in playing games, one must win. Arnold (2015) stresses that gamification creates engagement models where one may discover goals, he/she does not know they already have. A person's sense of satisfaction when he/she has done the tasks pushes them more to go on with their objective.

The use of game-based elements in the content of teaching and learning process in education has been utilized since this generation was considered the digital age. This conclusion was justified by Wood (2015), wherein gamification is the new and innovative way to engage the learners in fun and enjoy learning the set objectives.

Moreover, Plass (2015) concluded that to properly understand what games have to offer for learning, game design and game research require a combination of cognitive, motivational, affective, and sociocultural approaches. The gamebased instructional design should be made not only for fun but also for a memorable learning outcome.

Conclusively, Nazarova (2016) states that using game-based learning improves students' emotional and personal lives and accelerates language learning, with the primary objectives of self-realization and knowledge advancement in the area of the English language. This modification in the teaching strategy is due to the modernization of teaching language and the expansion of educational technologies. One of the considered strategies is the use of old game-based activities.

The studies mentioned above focused on finding the connection between the student's learning achievement during the Pandemic and how it can be used to create a supplementary learning program during the transition of the postpandemic academic year. When the Pandemic started, the curriculum was also specified. There were remote distance learning modes like the online class, access to tv and radio-based instruction, and modular distant learning, even though these modalities vary on the learning environment and areas.

Based on the discussed literature above, online classes encountered problems with connection on wireless fidelity and mobile data connection since there are remote areas without signal towers. It is the same as tv and radio broadcasting in locations without electricity, so the only way they can learn is through modular distance learning. Those learners who have both situations fail to use modules to learn their lessons. The problem arises when they have no

resources to assist them in answering. Through a compilation of this related literature, the researcher came up with the idea that learners should have an interactive way of learning even if they are not being monitored every time. Electronic learning was adapted, and the concept of gamification and game-based mobile application was constructed to produce a supplementary program.

## Assessment through E-learning

With the different strategies in evaluating the students' performance, Rizvi (2021), in his study caused the students' assessment in digital learning does not only focuses on the learning itself but also the engagement and motivation it offers. This was seconded by Keremedchiev (2020), one of the most recent techniques to enhance conventional evaluation is through gamification, the use of game design and components in contexts other than gaming. Modern e-learning systems offer a variety of options for students to use in their final and self-assessment processes. In this study, we provide a grading method that consists of a final test and a self-evaluation.

#### INNOVATION, INTERVENTION AND STRATEGY

Through the existing least-learned competency, the researcher developed a gamified supplementary program that served as a tool for aiding the learning process of the students. Since the Tupi NHS was opted to have face-to-face class immediately after the near end of the pandemic, there have been changes in the learning development of the students, this has been emphasized in the study made by Flores (2022). Consequently, the researcher influenced by the study, "Gamification as transformative assessment" Oliver (2017), decided to create a learning material where students can move on to the new-normal without leaving behind the digital life that they have been through during the pandemic era. This app is self-maneuvered that can be basically used by students with android phones. With this, students would be inspired by learning through gaining points that makes them satisfy every time they win.

The content of the Rajah's Quest is composed of stages (*Kurita, Pah, Tarabusaw, and Seven Headed Monter*) wherein the students are free to explore the offline adventure game. There are three levels where each level they are going to answer sets of question, each correct answer is equivalent to points that can

help them move to the next level. The scores of the students in each level is reflected after every end of the level, it shows how many correct answers the students earned out of total given number of questions. Since not all the students can afford to have online data, the game was crafted to be used off-line mode. With this, students will not have their excuses on checking up the game from time to time.

Traditional teaching is used in both control and experimental group; however, for three (3) months span of time the experimental group was given with a gamified supplementary program to assist the teaching-learning process for the entire quarter. This is to test whether the intervening material contributes to acquiring the least learned competency.

#### **ACTION RESEARCH METHODS**

This study employed the True Experimental Research Design (TERD). The control and experimental groups undergone the pretest and posttest methods. Respondents came from intact classes, reducing the time and resources required for pre-screening and randomization while offering a more realistic and natural setting to capture the children's biliteracy development (Mackey & Gass, 2016).

The TERD included the descriptive validation of the GASP application and pretest and posttest questionnaire from the content validators. It also has the result of the experimentation of the GASP. As expected, it disclosed the significant difference between the control and experimental groups and the learning achievement of the study respondents.

# Respondents of the Study

One hundred (100) Grade 8 students of Tupi National High School served as respondents. These learners came from two (2) sections of Grade 8 year level, with fifty (50) students in each section. These sections are the two (2) sections of the SPED classes who are attending the face-to-face class in the academic year 2022-2023. Since it involved testing of the GASP, more or less a homogenous group of students are selected. These selected respondents are categorized based on their grades, performance, and their competence to maintain their grades with no grades below 80 in their subjects and not lower than 89 for their general average.

The respondents were randomly divided into two (2) groups of fifty (50) students: experimental and control groups. The experimental group were taught using GASP. In contrast, the control group were taught using conventional methods without the mobile game application to recognize positive and negative messages conveyed in a text.

Moreover, the validity of research tools was tested and thoroughly examined in this study. Therefore, there were five (5) content validators that validated/evaluated these instruments. As a requirement, these validators have valid credentials such as Master's Degree Graduate, major in English, Master Teacher, and an IT Specialist or Programmer. The first three (3) validators evaluated the GASP's content, engagement, functionality, aesthetics, and instructional quality. The other two (2) validators evaluated the pretest and posttest questionnaire and an IT Specialist or Programmer for the GASP technicalities.

# Sampling Techniques

The study respondents were one hundred (100) Grade 8 students. The students were initially identified to have the least learned competencies (LLCs) in English. These students have more or less homogenous characteristics regarding their grades, interest, and overall academic performance.

Respondents from the two sections of Grade 8 were randomly identified through a lottery method. Hence, 50 students were assigned to the experimental group and another 50 to the control group.

# **Data Gathering Instrument**

The research instruments that collected substantive data for this study were prepared with three (3) sets: GASP, Validation Instrument, and the Competency-based Test.

The researcher gathered the existing data for the school year 2021-2022. The school determined the least mastered competency each quarter by identifying the least learned competency that made way for crafting the GASP as a supplementary program. The material used is designed to help the students engage in answering their performance activity and parallel test.

The first instrument is the GASP application, which was anchored to the identified least mastered essential learning competency that also stores and

interprets the scores and results of the fun activities. The game application will include the lesson proper, learning competency code, performance tasks, activities, rubrics, reflection, and references.

Before creating this game application, the K to 12 MELCs were examined and reviewed only to focus on the least mastered essential competency. This game application is self-assisted, which comes with its manual, so the students learn at their own pace. Therefore, this game application was made to be user-friendly and easy to operate. Moreover, this GASP's content includes the LLCs, recognizing positive and negative messages conveyed in a text. This topic is composed of signal words and transitional devices.

Second, the researcher created a 50-item multiple-choice exam as a competency-based questionnaire, which was used to assess the level of learned competency of the experimental and control group. This pretest and post-test questionnaire were validated before it was used in the experiment. The Validation Rubric for Experiment Panel (VREP) by Simon (2016), was used to evaluate the questionnaire.

Lastly, the Mobile Application Rating Scale (MARS) was used to regulate the validity of the game application. Its content is based on engagement, functionality, aesthetics, and instructional quality. The researcher adapted the mobile validation and evaluation scale from the study of Stoyanov (2015) and was checked by credible evaluators in the field.

The dimensions are (a) engagement (8 items that includes the extent of involvement in the GASP which measures the fun, interest, interaction, and customization as well as its layout that is well-targeted to audience.), (b) functionality (7 items: the function of the app is easy to learn, navigate, and operate. The flow logic, and gestural design of game application is learner friendly), (c) aesthetics (6 items: the game app's graphic design, overall visual appeal, colour scheme, and stylistic consistency) and (d) instructional quality (10 items: the quality of the content and information included in the GASP that contributes to the learning achievement of the students).

#### CONCEPTUAL FRAMEWORK

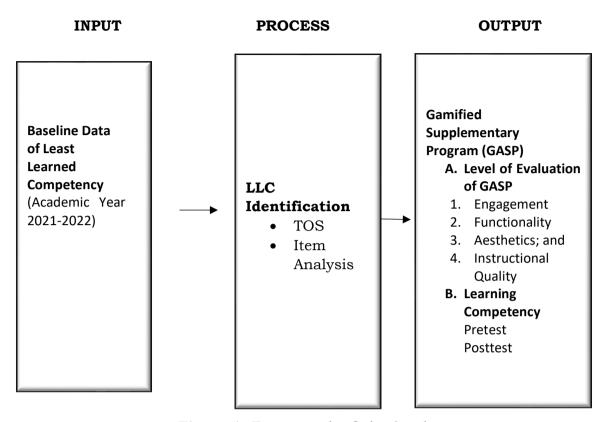


Figure 1. Framework of the Study

Figure 1 shows the conceptual framework for this study following a methodical approach of data collection, analysis, and supplementary assessment program planning. It includes gathering the data of the least learned essential competency, analyzing the data gathered, reviewing learning resources, crafting the GASP, and assessing the level of students' achievement. Suppose the investigation came across restricted resources of information and references. In that case, modifications must be made by returning to the beginning data as the baseline. Before the GASP has been used, it undergone pilot testing to approve its validity and reliability.

Additionally, the validation of results of the dependent variable taken from the supplementary program was measured by the data gathered through the pretest and posttest evaluation.

#### RESULTS AND DISCUSSION

To find out the result on the level of achievement of the control and experimental group the two-sample t-test was used.

Table 1
Paired Two Sample for Pretest and Post Test

t-Test: Paired Two Sample for Pretest and Post Test				
	Controlled Group		Experimental Group	
	Pretest	Posttest	Pretest	Posttest
Mean	25.74	33.32	29.74	36.84
Variance	29.95	37.12	50.93	31.93
P(T<=t) two-tail	0.00		0.00	

The table shows result of the control group; pretest  $\mu$ =25.74, which is interpreted as learned (see Appendix B), and post-test  $\mu$ =33.32, interpreted as highly learned. While the experimental group pretest  $\mu$ =29.74, also interpreted as learned, and post- test  $\mu$ =50.93, which is interpreted as highly learned. Hence, the result shows that the mean of pretest in both groups showed that there is slight rise of level after the conduct of posttest in each group. There is 8-point increase in the pretest to posttest of the control group, while 7-point increase in the experimental group.

The controlled group's pretest got  $\sigma^2$ =29.95, and the post test  $\sigma^2$ =37.12, which means the distance between the score of the students changed and increased, while the experimental group's pretest  $\sigma^2$ =50.93 and post test  $\sigma^2$ =31.93 where the distance of the scores decreased. Therefore, the result of the variance in the controlled and experimental group differs as the score got more comparable on the post test result of the experimental.

Since the p-value<0.05 of the mean difference of the pretest and post-test of the control and experimental group is 0.0, it is implied that there is a significant difference between the result of the two groups.

Table 2

Table of Correlation

GASP Evaluation and Post test Result (Experimental)

	GASP EVALUATION	EXPERIMENTAL POST TEST
Column 1	1	
Column 2	0.1681013	1

The result of the correlation between the GASP Evaluation and Post Test of the experimental group is r=0.1681013 which means very weak to no relationship. It means the evaluation of the GASP does not affect the result of the post test in the experimental group.

# REFLECTION, CONCLUSION RECOMMENDATIONS

The result of the study proved that the use of GASP in English 8 subject highly affects the academic performance of the students, however, further studies are needed to improve this implication in education. The outcome of the study produced higher performance average on the competency-based test of the students. Thus, it would be a good proposal that other curriculum levels should also have a digitized program to easily assess students' learning, especially in the post-pandemic era.

This study presents a gamified supplemental program that provides digital aid to students in coping with the LLCs, as well assess their learning. It is apparent that the use of this supplemental tool help students got more engaged in the topic, learners became more enthusiastic to finish the game in time and collect many points as they can while using the application. However, the need to have a gadget before the tool can be used is a big hindrance to the utilization of the game. The use of gamification in the teaching and learning process contributed a big help to learners, especially that the addition of games boosts their extrinsic motivation to learn.

During the utilization of the game, it encountered bugs that made its functionality unsteady, the application needed to be restarted to be refreshed so it would run again smoothly. If the game application had been well-developed, modified and enhanced, it could be used as a learning tool for schools, since the result of the study favored on the positive effect to the students' performance in academics. If there is enough funding for this gamified learning material, many schools would benefit much on the program.

The researcher admits the imperfections of the GASP especially in the compatibility of the supplementary application program to other units of android phones. Some of the animations were not executed properly and other in other phones the game did not play at all. However, it is with huge advancement on the assessment part since it shows scores of the students during the entire time, they are playing the app.

In conclusion, the app made a progress to the result of the competency-based test conducted on the entire process of using the gamified supplementary program. The assessment of the students' learned competency was easily measured through the use of the gamified supplementary app. Students with habit of using their gadgets can easily use the app since it is in off-line mode and can help them recognize the lesson through their experience motivated by extrinsic impulse.

#### REFERENCES

- Acosta-Medina, J. K., Torres-Barreto, M. L., & Alvarez-Melgarejo, M. (2020). Literature mapping about gamification in the teaching and learning processes. *Revista Espacios*, 41(11). https://revistaespacios.com/a20v41n11/20411126.html
- Al-Azawi, R., Al-Faliti, F., & Al-Blushi, M. (2016). Educational gamification vs. game based learning: Comparative study. *International journal of innovation, management and technology*, 7(4), 132-136. http://www.ijimt.org/vol7/659-CM932.pdf
- Arnold, Brian. (2015). Gamification in Education. https://www.researchgate.net/publication/295401531\_Gamification\_in\_ Education
- Baulo, Janisah & Nabua, Edna. (2019). Behaviourism: its Implication to Education.

  https://www.researchgate.net/publication/338158642\_BEHAVIOURISM
  \_ITS\_IMPLICATION\_TO\_EDUCATION
- Chitra, A. & Raj, M.. (2018). E-Learning. Journal of Applied and Advanced Research. 3. 11. 10.21839/jaar.2018.v3iS1.158. https://updatepublishing.com/journal/index.php/jaar/article/view/6783
- Department of Education (2016). K to 12 Basic Curriculum. K to 12 English Curriculum Guide. https://www.deped.gov.ph/wp-content/uploads/2019/01/English-CG.pdf
- Goyal, Sumit. (2012). E-Learning: Future of Education. *Journal of Education and Learning (EduLearn)*. 6. 239. 10.11591/edulearn.v6i4.168. https://www.researchgate.net/publication/287545379\_E-Learning\_Future\_of\_Education
- Guiamalon, Tarhata & Alon, Sittie & Camsa, Sofia. (2021). Teachers Issues and Concerns on The Use of Modular Learning Modality. 10.46529/socioint.202115. https://www.researchgate.net/publication/352414719
- Hancock, A., Hancock, J. & Terlecka, M. (2021) The Impact on Teaching and Learning Community Languages in Scotland During the COVID-19 Pandemic. Edinburgh: CERES/University of Edinburgh
- Hazaea, A. N., & Alzubi, A. A. (2016). The Effectiveness of Using Mobile on EFL Learners' Reading Practices in Najran University. English Language Teaching, 9, 8-21. https://doi.org/10.5539/elt.v9n5p8
- Healey, Mick & Jenkins, Alan. (2000). Kolb's Experiential Learning Theory and Its Application in Geography in Higher Education. *Journal of Geography*. 99. 185-195. 10.1080/00221340008978967.
- Ishaq, K., Zin, N. A. M., Rosdi, F., Jehanghir, M., Ishaq, S., & Abid, A. (2021). Mobile-assisted and gamification-based language learning: a systematic

- literature review. *PeerJ Computer Science*, 7, e496. https://peerj.com/articles/cs-496/
- Kalogiannakis, M., Papadakis, S., & Zourmpakis, A. I. (2021). Gamification in science education. A systematic review of the literature. *Education Sciences*, 11(1), 22. https://www.mdpi.com/2227-7102/11/1/22/pdf
- Kamal, M.I., Zubanova, S., Isaeva, A. *et al.* Distance Learning Impact on the English Language Teaching During COVID-19. *Educ Inf Technol.* 26, 7307–7319 (2021). https://doi.org/10.1007/s10639-021-10588-y
- Kashim, U., Raisha, S., (2017). EFL Students' Reading Comprehension Problems: Linguistic and Non-Linguistic Complexities. *English Education Journal (EEJ)*, 8(3), 308-321. https://core.ac.uk/download/pdf/291614046.pdf
- Keremedchiev, Delyan & Borissova, Daniela & Tuparov, G. (2020). An Algorithm for Assessment of Students Using Gamification. 636-640. 10.23919/MIPRO48935.2020.9245291.
- Khakpour, A., & Colomo-Palacios, R. (2021). Convergence of gamification and machine learning: a systematic literature review. *Technology, Knowledge and Learning*, 26(3), 597-636. https://link.springer.com/article/10.1007/s10758-020-09456-4
- Kolb, Alice & Kolb, David. (2012). *Experiential Learning Theory*. DOI: 10.1007/978-1-4419-1428-6 227.
- Laguitao, JDS., Cubalit, BFA., Teppang, RAJO., dela Cruz, MAR., & Bautista, RG. (2021). Surviving, Adapting, and Passing: The Educational Experiences of CoViD Babies in Their Tertiary Education. *American Journal of Educational Research*. 2022, Vol. 10 No. 3, 135-140. doi: 10.12691/education-10-3-4
- Landers, Richard. (2015). Developing a Theory of Gamified Learning. Simulation & Samp Gaming. 10.1177/1046878114563660.
- Legaki, Z., & Hamari, J. (2020). Gamification in statistics education: A literature review. http://ceur-ws.org/Vol-2637/paper5.pdf
- Lumanog, Ailene & Medrano, Myrna. (2021). Enhancing Most Essential Learning Competency (Melc) in English 9 Using The Skills-Based Learning Material. *International Journal of Theory and Application in Elementary and Secondary School Education*. 3. 51-60. 10.31098/ijtaese.v3i2.631.
- Mackey, A., Gass, M. Second Language Research: Methodology and Design (Second Edition) https://doi.org/10.4324/9781315750606
- Madrunio, M. R., Martin, I. P., & Plata, S. M. (2016). English Language Education in the Philippines: Policies, Problems, and Prospects. In R. Kirkpatrick (Ed.), *English Language Education Policy in Asia* (pp. 245-264). Berlin: Springer.

- Manjula, R. (2018). Teaching English Language: Principles & Practices. *Journal Of Emerging Technologies and Innovative Research*. https://www.semanticscholar.org/paper/TEACHING-ENGLISH-LANGUAGE%3A-PRINCIPLES-%26-PRACTICES-Manjula/6a319b87bf3e6a6ace23291785a0be73b75a1f2e
- Maribbay, J. (2022). Project SOLE: Sharpening Of the least mastered skills in Learning English through SIM-Based learning activities. *International Journal of Arts, Sciences and Education*, 3(1), 26–33. Retrieved from https://www.ijase.org/index.php/ijase/article/view/89
- Martí-Parreño, J., Seguí-Mas, D., & Seguí-Mas, E. (2016). Teachers' attitude towards and actual use of gamification. *Procedia-Social and Behavioral Sciences*, 228, 682-688. https://www.sciencedirect.com/science/article/pii/S1877042816310308/pdf?
- Migullas, M. (2021) Grade 4 Least Learned Competencies Quarter 1. https://www.academia.edu/35868412/GRADE\_4\_LEAST\_LEARNED\_CO MPETENCIES\_Q
- Mora-Flores E, Kaplan SN. Interdisciplinary Learning: Connecting Language and Literacy Across the Curriculum. *Gifted Child Today*. 2022;45(2):110-112. https://doi:10.1177/10762175211070
- Muhammad Shahbaz, & Raja Muhammad Ishtiaq Khan. (2017). Use of Mobile Immersion in Foreign Language Teaching to Enhance Target Language Vocabulary Learning. *MIER Journal of Educational Studies Trends and Practices*, 7(1), 66–82. https://doi.org/10.52634/mier/2017/v7/i1/1448
- Nah, F. F. H., Zeng, Q., Telaprolu, V. R., Ayyappa, A. P., & Eschenbrenner, B. (2014, June). Gamification of education: a review of literature. In *International conference on hci in business* (pp. 401-409). Springer, Cham. https://link.springer.com/content/pdf/10.1007/978-3-319-07293-7\_39.pdf
- Nazarova, Mariya & Galiullina, E.. (2016). Game-based Learning in Teaching English. *Journal of Organizational Culture, Communications and Conflict.* 20. 8-12. https://www.researchgate.net/publication/316886105\_Game-based\_learning\_in\_teaching\_English
- Noviyanty, Leffi. (2018). Strategies in Learning and Techniques in Teaching English Speaking. English Franca: Academic Journal of English Language and Education. 2. 35. 10.29240/ef.v2i1.454. http://journal.iaincurup.ac.id/index.php/english/article/view/454
- Plass, J., Homer, B., Kinzer, C. (2015) Foundations of Game-Based Learning. *Educational Psychologist*, 50(4), 258–283, DOI: 10.1080/00461520.2015.1122533
- Rizvi, Nusrat. (2021). Assessments through gamification
- Saleem, A. N., Noori, N. M., & Ozdamli, F. (2021). Gamification applications in Elearning: A literature review. *Technology, Knowledge and Learning*, 1-21.

- https://www.researchgate.net/profile/Narmin-Noori/publication/348161943
- Silva, R. J. R. D., Rodrigues, R. G., & Leal, C. T. P. (2019). Gamification in management education: A systematic literature review. *BAR-Brazilian Administration Review*, 16. https://www.researchgate.net/profile/Rui-Silva-44/publication/346915875
- Stoyanov SR, Hides L, Kavanagh DJ, Zelenko O, Tjondronegoro D, Mani M. Mobile app rating scale: a new tool for assessing the quality of health mobile apps. JMIR Mhealth Uhealth. 2015 Mar 11;3(1):e27. doi: 10.2196/mhealth.3422. PMID: 25760773; PMCID: PMC4376132.
- Ugwu, Ifeanyi. (2015). Language Teaching Methods: A Conceptual Approach. 9. 20-34. https://www.researchgate.net/publication/342923617
- Wood, Lincoln & Reiners, Torsten. (2015). Gamification. 10.4018/978-1-4666-5888-2.ch297. https://www.researchgate.net/publication/265337179\_Gamification
- Yildirim, I. (2017). The effects of gamification-based teaching practices on student achievement and students' attitudes toward lessons. *The Internet and Higher Education*, 33, 86-92. http://www.bwgriffin.com/gsu/courses/edur7130/2018spr-chats/07-2017-Yildirim-gamification.pdf

# Appendix A: Baseline Data (Least Learned Competency)



Republic of the Philippines
Department of Education
REGION XII-SOCCSKSARGEN
SCHOOLS DIVISION OF SOUTH COTABATO
TUPI NATIONAL HIGH SCHOOL
Poblacion, Tupi, South Cotabato

# LEAST LEARNED ESSENTIAL COMPETENCY IN GRADE 8 LEVEL

## S.Y. 2021-2022

# **TUPI 1 DISTRICT**

	Quarter II	
ENGLISH	Competency Code	Least Learned Competency
	ENSS8-III-1.6.6	Recognize Positive and Negative Messages Conveyed in a Text

Prepared by:

## ALMA C. MANCHURES

English Department Head

Noted by:

STEPHEN S. SALAZAR

Principal IV

# Appendix B: Learners Level of Achievement

Table 3: Learners Level of Achievement in Competency-based Test

MEAN	INTERPRETATION
41-50	Excellently Learned
31-40	Highly Learned
21-30	Learned
11-20	Fairly Learned
0-10	Poorly Learned