DEVELOPMENT AND VALIDATION OF INTERACTIVE VIDEO LESSON IN ENGLISH FOR GRADE 4 PUPILS

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Abstract

The study is about developing and validating an interactive video lesson to make English teaching and learning more engaging and exciting. The study was conducted at Balangasan Central Elementary School during the third quarter of School Year 2022-2023. The lesson plan was crafted and has undergone validation and evaluation. An interactive video lesson was created using the Lumi app. It is an open-source video editor utilizing the h5p tool to create an interactive interface that can be applied to a video. Various interactive quizzes were done. The interactive video lesson was submitted to the panel of experts for validation and thorough evaluation. The panel of experts gave comments and suggestions for improving the material. Feedback from the pupil-end user was also gathered. The result shows that the material passed the educational soundness evaluation and is compliant with all the factors, such as integrity, learners' focus, usability, and accessibility. The overall Educational Quality of the Interactive video lesson is very satisfactory. It shows compliance with content quality, instructional quality, technical quality, and other findings. The dominance of technical quality's mean score suggested that the interactive video lesson has established superiority because of its interactive features. The pupils' feedback was grouped into three parts: (1) navigation and function, (2) format and layout, and (3) overall features. The pupils' responses varied since they had thoughts and feelings about their encounters with the interactive video lesson. Still, their overall feedback was overwhelmingly positive, as they had a fascinating and engaging experience.

Keywords: Development and Validation; Interactive Video Lesson

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Yayang, Yael, and Bethuel

Context and Rationale

The upshot of the pandemic, which allowed learners to have distance learning modality for two years, increased learners' engagement with videos, games, and web-based interactive media software that are readily available on their gadgets. This resulted in a decrease in the pupils' attraction to the pedagogical approaches in teaching English subjects. Pupils' minds are preoccupied with various social media platforms, which results in less interest in learning English. Hasheenla and Smith (2021) agree on claims that pupils' increase in the use of technology during the pandemic resulted in a loss of interest in traditional teaching methods. Their study highlighted the need for educators to incorporate technology in teaching to maintain pupils' engagement and interest. Azhar et al. (2021) support this claim because they found in their study that the shift to online learning throughout the pandemic caused a decrease in pupils' motivation, engagement, and interest in education; hence teachers need to be more creative in their delivery of content and use a variety of teaching methods to keep pupils' engagement and interest in learning.

Finding a way to bring back the pupils' attention to learning English is the primary goal of every English teacher today. The use of interactive video is becoming more popular due to ongoing developments in mobile and multimedia technology in educational settings (Yorganci 2022). Computers and the internet have a better way of delivering instruction to learners, thus increasing the English achievement of pupils. Moreover, multimedia-rich learning settings influence participants' engagement in addition to providing them with a unique learning experience (Barut and Dursun 2022). When multimedia resources are used in learning activities, people display several sorts of employment, primarily cognitive, behavioral, and emotional domains (Lin and Li 2018, 55). User-friendly video editing tools are already available for teachers' use and application in the educational process. Indeed, by utilizing this Android-based video platform as a tool, learners could realize that their Android mobile devices are not only for gaming purposes but a tool for learning English as well. This will bring back their interest in learning, thus increasing their engagement and performance in English. Pupils can effectively learn and succeed without dramatically increasing their workload (Wilson et al. 2021). A better learning environment would create an atmosphere that could carry out participation and engagement with the learners (Kiat et al. 2020, 3625-3629).

Interactive videos have become an increasingly popular tool in teaching and learning, providing an engaging and immersive way to deliver information and capture the viewer's attention. Unlike traditional passive videos, interactive videos allow learners to engage with the content by interacting with the video itself.

In interactive videos, viewers can click on links, answer questions, and make choices that affect the direction of the video. This engagement level helps learners retain information better and stay more focused on the content. Interactive videos can also imitate real-world situations, allowing students to hone their knowledge and skills in a secure and controlled setting.

The benefits of interactive videos in teaching and learning are numerous. They can help learners to boost motivation and engagement, problem-solving skills, and critical thinking development. Interactive videos also offer a more personalized learning experience, permitting learners to move at their own pace and choose the content that is most relevant to their needs.

Interactive video lessons can provide learners with more opportunities to engage with the content and promote deeper learning. On the other hand, interactive

multimedia may not always enhance pupils' learning, and that careful consideration of the design and implementation is necessary to realize their benefits (Dwyer et al. 2007). This was supported by the study of Tsai (2014), which showed that while the pupils found the interactive video engaging and entertaining, there was no significant difference in their learning performance compared to traditional instruction. The study further suggests that interactive video may not necessarily lead to better learning outcomes.

Balangasan Central Elementary School is in the heart of Pagadian City, where most of the enrolled pupils come from middle-class families and upper class who can afford to buy Android devices like cell phones and tablets. This has become the integral focus of most researchers today in the locality since this trend significantly affects the academic performance of most elementary pupils, especially in Grade 4 English. Furthermore, Elementary English teachers attest that the outcome of the standard classroom chalk-and-talk method in handling Grade IV English concepts is less effective in the learners' minds, as revealed from their quiz results.

Innovation, Intervention, and Strategy

An interactive video lesson and lesson plan that has undergone validation is the output and will be the innovation of this study.

This innovation will allow pupils to experience interaction with the video lesson by manipulating the video player like a laptop, desktop, android cellular phone and tablet, and other gadgets capable of playing videos. The pupils will be able to watch and learn from the video. They can input their answers that are provided with instant feedback. It allows them to have their own pace in answering the questions because the video will not continue if they will not click continue after being automatically paused for the interactive questions. They can also try again if they get the wrong answer. At the end of the interactive video, a summary of their points will be displayed, which they can send to their teacher for recording by mail or send pictures on platforms available to them.

These are the components of the interactive video lesson:

Table 1: Parts of the Interactive Video Lesson

Parts of the Interactive Video Lesson	Description
Preliminaries	Greetings of the teacher to the pupils. Informing them of what the interactive video lesson is all about.
Review	Review of the previous lesson. A lesson prior to the current lesson will be discussed briefly. An interactive interface on multiple choice is embedded here. The interactive video will automatically pause to give way to the interactive interface, allowing pupils to choose their correct answer. They can also check if their answer is correct. They will earn the corresponding point.
Introduction	The teacher will introduce the topic to be discussed.
Interactive Activities	An interface where pupils will answer questions like filling in the blanks and drag and drop activities.

Interactive Assessments	An interface where pupils will fill in the blanks to answer the assessment.

In addition to being interactive, an energetic and lively teacher teaches the lesson in an interactive video that will give the pupils an exciting experience.

This innovation sought to determine the developed interactive video lesson's validity level in terms of content quality; instructional quality; technical quality; accuracy; and up-to-datedness. It will also gather feedback from the Grade 4 pupils' experience manipulating the interactive video lesson in terms of (1) navigation and function, (2) format and layout, and (3) overall features.

The researchers firmly believe that developing and validating this interactive video lesson will increase pupils' attitudes and engagement in learning English, as Yildiz and Arslan (2020) claimed that integrating an interactive video lesson in English will create a more engaging environment that could increase learners' interest in learning. Furthermore, incorporating interactive video lessons significantly affected the pupils' motivation, engagement, and participation in the learning process (Kirkgoz and Bas 2020). Hence, Interactive video lessons provide a more engaging and interactive learning experience, which can lead to improved learning outcomes.

The interactive video lesson was developed based on the essential learning competencies the Department of Education identified in the third quarter. This interactive video lesson underwent a series of validation by the learning resource evaluators of the school's division office under the Learning Resources Management and Development System (LRMDS) to ensure the validity and reliability of the Interactive video lesson based on the criteria identified by the Regional Office of Department of Education in Region IX.

Action Research Questions

This study seeks to develop and validate an Interactive Video Lesson in English for SY 2022-2023 at Balangasan Central Elementary School. Specifically, it aims to answer the following questions:

1. What is the extent of educational soundness of the developed Interactive video lesson in English for grade 4 pupils in terms of:
    - 1.1 Integrity;
    - 1.2 Learner Focus;
    - 1.3 Usability; and
    - 1.4 Accessibility?
2. What is the level of educational quality of the developed Interactive video lesson in English for grade 4 pupils in terms of:
    - 2.1 Content Quality;
    - 2.2 Instructional Quality;
    - 2.3 Technical Quality; and
    - 2.4 Accuracy and Up-to-datedness?
3. What are the comments and suggestions of the teacher expert validators to improve the developed interactive video lesson in English for grade 4 pupils?
4. What is the feedback of the pupils in the developed interactive video lesson in terms of:
    - 4.1 Navigation and Function;

4.2 Format and Layout, and;
4.3 Overall Features?

5. What enhanced Interactive video lesson can be developed?

Action Research Methods

Research Design

This study utilized a Research and Development (R&D) design that focuses on creating, planning, generating new knowledge, and developing innovative solutions to address specific challenges or opportunities. The goal of developing and validating an Interactive video lesson in English in this study is to create valuable innovation that drives progress and improvement in the teaching and learning process. Hence, Research and Development (R&D) design is appropriate for this study as it encompasses a systematic and strategic approach to educational research and formulating innovative solutions to addressing practical problems in education (Gustiani 2019).

Participants and Other Sources of Data and Information

The study was conducted in Balangasan Central Elementary School, Pagadian City, during the Third quarter of the school year 2022-2023. Participants include four expert validators; and 11 end-user pupil validators. The expert validators are from the pool of evaluators of the Division resource evaluators and regional resource evaluators who were identified as experts in evaluating the developed interactive video lesson. They were asked to validate the material thoroughly following the standard guidelines in evaluation learning resource material. 11 randomly chosen pupils from a 35-pupil class served as pioneering pupils who will try out the interactive video lesson to generate the pupils' feedback as end users of the material being validated.

Research Instruments

The first research instrument used in the study is the educational soundness evaluation checklist sourced from the Learning Resources Management and Development System (LRMDS) of the Department of Education. This tool comprises four factors or domains: Integrity, Learner Focus, Usability, and Accessibility. This validation form also contains a section where the expert validators annotate their comments and suggestions for the improvement of the material being evaluated.

The second instrument used in the conduct of research is the Evaluation Rating Sheet for Non-Print Materials of DepEd LRMDS. This instrument evaluates the Interactive video lesson in English in terms of Content Quality, Instructional Quality, Technical Quality, and Accuracy and Up-to-datedness. Moreover, this tool also contains a part where the expert validators specify their comments and suggestions for the improvement of the resource material being assessed.

Data Gathering Procedure

This study upholds the ethical measures before, during, and after the data-gathering process until the analysis of data results. The researchers will seek permission from the office of the principal. Upon the principal's approval, approval from the division office was sought. Upon the approval of the City Schools Division Superintendent to pursue the study, the researchers crafted the interactive video lesson, beginning with the lesson plan and the script. Once the material was ready, the researchers contacted

the expert validators to validate the developed interactive video lesson. For the first and second research problems, the panel of experts evaluated the Interactive Video Lesson in English using the evaluation tools on educational soundness and evaluation for non-print materials.

The researchers also seek the permission of the parents of the pupil participants to gather feedback from them as end-users. The researchers ensured the parents and participants the anonymity and privacy of all data gathered.

Data Analysis

The data gathered from the material evaluation were examined using quantitative and qualitative analysis to address the research problems effectively. For the first problem, descriptive statistics were used to describe the descriptive level of the learning material using mean and standard deviation. Gathered values from expert validators' scores were interpreted using the four descriptive scales; 1.00 – 1.75 Not Satisfactory; 1.76 – 2.50 Poor; 2.51 – 3.25 Satisfactory; 3.26 – 4.00 Very Satisfactory. The researchers followed the comments and suggestions for improvement from the expert validators and learning resource evaluators to improve the learning material. The analysis also includes qualitative analysis to address the needed improvement of the learning material as it progresses from the development phase down to the validation phase.

For interpreting the feedback of the pupils, a qualitative analysis using thematic analysis was employed to qualify their experiences. The generated themes from the participants' responses served as support that could reinforce the conceptualization of the findings and the basis for crafting conclusions. This could make the results more conclusive and robust, proving what is claimed and argued.

Results and Discussion

Educational Soundness Evaluation. The first validation stage focused on the Interactive video lesson's educational soundness regarding integrity, learners' focus, usability, and accessibility.

Table 2: Extent of Educational Soundness of the Interactive Video Lesson

Factors	Validator 1		Validator 2		Validator 3		Validator 4		**Overall**	
	YES	NO	YES	NO	YES	NO	YES	NO	**YES**	**NO**
1. Integrity	100 %	0	100%	0	100 %	0	100 %	0	**100 %**	**0**
2. Learner focus	100%	0	100%	0	75%	25%	100%	0	**94%**	**6%**
3. Usability	100%	0	100%	0	100%	0	100%	0	**100%**	**0**
4. Accessibility	100 %	0	100%	0	75 %	25%	100 %	0	**94 %**	**6%**

As presented in Table 2, expert validators unanimously evaluated that the interactive video lesson achieved the general educational sound level and passed the mandated quality. This result suggested that the content of the interactive video lesson is accurate and reflects how knowledge in that domain is conceptualized. Correct and appropriate use of terms, phrases, symbols, notations, and diagrammatic and graphical representations were evident. The interactive video does not require learners to disclose personal data, which might embarrass them, unfavorably compare learners' performances with their identity, and unnecessarily confront cultural beliefs and practices. The instructional material was enhanced based on the Non-compliance Rating on Learner focus and Accessibility factors given by one of the validators. Thus, the interactive video lesson is recommended for the next validation stage.

Educational Quality Evaluation. The second stage of Interactive video lesson validation by expert validators involved the quantitative evaluation using the Rating Sheet for Non-Print Materials comprising four (4) qualities, namely: (1) Content Quality; (2) Instructional Quality; (3) Technical Quality ;(4) and Other Findings.

Table 3 presents the evaluation of the Interactive video lesson in terms of Educational Quality. As presented in the table, it can be observed that Technical Quality surmounts among the four factors with a mean score of 3.96 *(SD = 0.19)*, descriptively interpreted as Very Satisfactory. On the other hand, Content Quality has the lowest weighted mean of 3.93 *(SD = 0.26)* but is still interpreted as very satisfactory. All the factors have the highest rating manifested by the overall mean score of 3.95, descriptively interpreted as Very Satisfactory.

Table 3: Level of Educational Quality of the Interactive Video Lesson

Factors	Educational Quality		**Qualitative Description**
	Mean	SD	
1. Content Quality	3.95	0.22	Very Satisfactory
2. Instructional Quality	3.93	0.26	Very Satisfactory
3. Technical Quality	3.96	0.19	Very Satisfactory
4. Other Findings	3.94	0.24	Very Satisfactory
Overall	**3.95**		**Very Satisfactory**

Legend: *3.26–4.00-Very Satisfactory; 2.51–3.25-Satisfactory; 1.76–2.50-Poor; 1.00–1.75-Not Satisfactory*

The dominance of Technical Quality's mean scores suggested that the Interactive video lesson has established superiority because of its interactive features. Though contents got the lowest mean score, it does not necessarily mean it does not align with the standards because it has a rating of very satisfactory considering that during the design phase of the study, the MELC was used as the guide to ensure that the required standards and competencies are met. The material very satisfactorily reinforces, expands upon, and results in the mastery of the specified learning goals. The presentation of factual content is appropriate, stimulates and promotes critical thinking, and has application in real-life situations. Also, the high satisfaction rating in terms of the interactive video lesson's accuracy and up-to-datedness means specific minor errors are present and must be corrected before the implementation (Tan 2019, 16–28).

Comments and Suggestions by Expert Validators. As part of the validation phase, qualitative findings were collected to further enhance the impact of the Interactive video lessons. Qualitative findings include comments and suggestions from experts gathered as a basis for revising the Interactive video lessons.

Regarding content quality, expert validators commented that the material could be used as independent learning during any learning mode after incorporating the comments and revisions. This is because the Interactive video provides activities that help learners achieve the goal formulated in alignment with the identified learning competencies. Activities range from easy to complex, enough to require thought and not just a chance of selecting answers. Moreover, learners must know how the Interactive video works since it is their first time using the application.

In terms of instructional quality, the content was sequenced appropriately. The content was organized in a way that scaffolds and challenges the pupil's level of understanding. Embedded interactive activities generated automatic feedback in the form of scores. They answered keys, thus increasing learners' interest in accomplishing

the task while allowing the teacher to track the progress made by the learners in performing the embedded activities. One feature that impressed the validators was providing an answer key only provided the moment learners enter the 'check button. Once the answer is inputted, the video provides an answer check button that, if clicked, will give instant feedback with corresponding points, allowing learners to self-check their performance. If they did not get the correct answer, they could have the option to try again. However, in the assessment part, the try again button was disabled. This ensures that teachers evaluate students' actual learning, closing the issue of unreliable outputs of the learners (Tan 2019, 16-28; Dangle and Sumaoang 2020, 170-182). However, validators found some concerns in the interactive video setting. For example, the choices in the multiple-choice question shuffle now and then, and the sequence does not correspond to the choices being read by the teacher in the video lesson. Instructions in the activity must be strengthened and must be presented clearly. This recommendation is related to the recommendations raised by the parents in the study of Sumaoang (2020), which emphasized that instructions in each activity must be clear enough for learners to understand the material independently.

Regarding technical quality, the interactive video lesson provided the necessary information in the form of texts, images, and videos, allowing learners to grasp the concept of the lesson. The interactive video also provides an opportunity for learners with slow to zero internet access since the contents are still accessible offline. Visuals such as images were accurate and did not misinterpret the concepts presented. However, short descriptions must be provided below each visual for learners to build connections between the text and images. The background color enhances the readability of the texts.

Regarding accuracy and up-to-datedness, validators posited that the learning interactive video lesson content is very up-to-date. The interactive video lesson presents the concept of adverbs of time and place. Hence, learners would be able to connect English in a real-life setting. The material needs to be free of error because it leads to confusion and misinterpretation among learners and may ultimately hinder their progress (Foulger 2010). Errors could lead to cognitive overload and distract learners from the central message of the video. Error-free content is crucial in engaging learners in interactive video lessons (Cheon et al. 2012, 1054–1064).

Pupils' Feedback on the Use of Interactive Video Lesson. The grade 4 pupils were allowed to watch the video lesson and interact with the lesson by manipulating the laptop's cursor pad. They were allowed to experience the interactive video lesson. As evidence, the pupils were all amazed, excited, and very engaged in the video lesson. After the lesson, the pupils were given a guided question to be able to share their feedback. The feedback was grouped into three parts: (1) navigation and function, (2) format and layout, and (3) overall features. The pupils' responses varied since they had thoughts and feelings about their encounters with the interactive video lesson. Their overall feedback was overwhelmingly positive, as they had a fascinating and engaging experience. Samples were taken from pupils' work to represent what carries almost the same thought as their personal experiences.

Feedback Focused on Navigation and Function. Feedback showed that pupils were delighted and excited to interact with the video lesson. Many said it was their first time doing an activity where instant feedback on their answers was available, making them more excited to answer. Here are the sentences of the actual feedback of the pupils that manifested to emphasize their pleasurable responses. Their actual comments are reflected below.

"I like the video because I got to interact with the question, and it was a lot of fun." (P1)

"I'm happy because I learned something, and I feel happy for the first time doing this. It makes me get excited again if we do this thing again. I love watching it because it is so interactive." (P2)

"It was so fun! I love it. I was so excited to answer the questions, and I was able to interact. I love it." (P4)

"It's my first time doing this. I liked the video lesson, so interactive." (P10)

The pupils' feedback on navigation and function shows that it is their first time using the interactive video lesson, which makes them excited to do it. This is supported by the claim of the positive impact of Interactive Videos on students' learning effectiveness (Zhang, et al. 2006, 15). Hence, an Interactive video lesson can provide a learning experience that can motivate pupils to learn. With immediate feedback features of the interactive video lesson, it can facilitate their progress in learning accurately.

Feedback Focused on Format and Layout. The pupils' feedback on the format and layout affirms that watching and interacting with the video lesson excites them. In this study, the research participants expressed the following:

"I feel so excited and happy and it is my first time doing the video lesson and I like the video lesson." (P3)

"It's my first time to do this. I love the video lesson because it's making me smart." (P5)

"It makes me thrilled and excited because I never tried this unique way of teaching." (P7)

"I feel so excited and happy and it is my first time doing the video lesson and I like the video lesson." (P11)

This positive outcome of employing Interactive Video on the learning engagement of pupils is backed up by several studies. Learners' satisfaction with technology-assisted learning and the effectiveness of the educational outcome are mediated by engagement in the learning process (Hu and Hui 2012, 782). Thus, Interactive video lessons support high results and positively affect learning engagement in English.

Feedback Focused on Overall Features. The pupils, as end-users of the instructional material, provided feedback on the use of the overall features of the developed interactive video. The research participants disclosed the following:

"I liked the lesson very much because I learned the lesson so much." (P5)

"It was inspiring and exciting and the best lesson ever. Surprisingly good. The best video I've inspired in English, and I like the video so much It made me and my classmates so excited." (P9)

"I learned a lot, and the video was super fun, and it was very exciting. I love it so much; it was so fun to watch." (P10)

From the answers reflected above, most of their experiences are fruitful, enjoyable, and delightful because they have experienced a new way of video lessons where they can interact with the video. It means that their experience in interactive video lessons was pleasing and satisfying. They are looking forward to having more interactive video lessons. This is confirmed by the study of Vandergriff (2013) on his study about interactive video lessons, which claims that using interactive video lessons could enhance language learning by providing authentic language input, encouraging learner participation, and promoting learner engagement.

The outcomes of this study warrant the claim that the developed and validated interactive video interactive is very useful in the teaching-learning process. Studies reveal that video can increase pupils' motivation and engagement, improving learning outcomes (Hsin and Cigas 2013). Similarly, interactive video can improve pupils' retention and knowledge transfer (Osguthorpe and Graham 2003).

Enhanced Interactive Video Lesson. Revisions were made to make the interactive video lesson more helpful to learners, strictly following the comments and suggestions of the panel of experts. The material is now polished and ready for use. It is an interactive video lesson in adverbs of time and place with various interactive activities where pupils can manipulate, input, or choose answers. Instant feedback is present, and the retry button gives pupils a second chance to give a correct answer. A Tally of scores at the end of the lesson is presented where pupils can screenshot and send the picture to the teacher for recording or send it immediately as an email. This interactive video lesson allows pupils to answer at their own pace and time. This interactive video lesson file can be sent via messenger, share, Bluetooth, or email. It can be downloaded and can be played online or offline. It will work on all gadgets that can play HTML file.

Conclusion and Recommendations

Out of the development and validation results, the developed interactive video lesson passed all the criteria. It was accepted and recommended for distribution and reproduction after incorporating all the comments and suggestions of the expert validators. The expert validators found the interactive video lesson ready to be used. This interactive video lesson will be a tool used for enhancing pupils' learning and engagement. The interactive video received positive feedback from the pupils.

The researchers also concluded the limitations of the interactive video lesson as they try out on the learner pupils was done. Among these are: (1) Interactive video lessons cannot play on televisions using removable storage devices. Televisions can only be used to project the laptop or computers and can mirror the screen of smartphones if it is a smart TV; (2) The Interactive video lesson can be, at most, an extended period, for it will be hard to export the file; and (3) This study's product differs from the use of printed self-learning modules. However, it offers advantages that teachers might consider in having an engaging and interactive video lesson to make the class livelier and more exciting.

The following recommendations are formulated based on the results obtained from developing and validating the interactive video lesson: (1) Conduct a study that tests the effectiveness of the learning outcomes between two groups, one having the interactive video lesson; the other will have a conventional lesson in time series; (2) Conduct a thorough needs assessment that collects different kinds of learners' needs. A careful and comprehensive needs assessment would lead to the creation of excellent and

relevant interactive video lessons; (3) Develop an interactive video lesson in other learning areas; (4) Explore available software that can be used to create an interactive video lesson; and (5) English teachers shall receive seminars and workshops on developing interactive video lessons.

Action Plan

Subject Focus	Program Description	Objectives	Strategies/ Activities	Time Frame	Persons Involved	Sources of Fund	Expected Outcome
Interactive Video Lesson	Video Lesson Making	• Improve efficiency and productivity in Making Video Lessons	• Video Recording • Video Editing using Lumi App video editing tool using H5P	First and Second semester	All Teachers of BCES	School MOOE	98% of the teachers can conceptualize an interactive video lesson.
	Seminar – Workshop on Making Interactive Video Lessons	Improve teacher's knowledge and skills in Video recording and video editing.	Intensive In-service Training for BCES Teachers The use Lumi App uses an H5P video editing tool	First and Second Semester	All Teachers of BCES	School MOOE	98% of the teachers will be oriented and informed on Video recording and video editing

References

Azhar, S., Raza, S. A., & Saleem, F. 2021. “Impact of the COVID-19 Pandemic on Academic Engagement: A Study of University Students in Pakistan.” International Journal of Learning, Teaching and Educational Research, 20(7), 96-109.

Barut, T. E., & Dursun, O. O. 2022. “Effect of animated and interactive video variations on learners' motivation in distance education.” *Education and InformationTechnologies, 27*(3),3247-3276. doi:https://doi.org/10.1007/s10639-021-10735-5

Cheon, J., Lee, S., Crooks, S. M., & Song, J. 2012. “An investigation of mobile learning readiness in higher education based on the theory of planned behavior.” Computers & Education, 59(3), 1054–1064.

Dangle, D. C., & Sumaoang, M. A. 2020. “Assessing Actual Learning: Strategies and Techniques for Teachers.” Journal of Educational Research and Practice, 10(2), 170-182.

Dwyer, K., Lee, J. W., & Hollebrands, K. F. 2007. “Interactive multimedia and learning: Realizing the benefits.” Innovate: Journal of Online Education, 4(4).

Foulger, T. S. 2010. “Creating compelling educational videos: A synthesis of the literature.” Journal of Educational Technology Development and Exchange, 3(1), 1-14.

Gustiani, Sri. 2019. "Research and development (R&D) method as a model design in educational research and its alternatives." Holistics (Hospitality and Linguistics): Jurnal Ilmiah Bahasa Inggris 11, no. 2.

Hasheela, N., & Smith, E. 2021. “Learners’ Loss of Interest in Traditional Teaching Methods during the COVID-19 Pandemic.” International Journal of Emerging Technologies in Learning (iJET), 16(13), 140–153.

Hsin, C., & Cigas, J. 2013. “Short videos improve student learning in online education.” Journal of Computing Sciences in Colleges, 28(5), 253-259.

Hu, Paul Jen-Hwa, and Wendy Hui. 2012. "Examining the role of learning engagement in technology-mediated learning and its effects on learning effectiveness and satisfaction." *Decision support systems* 53, no. 4: 782-792.

Kiat, T. Y., Jumintono, E. S. K., Sugiri, E. H., Anggarini, Y., & Rofik, M. 2020. “The Effectiveness of Multimedia Learning on Academic Achievement in Reproduction Topic Science Subject.” *Universal Journal of Educational Research*, 8(8), 3625-3629.

Kırkgöz, E., & Baş, G. 2020. “The Effect of Interactive Video Lessons on Vocabulary Acquisition and Attitudes.” International Journal of Emerging Technologies in Learning (iJET), 15(21), 61-75. doi:10.3991/ijet.v15i21.12545

Lin, L., & Li, M. 2018. “Optimizing learning from animation: Examining the impact of biofeedback.” *Learning and Instruction*, pp. 55, 32–40.

Osguthorpe, R. T., & Graham, C. R. 2003. “Blended learning environments: Definitions and directions.” Quarterly Review of Distance Education, 4(3), 227–233.

Tan, H. 2019. “Assessment for Learning: Strategies to Evaluate Pupils' Actual Learning.” International Journal of Education, 11(2), 16–28.

Tsai, M.-F. 2014. “The Impact of Interactive Video on EFL College Students' Learning Performance, Motivation, and Perceived Satisfaction.” Turkish Online Journal of Educational Technology, 13(1), 10–18.

Vandergriff, I. 2013. “Interactive video in language teaching.” *Language Learning & Technology*, 17(1), 1-18

Wilson, J. H., Morton, D. P., Chudik, E., & Han, E. 2021. “Flipping out for probability.” *IIE Annual Conference.Proceedings,* pp. 1–6. https://www.proquest.com/scholarly-journals/flipping-out-probability/docview/2560888099/se-2

Yıldız, A., & Arslan, M. 2020. “The Effects of Interactive Video Lessons on EFL Elementary School Students’ Attitudes and Learning Outcomes.” Journal of Language and Linguistic Studies, 16(3), 832-846.

Yorganci, S. 2022. “The interactive e-book and video feedback in a multimedia learning environment: Influence on performance, cognitive, and motivational outcomes.” *Journal of Computer Assisted Learning, 38*(4), 1005–1017. doi:https://doi.org/10.1111/jcal.12658

Zhang, Dongsong, Lina Zhou, Robert O. Briggs, and Jay F. Nunamaker Jr. 2006. "Instructional video in e-learning: Assessing the impact of interactive video on learning effectiveness." *Information & management* 43, no. 1: 15-27.

Financial Report

The table below shows the cost estimates expended before, during, and after conducting this action research.

General Descriptions	Quantity	Unit	Unit Price	Total Costs
Short Bond paper sub-20	1	ream	274.00	274.00
Ink for printer	4	bottles	269.00	1,076.00
Printing and Binding	6	copies	60.00	360.00
Ballpen	2	pcs	10.00	20.00
Umbrella Light	2	pcs	1,522.00	3,044.00
Camera holder	1	Pcs	100.00	100.00
White Board Markers	2	pcs	60.00	120.00
Snacks (Evaluators) during the data gathering	4	pcs	100.00	400.00
Total				₱ 5,000.00

Appendix A

Content Experts' Validation of the Interactive Video lesson

Indicator	Validator 1	Validator 2	Validator 3	Validator 4	Mean
Factor A: Content Quality					
1. Content is consistent with topics/skills found in the DepEd Learning Competencies for the subject and grade/year level it was intended for.	4	4	4	4	4
2. Concepts developed contribute to enrichment, reinforcement, or mastery of the identified learning objectives.	4	4	4	4	4
3. The content is accurate.	4	4	3	4	3.75
4. The content is up to date.	4	4	4	4	4
5. Content is logically developed and organized.	4	4	4	4	4
6. Content is free from cultural, gender, racial, or ethnic bias.	4	4	4	4	4
7. Content stimulates and promotes critical thinking.	4	4	4	4	4
8. Content is relevant to real-life situations.	4	4	4	4	4
9. Language (including vocabulary) is appropriate to the target user level.	4	4	4	4	4
10. Content promotes positive values that support formative growth.	4	4	3	4	3.75
Factor B: Instructional Quality					
1. Purpose of the material is well-defined.	4	4	4	4	4
2. Material achieves its defined purpose.	4	4	4	4	4
3. Learning objectives are clearly stated and measurable.	4	4	4	4	4
4. Level of difficulty is appropriate for the intended target user.	4	4	4	4	4
5. Graphics/colors/sounds are used for appropriate instructional reasons.	4	4	4	4	4
6. Material is enjoyable, stimulating, challenging, and engaging.	4	4	3	4	3.75
7. Material effectively stimulates the creativity of the target user.	4	4	3	4	3.75
8. Feedback on the target user's responses is effectively employed.	4	4	3	4	3.75
9. Target users can control the rate and sequence of presentation and review.	4	4	4	4	4
10. Instruction is integrated with the target user's previous experience.	4	4	4	4	4
Technical Quality					
1. Audio enhances understanding of the concept.	4	4	4	4	4
2. Speech and narration (correct pacing, intonation, and pronunciation) are precise and easily understood.	4	4	3	4	3.75

3. There is complete synchronization of audio with the visuals, if any.	4	4	3	4	3.75
4. Music and sound effects are appropriate and effective for instructional purposes.	4	4	4	4	4
5. Screen displays (text) are uncluttered, easy to read, and aesthetically pleasing.	4	4	4	4	4
6. Visual presentations (non-text) are clear and easy to interpret.	4	4	4	4	4
7. Visuals sustain interest and do not distract the user's attention.	4	4	4	4	4
8. Visuals provide an accurate representation of the concept discussed.	4	4	4	4	4
9. The user support materials (if any) are effective.	4	4	4	4	4
10. The design allows the target user to navigate freely through the material.	4	4	4	4	4
11. The material can easily and independently be used.	4	4	4	4	4
12. The material will run using minimum system requirements.	4	4	4	4	4
13. The program is free from technical problems.	4	4	4	4	4
Factor D: Other Findings					
1. Conceptual errors.	4	4	3	4	3.75
2. Factual errors.	4	4	4	4	4
3. Grammatical and/or typographical errors.	4	4	4	4	4
4. Other errors (i.e., computational errors, obsolete information, errors in the visuals, etc.).	4	4	4	4	4