

Localized Lecture Video in Teaching Grade 11 Science Concepts

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Abstract

The study focuses on developing a localized lecture video that addresses the specific least learned competencies in Earth Science 11 in one of the big central schools in Surigao Del Sur, Mindanao, Philippines. The study employed developmental-evaluative design, which equated to developing the instructional material, the localized lecture video, based on the least learned competency in Earth Science 11. The tool utilized in evaluating the developed video was an adopted survey questionnaire from the Department of Education, Surigao Del Sur, Philippines. After watching the uploaded video on the internet, expert teachers and students did the evaluation. Results show that teacher experts and students as evaluators rated the localized demo video very satisfactory in terms of Integrity, learner's focus, usability, accessibility, Content, format/technical design, presentation/organization, accuracy, and up-to-date information. Findings revealed that the evaluation rating of teacher-experts has no significant difference from the evaluation rating of students. Moreover, the same results were attained in the evaluation rating of the teacher- experts and students on the localized demo video for audio and video recording, which shows no significant difference. According to experts, the localized demo film is a promising instructional material for use because it is suitable and respectable for learning reasons.

Keywords: localized, lecture-video, Earth Science 11, least learned competency

Introduction

Education has shifted drastically to another platform because of the Coronavirus disease (COVID-19) pandemic. Based on the United Nations Children Fund (UNICEF) report, schools for more than 168 million children globally have been closed for almost an entire year due to COVID-19 lockdowns as of March 2020. The unexpected crises impacted the radical change in the education system, embracing the notable rise of electronic learning, in which teaching is done remotely and on online platforms.

One of the most oft-online learning methods is educational videos, which students can register, archive, and share for future reference. For example, in a study by Max Bevan (2016), teacher-made educational videos have attracted students' attention because of its ability to enhance student learning and information retention. Educational videos provide students a good option to learn basic and complex tasks, regardless of their situation, location, and insurmountable obstacles (Simi, 2020). When the explanation is partnered with a video that is interactional of the task combined, it greatly aids in the development and addition of knowledge in the specific competency, it's because of the ability to motivate students and provide strong visual cues (A Roslaniec, 2018). According to an article from Marc Ratcliffe (2017), one must interact comprehensively in order to transcend inefficient learning.

Educational videos generate a massive advantage for learning, especially in this pandemic. Priyanka Gautam (2020) revealed that students learn anywhere using educational videos or lectures on their mobile devices, such as computers, tablets, or smartphones. Students can enjoy the process of learning whenever they want in just a matter of a single click of the teacher the uploading of video lectures online. Students as well are well informed by sending the link. Alternatively, teachers can create a CD or send the lecture by email. Further, with Covid-19 still in the corridors, distant learning is enshrined, which equates to students having

different schedules in their respective homes. It is then possible that a student can miss out on an entire class that will affect his/her grade. Nevertheless, if a student happens to miss one of the lectures, the teacher can send them the lecture video (or simply make regular posts on a blog or website for all students to access at their convenience). This allows all the students to keep up with the curriculum.

Education has exceeded another platform that emerged into a new normal education system; as a result, many challenges and problems arisen. A few pitfalls of online learning include subjects requiring thorough discussion, which can only be done face-to-face. In particular, subjects encompassing science concepts need a systematic approach that needs science process skills. Research from R Millar (2018) explained that science teaching and learning are difficult because it requires a higher cognitive skill to grasp the subject material and comprehend information to answer questions of abstract situations that are commonly part of Science concepts. A central goal of science education is to help students develop their higher-order thinking skills to enable them to face the challenges of daily life (GM Saldo, 2016). Therefore, science concepts need repetition of discussion and excessive effort in order for students to understand. Unfortunately, there is a greater probability that teachers could not put a greater amount of time into the discussion because of the limited resources, includes data for internet usage. Accessibility is poor for online lectures; it is not recommended for all students because of each unique underlying situation. In addition, not all locations are provided with internet connections, particularly when it comes to remote areas. Therefore, an educational video is a great tool for bridging the gap as it requires only a single recording time, which can be disseminated to numerous people, including students who have liabilities. Apart from it, one of the most useful advantages of educational videos for students is that it allows them to review as much as they can on a specific topic that they had difficulty understanding.

School closures have a negative effect on the performance of students. Academic studies suggest education interruptions can have short- and long-term consequences. They also find impacts can vary depending on numerous factors, including the age of the student, the time of year that campuses close, and children's socioeconomic background (DM Ordway, 2020). In the Philippines, the teaching of Science revealed a drastic change in students' performance at primary and secondary levels. However, science teachers exerted effort to bridge the gaps by improving students' scientific material expertise and scientific skills related to practical activities and investigations.

On the other hand, teachers are confused about how to promote the kind of behaviors outside of the usual classroom setting. Amidst the COVID-19 crisis, teachers have voiced concerns about safety, risk assessment, and liability if students carry out laboratory activities without direct supervision by a trained professional. This case is not limited to experiments but includes teaching specific lessons on science concepts that need a thorough explanation that requires face-to-face classes for proper comprehension. Moreover, particular situations are observed from national to local levels where teachers have questioned their ability to promote student learning in Science in a similar manner of distinguishing students' needs or abilities and collecting proof of learning. Data from Carrascal National High School Sur revealed that the Mean Percentage Score (MPS) in Earth Science 11 during the 1st quarter for SY 2020-2021 is significantly lower than the previous years of the same quarter. The identified competency which contributed to low MPS is determined to be the explanation of how heat from inside the earth (geothermal) and from flowing water (hydroelectric) is tapped as a source of energy for human use (S11SES-1e-11). Thus, to resolve students' lack of mastery in Earth Science 11, a variety of techniques and approaches for instructing within the classroom were used, one of which was teaching with the help of instructional material, particularly demo videos.

With the above context, the researchers were prompted to study the development of localized lecture videos that can address the specific least learned competencies in Earth Science 11. This study allowed learners to understand the step-by-step process for generating power, specifically in Geothermal and Hydropower Energy. This material's Content and instructional quality were determined by teacher experts and the students who were considered the respondents of the educational video to be developed.

The localized lecture video was evaluated using the evaluation instrument adapted from the Department of Education (DepEd) Learning Resource Center (LRC). Assessments of teachers and students were collected to evaluate the Educational Soundness of the video, specifically focused on Integrity, Learner Focus, Usability, and Accessibility. In addition, the DepEd Evaluation Rating Sheet was used for assessing the

Video and Audio Recordings on the developed localized demo video in terms of Content, technical design presentation, and accuracy.

The developed localized video bridges the gap of the current situation in the new normal learning setting, particularly the challenges and problems in teaching science concepts in Grade 11. Moreover, the results provided students opportunities to self-study at their own pace and have the ability to repeat specific parts wherein they are confused until adequate learning is achieved.

Methodology

Research Design

The study used a combination of developmental-evaluative and cross-sectional research design. The instructional content, the localized lecture video, was developed based on the least learned competency in Earth Science, which used a developmental-evaluative design. The selected Science Teacher experts evaluated and validated the said instructional material in terms of instructional quality, and technical quality. Cross-sectional survey was then employed in the collection of respondents particularly the Grade 11 students' data and inferences.

Research Locale

The research was conducted in the municipality of Carrascal, Surigao Del Sur, Mindanao Philippines. Specifically, the Carrascal National High School, being the biggest secondary school in the area served as the point area of respondents and where the development of the localized lecture video was done. The said instructional material was developed, validated and evaluated in the academic year 2020-2021.

Research Respondents

The respondents of the study were the selected five (10) Earth Science teacher-experts and forty (40) Grade 11 students in Carrascal National High School. Convenience non-probability sampling method was employed in the selection of the respondents. This was done due to mainly because of the ongoing pandemic, conducting of face to face survey is strictly prohibited. In response, the researcher decided to divert the survey into online means to ensure the safety of the students. However, a fraction of Grade 11 students reside from remote areas wherein there is a poor or even no internet connection. Thus, the researchers utilized the students living from downtown area of Carrascal, Surigao del Sur because they have the ability to fill out the survey online having a stable connection. The researcher were able to gather 40 responses.

Research Instruments

The LRMSD Educational Soundness General Evaluation Checklist and the DepEd Evaluation Rating Sheet for Video and Audio Recordings were the primary tools used in the data gathering. Each instrument is described as follows: Educational Soundness General Evaluation Checklist includes the following parts: Integrity, learner concentration, usability, and accessibility are the four components of this assessment sheet. Each component is made up of a number of different parts. Each object has a score value ranging from 1 to 4 and a corresponding interpretation. The highest possible score is four, which indicates Very Satisfactory (VS), while the lowest possible score is one, which indicates Poor (P). II. DepEd Evaluation Rating Sheet for Video and Audio Recordings includes Content, format/technical design, presentation and organization, and accuracy and up-to-datedness of the information are the four components of this assessment sheet. Every component is made up of a number of different parts. Each component has a score value ranging from 1 to 4 and a corresponding interpretation.

Results and Discussion

Table 1 presents the evaluation rating of teacher - experts and students on the Educational Soundness of the developed localized lecture video in terms of Integrity, Learner Focus, Usability, and Accessibility. It can be shown on Table 1 the results of teacher-experts' and students' evaluation rating with regards to educational soundness of the developed localized demonstration video. As to **Integrity**, Indicator 1 - *Supports learners' deepening of knowledge within the content domain revealed* the highest weighted mean of 3.78 (Very Satisfactory). Meanwhile, Indicator 3 - *Presents controversial issues with balance and fairness and by the DepEd curriculum policies, where these apply* got the least weighted mean of 3.60, still in the Very Satisfactory level. The result demonstrates that the educational localized lecture video is relevant

and well agreed upon by student and teacher expert assessors in terms of educational soundness, notably on Integrity, with a total weighted average of 3.67 (Very Satisfactory).

Table 1. Educational Soundness Evaluation of the Developed Localized Lecture Video in terms of Integrity, Learner Focus, Usability, and Accessibility

INTEGRITY	Student	Teacher-experts	AWM	Adjectival Description
1. Content is accurate and reflects the ways in which knowledge is conceptualized within the domain	3.70	3.60	3.65	Very Satisfactory
2. Supports learners' deepening of knowledge within the content domain.	3.75	3.80	3.78	Very Satisfactory
3. Presents controversial issues with balance and fairness and in accordance with the DepEd curriculum policies, where these apply.	3.60	3.60	3.60	Very Satisfactory
4. Uses language and symbols of the content domain and its ways of representation, and supports learners in developing and using them.	3.70	3.60	3.65	Very Satisfactory
5. The following are used correctly and appropriately:(terms and expressions, symbols and notations, diagrammatic representation and graphical representation)	3.68	3.60	3.63	Very Satisfactory
TOTAL MEAN	3.69	3.64	3.67	Very Satisfactory
LEARNER FOCUS	Student	Teacher-experts	AWM	Adjectival Description
1. Assists the learner with identifying and differentiating between different points of view and perspectives presented	3.55	3.60	3.58	Very Satisfactory
2. Uses content in ways that are real to life/authentic for learners/users:	3.80	3.60	3.70	Very Satisfactory
3. Are not over simplified or trivialized	3.45	3.60	3.53	Very Satisfactory
4. Makes sense to learners within their imaginary or real world	3.68	3.60	3.64	Very Satisfactory
5. Are realistic within the relevant context, enhances learners' social capital-their knowledge of how the world works and how to make a way into it.	3.78	3.60	3.69	Very Satisfactory
6. Reflects the profile of the target learner/user for the curriculum or training area.	3.5	3.80	3.65	Very Satisfactory
7. Presents the same idea to learners/users in multiple/multi-directional modes (visual text (e.g. pictures, diagrams), verbal (written) text, symbolic representations, oral (spoken) text, both static and dynamic images	3.75	3.80	3.78	Very Satisfactory
8. Learning objectives are made explicit to learners/users.	3.68	4.00	3.84	Very Satisfactory
9. The target learners/users are clearly identified	3.78	3.60	3.69	Very

(academic level/technical ability/demographics addressed).				Satisfactory
10. Content is structured to scaffold learning.	3.53	3.60	3.57	Very Satisfactory
11. Provides an opportunity for learners/users to obtain feedback either within or outside the resource.	3.75	3.60	3.68	Very Satisfactory
12. Presents the same idea to learners/users in multiple/multi-directional modes	3.70	3.60	3.65	Very Satisfactory
TOTAL MEAN	3.70	3.69	3.70	Very Satisfactory
USABILITY	Student	Teacher-experts	AWM	Adjectival Description
1. Is easy to use (time and effort to use it is reasonable) and the language is appropriate for the intended learner/user	3.88	3.60	3.70	Very Satisfactory
2. Clear instructions for use are provided (i.e., purpose, processes, intended outcomes are explicit).	3.78	3.60	3.69	Very Satisfactory
3. Learning and information design is intuitive (i.e., the user knows what to do and how to it.	3.65	3.60	3.63	Very Satisfactory
TOTAL MEAN	3.80	3.60	3.70	Very Satisfactory
ACCESSIBILITY	Student	Teacher-experts	AWM	Adjectival Description
1. The learning resource can be accessed by learners/users in deprived, depressed and underserved areas and communities.	3.65	3.60	3.63	Very Satisfactory
2. The resource may not require teacher/facilitator intervention to be used effectively in varied learning environments and learning sequences	3.63	3.60	3.62	Very Satisfactory
3. The learning resource connects to learners' personal/local knowledge and experience	3.75	3.60	3.68	Very Satisfactory
4. Resource does not confront or embarrass learners In any or all of the following ways:	3.60	4.00	3.8	Very Satisfactory
5. Equivalent or alternative access to information is available for learners' with diverse needs	3.90	3.80	3.85	Very Satisfactory
TOTAL MEAN	3.71	3.72	3.72	Very Satisfactory
OVER ALL MEAN	3.73	3.66	3.70	Very Satisfactory

Legend: 1.00 – 1.80 Poor (P) 1.80 – 2.61 Fair (F) 2.62 – 3.42 Satisfactory (S) 3.43 – 4.00 Very Satisfactory (VS)

In selecting effective instructional material for classroom use, Bugler (2017) asserted that one factor should be devoid of errors of any kind, such as grammatical flaws, spelling problems, inaccurate facts, or erroneous problem response sheets. Furthermore, educational materials should be well-written and appealing to the eye. According to an article from University of Houston, having academic integrity means that others can trust you. As an educator who deals with multiple students know that they can rely on you to act honestly

and to do what you say you will do. When students know that you believe in doing the right thing, and that your behavior is consistent with that belief, they trust you. Additionally, trust is one of the key characteristics of a successful and efficient educator.

As regards to **Learner Focus**, indicator 8 - *Learning objectives are made explicit to learners/users* revealed the highest weighted mean of 3.84 (Very Satisfactory). On the other hand, indicator 3 - *Are not over simplified or trivialized* showed the lowest weighted mean of 3.74 (Very Satisfactory). According to an article from Duke Learning Innovation, Learning objectives should be used to guide students as they work through the course, and to assess their learning progress. Excellent learning objectives equates and serves as a guide for students when reviewing materials and preparing for assessments. Learning objectives are the most powerful if they are actionable and measurable. Both the teacher and students can arrived to their goal when they possess a clear focus. Learning objectives that are well-defined and stated are crucial because they give pupils a clear goal to work toward in their studies. Objectives are an important aspect of the educational process because they help to explain the learner-educator relationship. Writing objectives aids educators in creating appropriate course content, instructional tactics or processes, and evaluation techniques. The result demonstrates that the evaluators agree that the lecture video is is sufficient and highly acceptable to the learners when it comes to the learning focus, with an overall mean of 3.70 (Very Satisfactory).

For **Usability**, all of the indicators got a Very Satisfactory rating revealing a weighted mean of 3.70. This demonstrates that the localized lecture video is highly efficient, as the language, instructions, and information design are all clear, understandable, and appropriate for the target audience. According to an article from Nathan (2016), he noted that when creating educational materials, simplicity of language should be prioritized. If the language is too difficult to comprehend, time will be spent trying to comprehend the language. The language and illustrations utilized in the creation of materials must be relevant to the learners' day-to-day lives. One should avoid complex structures and mechanical language while producing materials. When creating materials, complex structures and mechanical language should be avoided.

Lastly, for the Accessibility, indicator 1 - *the learning resource can be accessed by learners/users in deprived, depressed, and underserved areas and communities* garnering a Very Satisfactory mean of 3.63. This portrayed that the developed localized lecture video is accessible for students with regards to their learning. On another note, Indicator 5 - *Equivalent or alternative access to information is available for learners' with diverse needs* revealed the 1st rank with the average weighted mean of 3.85 (Very Satisfactory).

The developed localized lecture video had an overall weighted mean of 3.70 (Very Satisfactory), the localized demo video is only accessible or attainable by learners from various cultures and needs. It also promotes individual learning by allowing for a variety of learning contexts and sequencing.

The table 2 shows Evaluation Rating of Teacher expert and Student on the developed localized demo video in terms of Content, Format/Technical Design, Presentation and Organization, and Accuracy and Up-to-datedness of information of Department of Education.

Table 2. DepEd Evaluation Rating Sheet for Video and Audio Recordings

Factor 1: Content	Student	Teacher-experts	AWM	Adjectival Description
1. Content is suitable to the learners' level of development.	3.98	4.00	3.99	Very Satisfactory
2. Material contributes to the achievement of specific objectives of the learning area and grade level for which it is intended.	3.95	4.00	3.98	Very Satisfactory
3. Material provides for the development of higher cognitive skills such as critical thinking, creativity, learning by doing, inquiry, problem solving, and 21st Century Skills	4.00	4.00	4.00	Very Satisfactory

4. Material is free of ideological, cultural, religious, racial, and gender biases and prejudices. Material must comply to the DepEd Social Content Guidelines.	4.00	4.00	4.00	Very Satisfactory
5. Material arouses interest of target reader.	4.00	4.00	4.00	Very Satisfactory
6. Adequate warning / cautionary notes are provided in topics and activities where safety and health are of concern.	3.93	4.00	3.97	Very Satisfactory
TOTAL MEAN	3.98	4.00	3.99	Very Satisfactory
Factor 2: Format/Technical Design	Student	Teacher-experts	AWM	Adjectival Description
1. Volume and quality of sound is appropriate.	4.00	3.60	3.80	Very Satisfactory
2. Pacing is effective and appropriate to instructional purposes.	4.00	3.60	3.80	Very Satisfactory
3. Audio-visual effects (music, sounds, graphics, etc) are appropriate and effective for instructional purposes.	4.00	3.60	3.80	Very Satisfactory
TOTAL MEAN	4.00	3.60	3.80	Very Satisfactory
Factor 3: Presentation and Organization	Student	Teacher-experts	AWM	Adjectival Description
1. Presentation is engaging, interesting, and understandable	3.65	3.60	3.63	Very Satisfactory
2. There is logical and smooth flow of ideas.	3.88	3.60	3.74	Very Satisfactory
3. Vocabulary level is adapted to target reader's experience and understanding.	3.88	3.60	3.74	Very Satisfactory
4. Length of the video/audio recording is appropriate to the attention span of the target learner.	3.38	3.60	3.50	Very Satisfactory
TOTAL MEAN	3.70	3.60	3.65	Very Satisfactory
Factor 4: Accuracy and Up-to-datedness of Information	Student	Teacher-experts	AWM	Adjectival Description
1. Conceptual errors	3.83	4.00	3.92	Very Satisfactory
2. Factual errors	3.70	3.80	3.75	Very Satisfactory
3. Grammatical errors	3.78	3.80	3.79	Very Satisfactory
4. Computational errors	3.55	4.00	3.78	Very Satisfactory
5. Obsolete information	3.50	3.80	3.65	Very Satisfactory
6. Typographical and other minor errors (e.g., inappropriate or unclear illustrations, missing labels, wrong	3.55	3.60	3.58	Very Satisfactory

captions, etc.)				
TOTAL MEAN	3.65	3.83	3.74	Very Satisfactory
OVER ALL MEAN	3.83	3.76	3.80	Very Satisfactory

Legend: 1.00 – 1.80 Poor (P) 1.80 – 2.61 Fair (F) 2.62 – 3.42 Satisfactory (S) 3.43 – 4.00 Very Satisfactory (VS)

As reflected on the table particularly on **Factor 1 - Content**, indicator 3 - *Material provides for the development of higher cognitive skills such as critical thinking, creativity, learning by doing, inquiry, problem solving, and 21st Century*, indicator 4 - *Material is free of ideological, cultural, religious, racial, and gender biases and prejudices. The material must comply to the DepEd Social Content Guidelines*, and indicator 5 - *Material arouses interest of target reader* had perfect evaluations which topped the indicators with the weighted mean of 4.00 (Very Satisfactory). Carey (2017) stated that imparting content to young students is critical since it inspires them and piques their interest. It also aids in the simultaneous development of subject and language competency, as well as cultural awareness, critical thinking, and creative capabilities. Wiseman (2018) went into greater detail about the relevance of materials in accomplishing learning goals. As a result, students should be given clear goals and directions, as well as intentional and explicit learning opportunities. Students should be able to recognize that subjects are worthwhile to learn, and the material should give an environment in which they can grow into interested, motivated, and self-regulating learners. Furthermore, Bridges (2018) claims that biased teaching materials lead to negative attitudes among students. They acquire a low sense of self-worth, which interferes with their cognitive and learning abilities. Their social lives are frequently impacted, which eventually becomes a major concern. On the other hand, using unbiased instructional information assists pupils to learn more rapidly because it has a beneficial impact on their knowledge of the subject matter. Positive motivation, which is the most important pillar for teaching and learning processes, is also affected.

For **Factor 2 Format and Technical Design**, the average weighted mean is 3.80 (Very Satisfactory). As a result, the generated instructional content has good audio-video quality and pacing that is acceptable and effective for educational purposes. According to Danielson (2019), the video should be accompanied by music and sound effects. If the improper music is used to accompany the video, it will become overdone. Your film's tone is set by the music. The music should be played at a tempo that matches the mood of the film. If you choose the improper sound effect, the only effect you'll have is to damage your video. Audio-visual materials, according to Mcnaught (2017), are particularly helpful instructional, instructional, and promotional tools. He also stressed the importance of audio-visual elements in situations where clarity of presentation is desired. They facilitate interactions that are difficult to achieve in other methods, enhancing the depth and variety of learning.

As to **Factor 3 Presentation and Organization**, the overall weighted mean is 3.80 (Very Satisfactory). According to the Teacher experts' and student's evaluation, the developed localized lecture video is well presentable and orderly. It also means that the content is time-bound, coherent, engaging, fascinating, and easy to comprehend. Allen and Smith (2012) suggested the following for creating educational videos to promote student learning and engagement: Use audio and visual elements to convey suitable aspects of the explanation; explore how to make these elements complementary rather than redundant; and use signaling to show significant ideas or concepts, embed movies in an engaging learning atmosphere by incorporating instruction questions, interactive elements, or associated homework assignments, and utilize a conversational, passionate tone to foster involvement.

Lastly for, **Factor 4 Accuracy and Up-to-datedness of Information**, the result is very satisfactory with the weighted mean of 3.80. The outcome indicates that the created instructional content is free of concept, factual, grammatical, computational, typographical, and minor errors, as well as outdated information. The term "accuracy" refers to the assurance that the information is correct and error-free. According to Jones (2029), the accuracy of information is critical since it can affect student's learning and even reaching their goals. Accuracy can help you judge how well your students understands the material and whether or not they are ready to move on. Another vital aspect of education is accuracy, because it serves as the basis how

valid and reliable the information is, which is very vital in the development of the cognitive foundation of the students.

Significant difference in the evaluation rating of the teacher-experts and students on the Educational Soundness of the developed localized demo video in terms of Integrity, Learner Focus, Usability, and Accessibility.

Table 3 reveals the significant difference in the evaluation rating of the teacher-experts and students on the Educational Soundness of the developed localized demo video in terms of Integrity, Learner Focus, Usability, and Accessibility. The computed t-value of all indicators is less than the t-critical at .05 level, henceforth the null hypothesis is accepted.

Table 3. Comparison of results for Educational Soundness as Evaluated by Teachers and Students

Educational Soundness Indicator	Sig.	Decision	Interpretation
Integrity	.914	Accept the Ho	no significant difference
Learner focus	.063	Accept the Ho	no significant difference
Usability	.412	Accept the Ho	no significant difference
Accessibility	.694	Accept the Ho	no significant difference

The findings suggest that there is no significant difference in the teacher-experts' and students' ratings of the generated localized lecture video in terms of Educational Soundness in terms of Integrity, Learner Focus, Usability, and Accessibility. Therefore, this implies also that this developed localized lecture video is appropriate for learners who want to learn independently. Educational Lecture video serves as an aid for student in this flexible learning. Not all students have the capacity and capability to keep up with virtual lessons of teachers, according to research, students are able to learn sufficiently and holistically when they study on their own pace. To bridge the gap, educational videos serves as a way for students to learn independently with the ease of access at any time that enables them to continue their education amidst the ongoing pandemic. On another note, teachers are also benefited from the situation, with the utilization of educational lecture videos, it decreases their workload through the absence of repetition of lessons as they are already recorded. Thus, it enables them to mainly focus on quality rather than quantity.

The findings support Albert's (2019) assertion that video content can enhance learning. Video clips can be an excellent tool for assisting students in gaining a better comprehension of topics. Ralph (2018) also found that using audio-visual aids as instructional tools, students can gain information, skills, and abilities through video-assisted learning.

Table 4: Comparison of results for Audio & Video recording as Evaluated by Teachers and Students

Deped evaluation tool for audio & video recording	Sig	Decision	Interpretation
Content	.091	Accept the Ho	no significant difference
Format & Technical design	.302	Accept the Ho	no significant difference
Presentation & Organization	.422	Accept the Ho	no significant difference
Accuracy and Up-to-datedness	.646	Accept the Ho	no significant difference

The **table 4** shows Significant difference in the evaluation rating of teacher-experts and students on the localized demo video using DepEd evaluation rating sheet for audio and video recording. The null hypotheses are accepted because the computed values of all the indicators for DepEd Evaluation are all smaller than the t-critical at the.05 level, as shown in table 6. This means that the teacher-experts' and students' evaluation ratings on the created localized lecture video utilizing the DepEd evaluation rating sheet

for audio and video recording are not significantly different. Furthermore, the outcome shows that both evaluators believe that the localized demo video is appropriate in terms of content, format and technological design, presentation and organization, and accuracy and up-to-datedness. This implies that the content of the developed localized video meets the level of the learners, the format is acceptable and appropriate, design appeals to the eyes of both the teacher and students, presentations are organized systemically and simplified for better grasp of the topic. Lastly, the video also shows accuracy and up-to-datedness equating to validity and reliability which is very vital for the development of the cognitive foundation of the students. According to Espinosa (2017), evaluating instructional materials aids in the development of high-quality content for learners to consume. It detects mistakes and enhances their efficiency. It also gives useful comments on the design, layout, images, and content. As a result, in any educational system, the evaluation of educational materials is critical.

Conclusions

The developed localized lecture video can be a potential instructional material since it is acceptable, appropriate and commendable for learning and educational purposes based from the results of the research. Similarly, this educational material is well-suited for independent learning, as it received high marks from teachers and students for its content, format/technical design, presentation, accuracy, and up-to-datedness of information. Furthermore, both teacher-experts and students agreed that the educational content is efficient and effective for students to consume, as both rated the integrity, learner focus, usability, and accessibility as Very Satisfactory. Finally, there is no significant difference in the evaluation between the teacher-experts' and the students' evaluation particularly from the Educational Soundness and DepEd Evaluation Sheet for Video and Audio Recording. The result let the researchers arrive to the idea that the video is indeed effective and efficient for holistic learning based from the standard adopted tools provided by the Department of Education.

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