

The Development of Digital Storytelling in Values Formation for Secondary Students

**Reden L. Alvario¹, Marie Nicole A. Evasco², Elaine T. Manag³, Cristine Joy S.R. Marquez⁴,
Dorethy Heart P. Samson⁵**

Corresponding Authors:

Joseline M. Santos, Susana C. Velasco, Rowena May T. David

¹Bulacan State University, City of Malolos, Bulacan

Abstract - The main objective of this study is to develop digital storytelling in values formation for secondary students, particularly Grade 10 students. The general problem of this study was how digital storytelling to be developed for the value formation of secondary students. The study utilized quantitative descriptive developmental research. The students and teachers are respondents. Developed digital storytelling was evaluated by 1 Information Technology teacher and 2 Technology Teaching and Learning Teachers to assess the content quality, technical quality, instructional quality and other findings. The study adopted the LRMDs for the evaluation of the digital storytelling, Technology Acceptance Model was used to know the level of acceptability of digital storytelling and System Usability Scale to know the level of the usability of digital storytelling. To know the level acceptability of digital storytelling, general mean was computed and for the system usability scale percentile rank was used. The findings show that there is a significant difference between the perception of the teachers and student in the level acceptability and usability of digital storytelling. The findings illustrate that teachers and students appreciate the development of digital storytelling. It is recommended for future researchers to study the effectiveness of digital storytelling in values formation for secondary students and to train the Values education teachers in the use of digital storytelling.

Keywords: *digital story, development, values formation, acceptability, usability*

Introduction

Digital storytelling is a form of telling a story using a digital platform. It is used for diverse pedagogical purposes and also, it is also culturally inclusive and used by Gunawardena et al. (2021). According to Didin et al. (2020), claimed that it decreases the quality of character in the value of today's life in the global society. One of these is the worsening use of language and words. It caused a decline in the quality of global society's character due to the changing of values in

life. The Indonesian young generation is included here, so it is necessary to optimize character education through various learning media. There is a study conducted for this purpose that shows a result that practices of digital storytelling has a significant effect on the creative writing skills of secondary school students (Esra et al., 2023).

This study identifies the gaps, it includes here several limitations, primarily the absence of longitudinal data to track the long-term impact on internalizing value. In addition, it also acknowledges the potential influence of cultural diversity within the learning environment, which necessitates careful consideration by educators in fostering cultural awareness through digital tools. This study needs to more explicitly demonstrate the effectiveness of digital storytelling in teaching the values. To be end with, it lacks a detailed exploration of the technological challenges and barriers that educators and students might encounter during the implementation of digital storytelling, particularly concerning equitable access to technology and varying levels of digital literacy. According to Gokce (2023), claimed that their study denotes an initial success on the use of digital advancement for learning values through digital storytelling, their study still lacks longitudinal data that aids future problems. This will not measure long-term changes in learners' understanding and values applied. Moreover, the study could affect cultural diversity inside the learning environment depending on how teachers establish cultural awareness and application of digital capability for learners' understanding. The study must state clearly the effectiveness of digital stories in values education internalization and impact of evaluation of projects from school stakeholders. According to Tyler et al. (2024), the impact of Technology is one of their gaps. Although this study highlighted digital storytelling as a pedagogical tool it does not delve deeply into the specific technological challenges and barriers that educators and students may face when implementing digital storytelling in the classroom. This is particularly relevant in the context of varying access to technology and digital literacy among students.

The researchers came up with this study to know how values formation in secondary students be developed since teachers are now using technology as their instructional materials particularly digital storytelling in Values Education to hone the values formation of the students. Also, the researchers aim to spread awareness about using digital storytelling at the secondary level to use it as an instructional material to hone the values formation of students.

Methodology

Research Design

The study employed a quantitative descriptive developmental method, focusing on the evaluation and refinement of a researcher-made digital storytelling tool aimed at promoting values formation among secondary students. To gather data, the researchers used an adopted survey questionnaire, designed to assess both the acceptability and usability of digital storytelling as an educational strategy.

Participants

The total number of respondents in this study is 129, consisting of 123 Grade 10 students and 6 Values Education teachers from Prenza National High School. The student participants are selected from a total population of 179 Grade 10 students, with 24 students each from the sections Agoncillo, Del Pilar, and Bonifacio; 27 students from Rizal; and 23 students from Silang, which has the fewest participants. These students are chosen to evaluate the effectiveness of digital storytelling in shaping core values such as empathy, integrity, responsibility, and teamwork. In addition, the inclusion of all Grade 10 Values Education teachers as respondents aims to gather professional insights on the educational value, usability, and impact of the digital storytelling tool in the classroom setting.

Instruments

The statistical analysis used in this study includes both descriptive and inferential methods, particularly focusing on correlation analysis to determine the relationship between the development of digital storytelling and its impact on educational outcomes such as values formation, usability, and acceptability. Descriptive statistics, including mean and standard deviation, were used to organize and summarize the responses gathered from students, teachers, and the institution. An independent samples t-test was also utilized to examine whether there are significant differences between the perceptions of students and teachers regarding the acceptability and usability of the digital storytelling tool. The study employed standardized tools such as the System Usability Scale (SUS) and the Technology Acceptance Model (TAM) to evaluate usability and acceptance. These statistical

measures enabled the researchers to assess the influence of digital storytelling on the effectiveness of teaching and the overall educational experience.

Procedure

The researchers conducted a study on secondary students at Prenza National High School to examine how digital storytelling might impact their values. The researchers would start seeking permission from the authorities to ensure the study is conducted with full approval. The researchers would also emphasize that their identity and privacy would be ensured and their answers to the questionnaire would be confidential to others.

The surveys were based on the core values: Maka-Diyos, Maka-Tao, Makakalikasan, and Maka-bansa and supplemented with additional questions designed by the researchers. These questions aimed to capture students and teachers' perspectives on the development of digital storytelling on their value formation.

After the respondents completed the survey, the researchers carefully collected, tallied, and summarized the responses. Through this process, they hope to gain meaningful insights into the role digital storytelling may play in fostering value formation among secondary students.

Data Analysis

The researchers would have engaged in descriptive statistical methods to organize and summarize results of development of digital storytelling as a tool for value formation among students. The researcher would use the mean and standard deviation to measure the average of observations by computing the mean, simple and observations and dividing it by the numbers of observations this statistic applied all through the research questionnaire and all evaluations tools were going to use. As well, would describe the data in terms of acceptability and usability among the students, teachers, and the institution.

The researchers used t-test independent samples to study the depth of several factors and respond to two variables such as acceptability and usability of development of digital storytelling as a tool for values formation. This statistical test aids the researcher to find the results of research problems such as there is a significant difference between the perceptions of the teachers and students in the level of acceptability and usability of digital storytelling materials especially by using the Systems Usability Scale and Technology Acceptance Model to evaluate the usability of digital storytelling. In the System Usability Scale, the researchers would have used the positive questionnaire. To get

the SUS score, add all the scores in the questions and multiply by 2.5 (Godwin, 2020). According to Sauro (2018), in interpreting the SUS score it is associated with excellent if the scores above 85. Above average at 71 is was just “Good” and for score at 51 it is associated with “OK”

Using digital storytelling correlates well to the related influenced it have on the ability of the institution to teach better, more effectively; also, thereby improving the quality of education for the student. With these statistical measures, it would then be possible to determine the influence of digital storytelling on educational outcomes and its potential towards uplifting teaching practices within the institution.

Ethical Considerations

The researchers would ask permission to the students if they are willing to become the respondents of the study by giving them a consent form. The researchers stated to the respondents that it is completely voluntary thus informing them about consent and clarifying to the respondents the benefits, risks, and the main purpose of the research. After that, since the grade 10 students are minor the researchers would give them an assent form to be signed by their parents or guardians.

The researchers assured the information from the participants would be kept private thus safeguarding the data gathered from being used unconstitutionally. The researchers conducted the study with utmost honesty thus avoiding falsification, plagiarism, and fabrication. The morality and rights of the respondents is upheld and respected all throughout the process of the study. The researchers ensured the full disclosure of the methods and findings in order to achieve research solidarity.

Before our research is conducted the researchers surely inform them about their rights, study's purpose, procedures, and potential risk. They had the right to withdraw at any time without penalty and all the procedures were transparent and honest. Also, the researcher considered the data management and security by the protocols were implemented to protect every participant's confidentiality, including their gender and age because our participants are not legal age and they need a strict protection for them. All research activities adhered to relevant ethical guidelines and regulations.

The researchers demonstrated the highest levels of ethics, wherein participants' welfare and integrity of data are protected. All subjects were informed clearly that they had the right to withdraw from the study at any time without penalty, it is voluntary, and all the data obtained were kept confidential

and secure based on current laws on data protection. In addition, disclosures and measures aimed at minimizing any potential conflicts of interest were made in ensuring that our results were objective and of integrity. No duplicity was involved in the research design as well as implementation.

Results and Analysis

1. Organization of written digital story based on the DepEd Core Values

This part presented the organization of written digital storytelling based on the Maka-Diyos, Maka-Tao, Maka-kalikasan at Maka-bansa.

1.1 Maka-Diyos

The Character in the story centers around Sophie, a devoted daughter struggling to care for her mother, who has Alzheimer's disease. Her mother, despite her condition, remains a significant figure in Sophie's life, symbolizing both pain and unconditional love. Other characters include the neighbors who misunderstand the situation, the municipal authorities involved in an incident, and the unseen yet deeply felt presence of God, who serves as Sophie's guide and source of strength.

The Plot follows Sophie's emotional and spiritual journey as she faces the challenges of taking care of her mother. She experiences heartbreaking moments when her mother forgets her, falsely accuses her, and even escapes from their home. In her desperation, Sophie turns to God, questioning why they must endure such suffering. However, through faith and prayer, she finds her mother in the church, sitting before the image of the Virgin Mary. This event strengthens her belief that God is guiding her through this trial. From that moment on, she entrusted everything to the Lord, learning to accept the things beyond her control while continuing to care for her mother with patience and love.

The Dialogue highlights Sophie's internal and external struggles. Her breakdown is evident when she prays, "*Lord, bakit po ba kailangan kong maranasan ito? Bakit po ba kailangan ko pang magkaroon ng Alzheimer's ang mama ko?*" revealing her doubts and desperation. The heartbreaking exchange between her and her mother, "*Sino ka? Magnanakaw ka, no?*" followed by Sophie's pleading response, "*Ma, ako 'to, si Sophie,*" illustrates the emotional pain of being forgotten by a loved one. The most touching moment occurs when her mother, after wandering away, recognizes the church and recalls asking the Virgin Mary for a child, saying, "*At d'yan sa Mahal na Birhen ako humiling ng bunsong anak—at ikaw 'yon.*" This statement reassures Sophie that despite her mother's fading memory, love remains.

The Point of View is first-person, as Sophie narrates her struggles, thoughts, and emotions. This perspective allows readers to empathize with her pain, doubts, and eventual acceptance of her situation.

The Theme of the story highlights faith and surrender to God's will. It emphasizes that even in the most difficult trials, trusting in the Lord provides strength and guidance. It also explores unconditional love, patience, and understanding, showing that true devotion means standing by loved ones despite challenges. The story serves as a reminder that God's presence offers comfort and light, even in life's darkest moments.

1.2 Maka-Tao

The story revolves around the Character, a student who experiences both sorrow and inspiration from Lola Auring, a kind and cheerful neighbor who established the community pantry in their village. The story also includes her Ate, who delivers the news of Lola Auring's illness, and her Tita, who plays a role in continuing the pantry's mission. The neighbors are also essential characters, representing the spirit of community and mutual care.

In the Plot, the story begins by depicting the protagonist's life during the pandemic, filled with routine and a lack of enthusiasm. One day, he learns that Lola Auring, the kind and cheerful neighbor who started the community pantry, has fallen ill. Despite prayers and hopes for her recovery, Lola Auring passes away a few days later, bringing deep sorrow to the protagonist and the entire community. However, instead of dwelling in grief, the village decides to reopen the Lola Auring Community Pantry as a tribute to her kindness. In the end, the protagonist realizes that the spirit of helping others never fades, and the goodness that Lola Auring instilled in their community continues to thrive.

Through Dialogue, the emotional impact of Lola Auring's passing and the return of hope in the community become more vivid. The protagonist's line, "*Ate, anong nangyari?*" expresses his immediate concern upon hearing about Lola Auring. His Ate's response, "*Nagka-COVID daw si Lola Auring,*" marks the beginning of her emotional journey. When he later finds out that the community pantry had reopened, he asks her Tita, "*May community pantry po ulit? Eh, wala na po si Lola Auring?*" showing his disbelief at how the mission could continue without its founder. His Tita's response, "*Binuksan ulit ng barangay ang 'Lola Auring Community Pantry,' bilang pagbibigay-pugay sa kanya. Siya naman ang nagsimula nito,*" brings inspiration and reignites her hope.

The story is written from a Point of View using the first-person perspective, where the protagonist narrates his thoughts and experiences. This perspective makes the story more personal and emotional, allowing the readers to feel his sorrow, longing, and, eventually, the inspiration brought by the reopening of the community pantry. The use of the first-person point of view also helps convey his emotions more effectively, especially when he says, "*Biglang bumalik ang sigla sa puso ko,*" upon learning that Lola Auring's legacy will live on.

The central Theme of the story is unity and *bayanihan*, evident in the revival of the community pantry even after Lola Auring's passing. It also highlights kindness and helping others, showing how a simple act of sharing food can significantly impact those in need. Another crucial theme is hope amidst loss, demonstrated through the way the community honors Lola Auring's legacy by continuing her mission. Despite her passing, her spirit remains in the hearts of the people, and her kindness lives on through the community's efforts.

1.3 Maka-kalikasan

The Character of the story centers around a fisherman who has lived on Isla Pamarawan for forty years. He deeply cares for the environment and his community's future. Other key characters include the barangay captain, who feels powerless against the higher authorities; fellow residents like Mang Bong and Aling Iseng, who are directly affected by the environmental destruction; and the mayor, who listens to the people's concerns and promises to review the project.

The Plot revolves around the struggles of a fishing community in Isla Pamarawan as they face environmental destruction caused by a reclamation project. When large boats start dumping landfill for airport construction, the mangroves are destroyed, leading to the decline of fish supply and increasing flood risks. The protagonist, along with his fellow villagers, speaks out against the project. Despite initial resistance from authorities, they persist in their advocacy, gaining support from environmental groups and the media. Eventually, their efforts led to a government review of the project and raised awareness about environmental protection.

The Dialogue in the story reveals the conflicting perspectives within the community and highlights their determination to fight for their environment. "*Kap, hindi na ba talaga natin kayang ipatigil 'yang ginagawang paliparan dito sa atin?'*" the fisherman asks. The barangay captain replies, "*Nako, wala tayong magagawa dahil mismong mga nasa itaas ang pumayag sa proyektong 'yan.'*" The fisherman argues, "*Hindi ba't tayong mga nakatira rito mismo ang apektado nito?*"

Ano'ng silbi ng pagiging masinop at malinis natin sa kapaligiran kung ang mga proyektong ito mismo ang sisira sa ating lugar?". The fisherman, filled with anger and concern, exclaims, "Hindi natin dapat payagan ang ganitong bagay. Hahayaan na lang ba natin lumubog ang lupang ating kinagisnan? Paano na ang ating mga anak?" These exchanges reflect fear, frustration, and the growing determination to take action.

The Point of View used in the story is first-person, with the protagonist narrating his personal experiences and emotions. This allows readers to connect deeply with his struggles, worries, and determination to protect his home.

The Theme of the story focuses on environmental protection and community solidarity. It emphasized the importance of standing up against environmental destruction and working together to protect natural resources for future generations. The story also highlights themes of activism, resilience, and responsibility in safeguarding the environment.

1.4 Maka-bansa

The story revolves around the Character, an 18-year-old first-time voter who is eager yet uncertain about whom to vote for in the upcoming elections. She seeks guidance from her mother and father whose wisdom helps shape her understanding of responsible voting. The story also includes her inner thoughts, which reflect the common concerns of young voters, and the barangay youth, whom she later engages in discussions about voting awareness.

In the Plot, the story begins with the protagonist registering as a voter, marking a significant milestone in her life. Upon returning home, she begins contemplating her choices, questioning the state of the nation and the qualities she should look for in a leader. Conflicted by her thoughts, she seeks advice from her parents, who provide insightful lessons on responsible voting. Encouraged by their words, she embarks on a journey of research, analyzing candidates' track records and discussing with her peers. The story reaches its climax on election day, where she casts her vote with confidence, recognizing that her decision is not just for herself but for the future of the nation.

Through Dialogue, the protagonist's internal conflict and the wisdom imparted by her parents become more pronounced. Her father's statement, "Anak, kailangan nating iboto ang mga taong hindi pumapatay ng tao. *"Wag din tayong boboto ng mga may record na ng pagnanakaw sa ating bansa,"* highlights the need for integrity in leadership. Her mother adds, *"Kung gaano ka makilatis sa kung sino dapat ang class*

president ng klase mo, ganoon din dapat ang pagkilatis sa kung sino ang mga iboboto mo," drawing a relatable analogy that simplifies the concept of discernment in voting. Their final words, *"Ang matalinong pagboto, anak, ay pagmamahal sa Diyos, sa mga kababayan, sa kalikasan, at higit sa lahat, sa bansa,"* encapsulate the core lesson of the story.

The story is written from a Point of View using the first-person perspective, allowing readers to experience the protagonist's journey firsthand. Her thoughts, questions, and realizations make the narrative more intimate and reflective. This perspective enhances the emotional depth, making the reader connect with her struggle, enlightenment, and final decision.

The central Theme of the story is nationalism and responsible citizenship, emphasizing the role of voting in shaping the country's future. It also explores critical thinking and discernment, as seen in the protagonist's journey from uncertainty to informed decision-making. The story highlights the power of guidance from family, showing how parental wisdom can shape a young person's values. Lastly, it underscores the importance of youth participation in democracy, proving that even a single vote carries weight in the pursuit of a just and progressive society.

2. Evaluation of the Written Story

Table 1.

Descriptive Measurement of Character in Story

Item	Mean	SD	Interpretation
Character			
1.The character is noticeable change or growth in their personality or perspective as the story progresses.	4.00	0	Strongly Agree
2. The characters' relationships with each other felt realistic and believable.	4.00	0	Strongly Agree
3. The story significantly impacted the character's personality .	4.00	0	Strongly Agree
4. I can easily identify the characters and their roles in the story.	4.00	0	Strongly Agree
5. The characters drive the story.	3.67	0.58	Strongly Agree
Overall	3.93	0.25	Strongly Agree

Table 1 highlights that the evaluators found the story's characters to be noticeable, realistic, and impactful, with 4.00 range scores indicating strong agreement about their personality traits. However, the item regarding characters driving the story received a slightly lower mean score of 3.67, along with a low standard deviation (SD) of 0.25, indicating consistent responses that reflect a strong consensus on its usability, thus enhancing the reliability of the conclusions. For items 1 through 4, the evaluators indicated high satisfaction levels. Conversely, for item 5, the evaluators noted lower agreement levels, suggesting challenges in developing

complex protagonists that genuinely drive the action of a story.

Table 2.

Descriptive Measurement of Plot in Story

Item	Mean	SD	Interpretation
Plot			
1. The plot is interconnected to the sequence of the story.	3.67	0.58	Strongly Agree
2. The plot of the story is planned.	4.00	0	Strongly Agree
3. The plot is logically arranged.	3.67	0.58	Strongly Agree
4. The story clearly describes the character's problem trying to resolve.	4.00	0	Strongly Agree
5. The story gives details on how to solve the problems of the characters.	4.00	0	Strongly Agree
Overall	3.87	0.31	Strongly Agree

Table 2 shows that the evaluators found the plot of the story to be well-planned, effectively describing the problem that needs resolving, and providing detailed solutions, resulting in an average score of 4.00, which strongly aligns with their agreement on this interpretation. Additionally, the low standard deviation (SD) of 0.31 indicates a high consistency in responses, suggesting that the findings reflect a strong consensus on its usability, thereby enhancing the reliability of the conclusions. For items 2, 4, and 5, the evaluators found high satisfaction levels. Conversely, for items 1 and 3, the evaluators noted lower levels of agreement, suggesting that unresolved plot elements can frustrate audiences and detract from overall narrative satisfaction.

Table 3.

Descriptive Measurement of Dialogue in Story

Items	Mean	SD	Interpretation
Dialogue			
1. The language used in the story was easy to understand.	3.67	0.58	Strongly Agree
2. The dialogue in the story felt realistic and appropriate for the characters and setting.	3.67	0.58	Strongly Agree
3. The conversations in the story flowed naturally and felt believable.	4.00	0	Strongly Agree
4. Each character has their own style of speaking.	4.00	0	Strongly Agree
5. There is communication from one or more characters.	3.67	0.58	Strongly Agree
Overall	3.80	0.31	Strongly Agree

Table 3 shows that the evaluators found the dialogue of the story to flow naturally and feel believable, with each character exhibiting their own distinct style of speaking, resulting in an average score of 4.00, which indicates strong agreement with this interpretation. Additionally, the low standard deviation (SD) of 0.31 indicates a high consistency in responses, suggesting that the findings reflect a strong consensus on its usability, thereby enhancing the reliability of the conclusions. For items 3 and 4, the evaluators found high satisfaction levels. Conversely, for items 1, 2, and 5, the evaluators noted lower levels of agreement, suggesting instances where poor

dialogue can detract from a story's overall impact and believability.

Table 4.

Descriptive Measurement of Point of View in Story

Items	Mean	SD	Interpretation
Point of view			
1. It is easy to follow the events and understand the characters' perspectives.	4.00	0	Strongly Agree
2. This story made me feel like I was experiencing the events firsthand.	3.67	0.58	Strongly Agree
3. The choice of point of view was effective in conveying the story's overall message and themes.	3.33	0.58	Agree
4. The first-person narration in this story created a strong connection between me and the narrator.	3.67	0.58	Strongly Agree
5. The chosen point of view gave me sufficient insight into the characters' thoughts and feelings.	4.00	0	Strongly Agree
Overall	3.73	0.31	Strongly Agree

Table 4 shows that the evaluators strongly agree that it is easy to follow the events and understand the characters' perspectives, with an average score of 4.00 indicating strong agreement with this interpretation. Additionally, the low standard deviation (SD) of 0.31 indicates a high consistency in responses, suggesting that the findings reflect a strong consensus on its usability, thereby enhancing the reliability of the conclusions. For items 1 and 5, the evaluators found high satisfaction levels. Conversely, for items 2, 3, and 4, the evaluators noted lower levels of agreement, suggesting that shifting or confusing points of view can detract from the cohesiveness of the narrative.

Table 5.

Descriptive Measurement of Theme in Story

Items	Mean	SD	Interpretation
Theme			
1. The different DepEd core values seen in the outcome of the story	4.00	0	Strongly Agree
2. Themes lend complexity and layers to a story.	3.67	0.58	Strongly Agree
3. Message of the story reflects upon and conveys.	4.00	0	Strongly Agree
4. The theme of the story is not overstated.	4.00	0	Strongly Agree
5. Theme reflects the writer's commentary on the DepEd core values.	4.00	0	Strongly Agree
Overall	3.93	0.50	Strongly Agree

Table 5 shows that the evaluators found that the themes of the story reflect the writer's commentary on the Department of Education (DepEd) core values, are not overstated, and present different DepEd core values evident in the outcomes of the story, resulting in an average score of 4.00, which indicates strong agreement with this interpretation. Additionally, the low standard deviation (SD) of 0.50 indicates a high consistency in responses, suggesting that the findings reflect a strong consensus on its usability, thereby enhancing the reliability of the conclusions. For items 1, 3, 4, and 5, the evaluators found high satisfaction levels. Conversely, for item 2, the evaluators noted lower levels of

agreement, suggesting how unclear or weakly presented themes can undermine the narrative's overall impact.

1. Development and Evaluation of digital story

Digital storytelling is being developed by the researchers and evaluated by chosen evaluators. The researcher made a story about the four core values from the DepEd (Maka-Diyos, Makatao, Makakalikasan, Makabansa). The stories were developed from the researcher and they followed LRMDs as a standard to make the output. The first thing that the researcher did is to make a written story that connects to the core values of DepEd that have already been mentioned. After the researcher made a written story, the researcher evaluated all stories from the teachers of Malikhing Pagsulat, Filipino Teacher and TTL teacher. The researchers ensure that the written story aligns with the curriculum objectives. Also, the development of written story within this framework requires adherence to the quality of standards such as character, plot, dialogue, point of view and the theme of every story.

Table 6.

Descriptive Measurement of Content Quality

Factor A. Content Quality	Evaluator 1	Evaluator 2	Evaluator 3
Q1. Content is consistent with topics/skills found in the DepED Learning Competencies for the subject and grade/year level it was intended.	4	4	4
Q2. Concepts developed contribute to enrichment, reinforcement, or mastery of the identified learning objectives.	3	3	4
Q3. Content is accurate	4	3	4
Q4. Content is up-to-date.	4	4	4
Q5. Content is logically developed and organized.	3	3	4
Q6. Content is free from cultural, gender, racial, or ethnic bias.	4	4	4
Q7. Content stimulates and promotes critical thinking.	3	4	4
Q8. Content is relevant to real-life situations.	4	4	4
Q9. Language (including vocabulary) is appropriate to the target user level	4	4	4
Q10. Content promotes positive values that support formative growth.	4	4	4
Total	37	37	40 Passed

The table 6 presents the results of the evaluation of learning resources that focus on content quality. Three evaluators assess the resource using the likert-type scale where 4 is the highest and 1 is the lowest across ten criteria. This table indicates a well-received learning resource with a strong content quality. The resource passed the evaluation and it indicated that it met the overall quality standards set for evaluation. The total scores of Evaluator 1 and 2 are 37, while Evaluator 3 gave a total score of 40. There are questions that are generally consistent in the rating and there are some minor discrepancies in ratings. However, the overall scores are

passed designation indicating that the resource is considered to be of high quality in terms of content.

Table 7.

Descriptive Measurement of Instructional Quality

Factor B. Instructional Quality	Evaluator 1	Evaluator 2	Evaluator 3
Q1. Purpose of the material is well defined.	4	3	3
Q2. Material achieves its defined purpose.	4	4	4
Q3. Learning objectives are clearly stated and measurable.	3	3	4
Q4. Level of difficulty is appropriate for the intended target user.	4	4	3
Q5. Graphics / colors / sounds are used for appropriate instructional reasons.	4	3	4
Q6. Material is enjoyable, stimulating, challenging, and engaging.	3	3	3
Q7. Material effectively stimulates creativity of target user.	3	4	4
Q8. Feedback on target user's responses is effectively employed.	3	3	4
Q9. Target user can control the rate and sequence of presentation and review.	4	4	4
Q10. Instruction is integrated with target user's previous experience.	4	4	3
Total	36	33	36 Passed

This table 7 presents the evaluation results of the learning resource focusing on the instructional quality. Evaluators assess the resource using the likert-type scale across ten criteria. The table shows that learning resources meet the overall instructional quality standards. In this case, Evaluator 1 and 3 gave a total score of 36, while Evaluator 2 gave a total score of 33. This shows that Evaluator 2 rated slightly lower than the other two evaluators. Among the evaluators, there is moderate agreement in which most scores are falling between 3 and 4. Some questions show discrepancies in ratings and it suggests some areas where the resource might be further refined or where the evaluators had slightly different interpretations. The resource has moderate scores of 3 in terms of enjoyability, engagement and feedback effectiveness. On the other hand, the resource received a high score of 4 in terms of the control over presentation and review.

Table 8.

Descriptive Measurement of Technical Quality

Factor C. Technical Quality	Evaluator 1	Evaluator 2	Evaluator 3
Q1. Audio enhances understanding of the concept.	4	4	3
Q2. Speech and narration (correct pacing, intonation, and pronunciation) is clear and can be easily understood.	4	4	3
Q3. There is complete synchronization of audio with the visuals, if any.	3	4	4
Q4. Music and sound effects are appropriate and effective for instructional purposes.	4	4	4
Q5. Screen displays (text) are uncluttered, easy to read, and aesthetically pleasing.	3	3	4
Q6. Visual presentations (non-text) are clear and easy to interpret.	4	4	4
Q7. Visuals sustain interest and do not distract user's attention.	3	4	4
Q8. Visuals provide accurate representation of the concept discussed.	4	3	4
Q9. The user support materials (if any) are effective.	4	3	4
Q10. The design allows the target user to navigate freely through the material.	3	3	4
Q11. The material can easily and independently be used.	4	4	4
Q12. The material will run using minimum system requirements.	4	4	4
Q13. The program is free from technical problems.	4	3	4
Total	48	47	50 Passed

This table 8 represents the results of evaluation that focus on technical quality. Three evaluators assess the resource using likert-type scale across thirteen criteria. It shows that the learning resource meets the overall technical quality standards. Overall, the resource passed the evaluation in overall assessment. The total scores of Evaluator 1 is 48, Evaluator 2 scored 47, and Evaluator 3 gives a total score of 50. This means that Evaluator 3 rated the resource slightly higher than the other two Evaluators. Some of the questions that focus on audio and visuals show several discrepancies related to these two elements. However, some areas need to improve but then resources performed consistently well in areas like music and sound effects, visual clarity, voice over, etc.

Table 9.
Descriptive Measurement of Other Findings

Factor D. Other findings	Evaluator 1	Evaluator 2	Evaluator 3
Q1. Conceptual errors.	4	4	4
Q2. Factual errors.	4	4	4
Q3. Grammatical and / or typographical errors.	4	4	4
Q4. Other errors (i.e., computational errors, obsolete information, errors in the visuals, etc.).	4	4	4
Total	16	16	16 Passed

The table 9 presents the evaluation results of a learning resource that focus on the other findings. The three evaluators assessed the resource using the likert-type scale across. It represents a highly accurate and error-free learning resource that contributes to its overall quality and effectiveness. Three Evaluators give a total score of 16 that indicates a perfect agreement among the evaluators. There is a perfect agreement among the evaluators across all the criteria and it was found to be completely free from conceptual, factual, grammatical/typographical, and other specified errors. Overall, the resource passed the evaluation indicating that it met the standards for other findings.

4. The level of acceptance of the used by the teachers and students

Table 10.
Descriptive Measure of the Perceived of Usefulness of Digital Storytelling as Perceived by the Teachers and Students

Items	Teachers	Interpretation	Students	Interpretation
1.Using digital storytelling can be good in teaching approach and learning.	3.50	Highly Acceptable	3.72	Highly Acceptable
2. Use of Digital Storytelling enhances teaching and academic achievement	3.17	Moderately Acceptable	3.50	Highly Acceptable
3. I find Digital Storytelling useful in class.	3.50	Highly Acceptable	3.57	Highly Acceptable
4. Using digital storytelling makes it easier to understand the lesson.	3.50	Highly Acceptable	3.63	Highly Acceptable
Overall	3.42	Moderately Acceptable	3.61	Highly Acceptable

Table 10 shows the perceived usefulness of digital storytelling by the teachers having the interpretation of 'Moderately Acceptable' ($x = 3.42$) and the students ($x = 3.61$) having the interpretation 'Highly Acceptable'. The teachers found that digital storytelling is moderately acceptable. There were 4 items evaluated, the items 1,3,& 4 got a 3.50 mean which is given by the teachers. The teachers found that digital

storytelling is good in enhancing teaching approach, teaching achievement and useful in class. The item 2 got the lowest score with a mean of 3.17, the teachers found that digital storytelling moderately enhances their teaching. In the students they found that digital storytelling is useful in class with an average mean of 3.63. The item 2 is the lowest, which is they found that digital storytelling enhances their learning. they found that digital storytelling is useful in class with an average mean of 3.63. The item 2 is the lowest, which is they found that digital storytelling enhances their learning.

Table 11.

Descriptive Measure of the Perceived Ease of Usefulness of Digital Storytelling as Perceived by the Teachers and Students

Items	Teachers	Interpretation	Students	Interpretation
1. Digital storytelling is easy to use in the classroom.	3.00	Moderately Acceptable	3.61	Highly Acceptable
2. Digital storytelling enhances teaching strategies.	3.50	Highly Acceptable	3.45	Moderately Acceptable
3. I found that digital storytelling is useful in integrating lessons in class.	3.50	Highly Acceptable	3.59	Highly Acceptable
4. Digital storytelling is useful in class	3.50	Highly Acceptable	3.66	Highly Acceptable
5. I learned in the mediaware of digital story telling.	2.83	Moderately Acceptable	3.55	Highly Acceptable
Overall	3.27	Moderately Acceptable	3.57	Highly Acceptable

Table 11 shows the perceived ease of use of digital storytelling by the teachers and students. The teachers moderately accept the item 1 and item 5 while they highly accept the items 2,3, & 4. The items describing the use of digital storytelling enhance teaching strategies, useful in integrating lessons in class and useful in class. The students also interpret the items 1, 3,4,& 5 as highly acceptable. Students found that digital storytelling is easy to understand, useful in class and it is to learn. The teachers and students found the easiness of the development of digital storytelling in values formation. The teachers found that the ease of use of digital storytelling is moderately acceptable because they may experience difficulties in doing it as an instructional material.

Table 12.

Descriptive Measure of the Attitude Towards Using of Digital Storytelling as Perceived by the Teachers and Students

Items	Teachers	Interpretation	Students	Interpretation
1. Digital Storytelling makes learning more engaging in class.	3.67	Highly Acceptable	3.60	Highly Acceptable
2. Digital storytelling helps me to think creatively.	3.33	Moderately Acceptable	3.60	Highly Acceptable
3. Digital storytelling has a positive impact to the learners	3.50	Highly Acceptable	3.45	Moderately Acceptable
4. I think digital storytelling is beneficial to use in class.	3.67	Highly Acceptable	3.69	Highly Acceptable
5. I think using digital storytelling in class is a trend.	3.50	Highly Acceptable	3.33	Moderately Acceptable
Overall	3.53	Highly Acceptable	3.53	Highly Acceptable

Table 12 shows that teachers and students have a positive attitude in using digital storytelling. It shows that digital storytelling is highly acceptable in items 1,3,4,&5 as perceived by the teachers with a mean of 3.53. They found that digital storytelling is makes learning more engaging, has a positive impact to the learners, will be beneficial to use in classroom and it is a trend. While item 2, is moderately accepted. The students also interpret the items number 1,2,3, & 4 as highly acceptable. The students found that digital storytelling is engaging, has a positive impact, beneficial and helps them to think creatively. While item number 5 students found that it is moderately acceptable that digital storytelling is a trend in class.

Table 13

Descriptive Measure of the Intention of use of Digital Storytelling as Perceived by the Students

Items	Teachers	Interpretation	Students	Interpretation
1. Digital storytelling is enjoyable in class	3.33	Moderately Acceptable	3.67	Highly Acceptable
2. Digital storytelling enhance my learning	3.33	Moderately Acceptable	3.58	Highly Acceptable
3. Digital storytelling helps me to keep motivated	3.50	Highly Acceptable	3.53	Highly Acceptable
4. Digital storytelling fosters students learning	3.67	Highly Acceptable	3.53	Highly Acceptable
5. I used digital storytelling to enhance the learning.	3.00	Moderately Acceptable	3.68	Highly Acceptable
Overall	3.37	Moderately Acceptable	3.60	Highly Acceptable

Table 13 shows the intention of use by the teachers and students. The teachers moderately accepted the intention of use of digital storytelling with a mean of 3.37. Item number 4 is the highest teachers found that digital storytelling fosters students learning. While item number 5 is the lowest teachers found that it is moderately acceptable that digital storytelling enhances their teaching. The students are highly accepting of the intention of use of digital storytelling with a mean of 3.60. The students highly accept the intention of using digital

storytelling to keep them motivated, to become enjoyable in class, and to enhance their learning.

5. The level of usability of the digital storytelling as perceived by the teachers and student

This part presented the level of the usability of digital storytelling as perceived by the teachers and students. The researchers used the System Usability Scale to know the level of usability of digital storytelling.

Table 14.

Descriptive Measure of the Usability of Digital Storytelling as perceived by the teachers and students

Items	Teachers	Interpretation	Students	Interpretation
1.I would like to use digital storytelling frequently.	3.50	Strongly Agree	3.75	Strongly Agree
2. I discovered that digital storytelling is manageable.	3.50	Strongly Agree	3.60	Strongly Agree
3. I think the digital storytelling was easy to use	3.00	Agree	3.69	Strongly Agree
4. I think that I could use digital storytelling without the support of a technical person.	3.50	Strongly Agree	3.55	Strongly Agree
5. I found the purpose in this digital storytelling was well integrated.	3.67	Strongly Agree	3.53	Strongly Agree
6. I think there was a consistency in digital storytelling.	3.17	Agree	3.71	Strongly Agree
7. I would imagine that most teachers would learn to use this digital storytelling.	3.50	Strongly Agree	3.71	Strongly Agree
8.I would imagine that most teachers would learn to use this digital storytelling.	3.83	Strongly Agree	3.59	Strongly Agree
9. I am very confident using digital storytelling.	3.50	Strongly Agree	3.76	Strongly Agree
10. I could use digital storytelling using my present skills or knowledge in computers.	3.83	Strongly Agree	3.76	Strongly Agree
Total	35.00		36.64	
SUS Score	87.50	Excellent	91.60	Excellent

Table 14 shows the system usability scale of digital storytelling of the teachers and students. The overall descriptive interpretation of the teacher is highly usable with a mean of 3.50. The teachers say that they will use digital storytelling in class frequently and it is easy to use in class. The teachers discovered that the use of digital storytelling is manageable. Also, they thought that they could use it without the help of a technical person. The items number 8 & 10 are the highest wherein they imagine that most of the teachers will learn with the use of digital storytelling and they can use the digital storytelling using their present skills. The students interpret that digital storytelling is highly usable with an overall mean of 36.64. Items 9 & 10 are the highest wherein they are very confident using digital storytelling and

they could use digital storytelling using my present skills or knowledge in computers. Teachers and students found that digital storytelling is excellent.

6. The Significant difference between the perception of the teachers and students in the level of acceptability and usability of the Digital Storytelling Material

Table 15.

Descriptive Measurement of the level of Acceptability of Digital Storytelling in the Perception of Students and Teachers

Acceptability of Digital Storytelling

Variables	t	Sig-value	Decision	Interpretation
Teachers and Students	-3.15944	0.00979	Reject Ho	There is a significant difference between the perceptions of the teachers and students in the level of acceptability of digital storytelling materials.

Table 15 indicates a statistical test result (most probably a t-test) for the acceptability of digital storytelling between teachers and students. The variables of the table are the teachers and the students and here the variables will be compared to each other. The table provides the calculated t-statistic that measures difference between the mean of two groups. Which implies the value of - 3.15944 indicates the negative sign value are direction are difference between teachers and student's acceptability. In addition, the outcome of Sig-value are no real differences between the groups. Sig-value of 0.00979 is smaller than the often used significance level of 0.05. Result of decision of data are "Reject Ho" indicate that the null hypothesis is rejected due to the reason that Sig-value less than 0.05. The acceptability of digital storytelling statistically varies between the teachers and the students. This table shows that there is variation between teachers and students' perception for the acceptability for the reason there are some challenges in terms of mastering technology or challenging implementation. Educators are challenged with mastering technology and catering to different learner needs, which may hinder effective DST integration. In addition, make a high-quality DST it well be time-consuming for the teachers because its requires access to technology, software and also training. Student views the DST as more interactive and provides encouragement this leads to approval one study reports that Students find DST exciting, as it can enhance classroom experience and increase levels of participation. The study truly says that the Ho of this research is rejected because of result of the study.

Table 16.

Descriptive Measurement of the level of Usability of Digital Storytelling in the Perception of Students and Teachers

Usability of Digital Storytelling				
Variables	t	Sig-value	Decision	Interpretation
Teachers and Students	-1.90265	0.036604	Reject Ho	There is a significant difference between the perceptions of the teachers and students in the level of usability of digital storytelling materials.

The table 16 shows the comparison of variable the teachers and students. The data present the t-statistic is -1.90265 its simply shows that the value positive indicates a difference between the two group. The Sig-value 0.036604 this values is less than the typical significance level of 0.05. The decisions resulted in table are Reject Ho means the hypothesis are rejected interpret that there are significant between teachers and student's perceptions at usability of DST. The low Sig-value supports the decision. There's a statistically significant difference in the perceived usability of digital storytelling between teachers and students.

Discussion

The findings revealed the importance of Maka-Diyos by focusing on Sophie's emotional and spiritual journey as she cared for her mother suffering from Alzheimer's disease. The researchers chose to highlight Alzheimer's disease to capture the real-life experiences of families affected by the illness, emphasizing how trials can deepen one's connection with God. According to Linton (2023), listening to and reading about the real experiences of individuals, particularly from older generations, can inspire authentic and meaningful storytelling. Moreover, the findings revealed that the story showcases the value of Maka-Tao by illustrating the spirit of *bayanihan* and compassion that emerged strongly during the pandemic. The researchers wrote the story centered on the core value of Maka-Tao because the pandemic revealed how vital human compassion and cooperation are for survival and recovery. According to the Philippine National Volunteer Service Coordinating Agency (2020), despite the difficulties brought by COVID-19, the spirit of bayanihan among Filipinos became a visible and powerful force. In addition, the findings revealed that the importance of Makakalikasan is depicted through the struggles of a fisherman and his community as they resist environmental destruction caused by a reclamation project. The story highlights the fisherman's determination and the community's advocacy, stressing that protecting natural resources is a shared responsibility. The researchers wrote this story based on the issue surrounding the New Manila International Airport (NMIA) project in Bulacan

and its potential negative environmental impacts, using it as a foundation to highlight the core value of Makakalikasan. According to geologist Narod Eco, the NMIA construction could worsen flooding and accelerate the sinking of nearby towns due to the extensive land reclamation required, increasing the risks faced by coastal communities. Hence, the findings revealed that this story illustrates the value of Maka-Bansa by following a young, first-time voter who learns the significance of voting responsibly and wisely. The researchers wrote a story that reflects a young voter's journey toward understanding civic responsibility and the importance of informed decision-making in elections. According to the United Nations Development Programme (UNDP), it is crucial to educate citizens about voting to ensure they understand their rights, responsibilities, and the political system, fostering a more participatory democracy.

The findings revealed that the evaluators found the story's characters to be noticeable, realistic, and impactful, with scores in the 4.00 range indicating strong agreement about their personality traits. This aligns with the assertion by Lehnen (2016), stated that well-crafted characters are essential for engaging storytelling. Also, the findings revealed that the evaluators found the plot of the story to be well-planned, clearly outlining the central problem and offering detailed solutions, resulting in an average score of 4.00, which indicates strong agreement with this interpretation. This supports Hasan's (2018) argument that a well-structured plot is essential for maintaining audience engagement. In addition, the findings revealed that the evaluators found the dialogue in the story to flow naturally and feel believable, with each character demonstrating a distinct speaking style, resulting in an average score of 4.00 that reflects strong agreement with this assessment. This supports the idea presented by Koivisto and Nykänen (2016), who argue that authentic dialogue enhances both character development and reader engagement. Moreover, the findings revealed that the evaluators strongly agreed it was easy to follow the events and understand the characters' perspectives, with an average score of 4.00 indicating strong agreement with this interpretation. This supports Nel's (2024) theory that point of view plays a crucial role in shaping a reader's experience and understanding of the narrative. Lastly, the findings revealed that the evaluators agreed the story's themes effectively reflect the writer's commentary on the Department of Education (DepEd) core values, are not overstated, and present various values through the story's outcomes, resulting in an average score of 4.00 that indicates strong agreement with this interpretation. This supports Cleave's (2024), argument that a well-defined theme enhances narrative depth and reader engagement.

The findings revealed that, it plays a crucial role in the effectiveness of digital storytelling within the educational system through the quality content within the Learning Resources Management and Development System. Tolentino et al. (2020), claimed that beyond accuracy, LRMDs focuses also on the instructional quality of content that includes how well the content is being designed to facilitate the learning. In addition, LRMDs functions as a quality assurance system that supports the selection of the high quality of digital and non-digital resources. In the context of digital storytelling, it is essential to consider instructional quality to recognize how digital storytelling can help students. LRMDs plays a crucial role in ensuring the quality, particularly in integrating and developing digital storytelling into educational practices. According to Jin et al. (2022), it is important to understand how to conceptualize and measure instructional quality to understand what can be understood as good teaching and develop approaches to improve instruction. Moreover, Learning Resources Management and Development System (LRMDs) prioritizes equitable access to the learning resources. According to Nery et al. (2024), claimed in their study it highlights the teacher training and experience effectively using LRMDs resources.

The findings revealed that the level of acceptance in the perceived usefulness of digital storytelling is good in enhancing the teaching approach, teaching achievement and useful in class. According to Fahmiyah et. al (2023), stated that age gap is one of the reasons for the difficulty in the acceptance of the technology. It shows that the younger teachers did not experience difficulty in using technology than the older teachers. In the ease of use of digital storytelling, the findings revealed that the teachers and students found the easiness of the development of digital storytelling in values formation. The students found that the ease of use in digital storytelling is highly acceptable. According to Niemi et al. (2016), digital storytelling (DST) plays a significant role in fostering 21st-century skills and enhancing student engagement. Moreover, in the intention of use of digital storytelling the findings revealed that teachers and students have a positive attitude in using digital storytelling. Digital storytelling has a positive impact on students' achievements especially in self efficacy and attitude (Kotluk & Kocakaya, 2017). Lastly, the findings revealed that it is highly acceptable the intention of using digital storytelling to keep them motivated, to become enjoyable in class, and to enhance their learning. There is a study conducted for this purpose that shows a result that practices of digital storytelling have a significant effect on the creative writing skills of secondary school students (Esra et al. (2023).

The findings revealed that the usability of the development of digital storytelling is excellent, Bouchrika (2024), stated that students' technological capabilities, research ability, writing competency, critical thinking, and creativity are all enhanced by creating digital stories. Additionally, it improves their capacity for information synthesis, analysis, and evaluation. Isaac et al. (2020), stated that in this study illustrated that digital storytelling can be used as a relevant classroom activity that can cover a wide range of the skills and the knowledge of the students that must be embraced in order to complete or finish different tasks. Moreover, according to Najat et al. (2014), the results of their study suggested that digital storytelling can create a constructivist learning environment that enhances student engagement and their learning outcomes.

The findings reveal how DST can significantly increase student motivation and participation that can lead to student acceptability on the material or the Digital Storytelling. In the context of Values Formation, through using DST students can help understand the importance of values like empathy and especially the four (4) core values in Edukasyon sa Pagpapakatao (E.S.P). In addition, the ability to tell personal or fictional stories that reflect moral dilemmas or values-driven that can help students better emotionally relate to these values (Hadj, 2024.) This study shows that using DST in values formation can help in student critical thinking skills and this material is an opportunity to critically engage with values and ethics. However, despite acceptance there's some teachers hesitate to use this tools for the reason having fear that not may align on the subject and the lesson objective (Kukul, 2023). Also, this study highlights that using DST needs further training for the teachers to ensure the educators feel equipped to effectively incorporate DST into their teaching regardless of subject area. Furthermore, the study highlights the challenges to time constraints, making DST consume time effort for the student such as brainstorming, scripting and editing. Despite the popularity of DST some students still experience lack of confidence in their own creativity for the reason lack of training and resources to enhance and practice using DST. However, still digital tools have great potential as pedagogical tools for the secondary students and the author promoted the DST for student's literacy development. Through providing students necessary time, resources and support, Digital Storytelling successfully engages in digital storytelling activities (Lugossy et al. 2024).

Conclusion

This study concluded that digital storytelling is a useful tool in teaching the DepEd Core values for the Secondary Students. While students appreciated and enjoyed the use of digital storytelling. Hence, the teachers faced challenges in technology.

The evaluation of digital stories strengthens the final output for the improvement. Despite these challenges, the overall acceptability and the Usability of digital storytelling were highly valued. This study concluded the importance of refining resources to instill the values formation for the secondary students and to improve the educational materials for the secondary students. The organization of a written digital story, anchored in the DepEd Core Values, effectively weaves character, plot, dialogue, point of view, and theme to mirror real-life situations, fostering a deeper understanding and appreciation of Maka-Diyos, Makatao, Makakalikasan, and Makabansa among readers. In the development of digital storytelling materials, it's hard to do it due to the fact that there's a thing that needs to be considered and these are; Content quality, Instructional quality, technical quality, and other findings. Digital Storytelling is not for all educators not all learner nor the teacher wants to adopt the digital tools as their instructional materials. Some educators have a hard time using it for the reason they don't have enough knowledge on how to operate digital tools. Besides that, lack of resources and their age. Teachers facing the digital tools as a challenge because of their age especially the older educator. However, despite the popularity of Digital Storytelling educators in the 21st century still trying to accept and use the digital storytelling as an effective weapon to be more critical thinkers, logical, creative and have deeper understanding learners and educator.

Recommendations

Based on the findings of the study, it is recommended to the school administrator and values teachers should have training on the use of instructional material particularly the animator to develop a digital storytelling in Prenza National High School. The teachers should develop digital storytelling in the Grade 10 students.

The researchers also recommend this paper to future researchers to test the effectiveness of the digital-storytelling for secondary students.

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