

STUDENTS' UNDERSTANDING OF LOCAL WISDOM AND ENVIRONMENTAL ISSUES IN SHORT STORIES

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ABSTRACT

The reserch aimed to describe students' knowledge of themes, character education (figures) who care about the environment, environmental issues, local wisdom, and students' expectations after reading short stories. The theories used are ecocriticism, local wisdom, and literary reception. This is a descriptive qualitative study. The data sources include a questionnaire with students' perspectives on short stories and five short stories by Jemmy Piran. The questionnaire included research data, namely student perspectives. Data was gathered via a questionnaire. The data gathering began with students reading the five short stories, after which they answered the questionnaire questions. The analysis of students' understanding yielded the following results: 1) The theme of the sea amounting to 0.80%, and the theme of Harin Botan 0.25%; 2) data on students' understanding of environmentally conscious character figures amounting to 1.60%; 3) data on fish population damage 0.51% and marine pollution 0.29%; 4) local wisdom includes traditional rituals amounting to 0.74%, beliefs 0.27%, local knowledge 0.27%, and customary law 0.09%; and 5) data on student readers' expectations about environmental preservation and local culture amounting to 1.34%. The research shows that local wisdom, such as traditional rituals and customary laws, is not only a culture but also an effective strategy for preserving the environment. The implication is that this understanding can enrich students' literacy regarding the importance of maintaining traditional values in facing modern environmental challenges.

Keywords: ecocriticism, local wisdom, short story, student understanding, Timor University students

INTRODUCTION

Ecocritical research is used in literary research to help scientists overcome environmental disasters (Garrard, 2012b). Ecological damage is currently an urgent issue due to climate change, deforestation, pollution, and water and soil quality degradation (Murphy, 2024; Ojebode, 2023). Therefore, the involvement of all disciplines, including literature, is needed in environmental conservation efforts. One of the conservation efforts is to utilize short stories through green literature learning. Green literature, or ecocriticism, is a bridge for literature lovers to criticize irresponsible people for the current environmental damage (Schneider-Mayerson et al., 2023; Siwi et al., 2022). Ecocriticism can inspire the formation

of attitudes that help mitigate climate change and has a significant influence on the formation of environmentally conscious characters (Juanda et al., 2024). In other words, green literature takes sides as the shaper of environmentally conscious attitudes.

Previously, ecocritical research was conducted by Afandi et al. (2024) and Juanda et al. (2024). The similarities and differences between th research and the previous ones are as follows: 1) This study, like the previous one, focuses on short stories with environmental themes. The difference is that the content of local wisdom was not found in previous researchers, while this study examined short stories with ecological themes and local wisdom content; 2) previous researchers used the theory of ecocriticism and reader reception, whereas this study used the theory

of ecocriticism, literary reception, and local wisdom; 3) Previous researchers' subjects were Makassar State University students, whereas the subjects of this study were carried out at Timor University by utilizing the works of short story authors from East Nusa Tenggara so that the literary learning material was very contextual to the lives of students.

One of the efforts to preserve the environment is through learning short stories with environmental themes and local wisdom (Primayanti & Puspita, 2022). Local wisdom as a way of life and knowledge and various life strategies in the form of activities carried out by local communities to meet their needs (Hamid et al., 2024). Local wisdom should be preserved and integrated into education (Hasan et al., 2024, p. 1).

Education is the process of reconstructing ongoing experiences to prepare students to participate actively in society by developing critical and creative thinking skills (Dewey, 2004). Thomas Lickona argues that education plays a crucial role in developing environmentally conscious individuals by instilling ethical values and increasing awareness and responsibility for nature preservation (Lickona, 2009).

An example of a literary work that contains local wisdom and environmental issues is found in Jemmy Piran's online short story. This short story gives this study an advantage over previous studies. Previous studies have not studied students' in-depth understanding using local wisdom short stories. Another novel aspect is that the local wisdom content in the five short stories is highly relevant to the environment of Timor University students on the Indonesia-Timor Leste border. Jemmy Piran is an author from East Nusa Tenggara, Indonesia. Therefore, the material used as learning material for short story appreciation is considered relevant to the lives of student readers.

One study that examines reader understanding is the study of literary reception (Singh & Pratima, 2022). This theory shifts the focus from the author and the text itself to the relationship between the text and the reader. It paves the way for a more pluralistic and contextual understanding and highlights the importance of individual and collective experiences in literary appreciation. The horizon of expectation is a collection of readers' expectations when they approach a text. These expectations are shaped by previous reading experiences, prevailing literary norms, genres, and socio-historical contexts (Jauss, 1982; Meretoja, 2023; Sorvari, 2024).

This research focuses on 1) themes, 2) character education (figures) caring for the environment, 3) environmental damage phenomena, 4) forms of local wisdom, and 5) readers' expectations in short stories. The research problem is to determine how student readers understand Jemmy Piran's five online short stories. The purpose of the study is to describe and interpret student understanding according to the focus of the research.

METHODS

The research applies descriptive qualitative research. The theories include ecocriticism, local wisdom, and literary reception. The research focuses on the reader's understanding of the questionnaire, including themes, character education (figures) who care about the environment, issues of environmental damage, types of local wisdom, and readers' expectations after reading the short story. Data was collected using a questionnaire. The data collection stage began with the reading of the five short stories. Next, students answered the question items in the questionnaire. The questionnaire consists of the following questions: (1) Mention the themes contained in the five short stories by Jemmy Piran!; (2) In the five short stories you read, who is the character who is concerned about the environment?; (3) Do you think the five short stories contain any environmental damage phenomena, such as pollution, disasters, forests, settlements, animals, or global warming?; (4) Mention the various forms of local wisdom presented in the five short stories, as well as the role of local knowledge in environmental conservation; (5) Did you learn anything about the value of environmental preservation and local knowledge after reading the five short stories?

Furthermore, the source of research data, namely a questionnaire containing a series of questions and five online short stories by Jemmy Piran (2017, 2018a, 2018b, 2019, 2022). The short stories have been published online on the *ruangsastra.com* site. The data in this study consists of sentences from a questionnaire about student comprehension. The population of this research is 786 students from the Indonesian Language and Literature Education Department, Faculty of Education, Timor University, who were recorded in the Dikti Forlap. The sample is 122 students and uses purposive sampling. Next, coding (data reduction) was carried out using Nvivo 12 software. At this stage, similar student understandings are grouped to facilitate thematic analysis and interpretation. Categorization is based on similarities in themes, characters of environmentally conscious figures (characterization), environmental issues, forms of local wisdom, and student expectations contained in the questionnaire. The results of the thematic analysis are presented in the form of tables and descriptions. After data reduction, the following stages were presentation and conclusions/verification (Matthew et al., 2019).

RESULTS AND DISCUSSIONS

The research examines students' understanding, including 1) short story themes, 2) character education (figures) who care about the environment, 3) environmental damage issues, 4) types of local wisdom, and 5) students' horizons of hope. Table 1 shows the results of a percentage of students' understanding.

Table 1 Percentage of Student Understanding

Coding	Percentage coverage
Sea theme	0,80%
Harin Botan Theme	0,25%
Environmentally conscious character	1,60%
Animal Issues	0,51%
Pollution Issues	0,29%
Ritual or Customary Traditions	0,74%
Trust	0,27%
Local Knowledge	0,27%
Norms and customary law	0,09%
Message and Horizon of Readers' Expectations	1,34%

The overall percentage of students' understanding, namely: first, theme. The theme of the sea is 0.80%, while the theme of Harin Botan is 0.25%. Second, character education (figures) who care about the environment is 1.60%. Third, environmental issues such as fish population damage account for 0.51%, while pollution accounts for 0.29%. In terms of local wisdom, traditional rituals account for 0.74%, beliefs for 0.27%, knowledge for 0.27%, and customary laws for 0.09%. Fifth, the reader's expectation is 1.34%. The results of the study are described as follows.

The first description is discussed to answer the questionnaire questions regarding the short story theme. Data from students' reading results of the five short stories were found, namely the theme of the sea and the theme of Harin Botan, the guardian of the sea. Table 1 shows that the sea is the main theme in the five short stories, accounting for 0.80% of the data. Selfiana Ngambut, a student, claims that this short story is about the sea. Here are the student's comments.

Reference 8 - 0,04% Coverage

Data 1. The theme of these five short stories is the "sea." These five short stories tell everything about the condition of the sea, starting from how to catch fish, performing rituals that have existed since ancient times, and also speaking about the guardians of the sea. The community considers the sea as their mainland "grains of rice." They go to the sea to fish for a living. These short stories also describe how the community protects the sea and preserves local wisdom passed down through generations (Selfiana).

Several other students, including Duldesta, Maria Susanti, Martha, Elisabeth, and Nelsiana, emphasized that the five short stories depict the daily lives of fishermen at sea. The argument was also confirmed by a student named Maria Apriliana Talan. This short story tells the atmosphere of life at the bottom of the ocean. The data presented below are student comments on the sea theme.

Reference 32 - 0,02% Coverage

Data2. From the beginning, this short story tells about the sea and the life in the sea. This story also tells about a skilled sailor who has married a seaguard and continues a new life in the sea (Martha).

Reference 3 - 0,04% Coverage

Data 3. The theme of the sea is because the short story can describe fishermen and their daily lives at sea (Duldesta).

Reference 18 - 0,05% Coverage

Data 4. I chose the sea as the theme for these five short stories because it contains a lot of information about the atmosphere and life on the seabed. Some of the characters become more accustomed to the underwater environment. There are also horror events that occur under the sea. A character named Koli, who works as a fisherman every day, already knows when the fish will gather (Maria Apriliana).

A student named Magdalena said the short story excerpt shows that the characters in the story live with the sea. Here is an excerpt from the story.

Reference 17 - 0,04% Coverage

Data 5. *"Nenek moyang kami adalah pelaut-pelaut yang tidak pernah mengenal musim. Tidak takut pada kematian. Buntung dan puntung itu hal biasa, sebab laut adalah lahan utama, tempat dimana setiap tetes keringat menjadi "bulir-bulir"*

"Our ancestors were sailors who never knew the season. Not afraid of death. Losses and stubs were common because the sea was the mainland, a place where every drop of sweat became "beads." (Piran, 2019)

The theme of the sea in the five short stories is understood by students as the core of the life and culture of coastal communities. Students noted that these short stories describe various aspects of fishermen's lives, such as how to catch fish, traditional rituals, and the presence of sea guardian creatures. The sea becomes the center of livelihood and spirituality and is depicted as an element that is integrated with the daily lives of the characters in the stories (data 1). Human interaction with the sea reflects local wisdom and cultural heritage that has been passed down from generation to generation (data 5), making the theme of the sea the main symbol in the narratives of these short stories.

These findings indicate that students have succeeded in comprehensively understanding the theme of the sea in the short stories. They are able to relate the sea to everyday life, local wisdom, and the culture and spirituality of coastal communities. These data also show the effectiveness of short stories in conveying messages about the importance of

preserving the environment and local culture.

This study is in line with previous research by Afandi et al. (2024). It is supported by the theory of Jauss et al. (2022) that studies that examine reader understanding are literary reception studies (Singh & Pratima, 2022). The reader's horizon is influenced by previous reading experiences, prevailing literary norms, genres, and socio-historical contexts (Jauss, 1982; Meretoja, 2023; Sorvari, 2024). Next, the description of the Harin Botan theme is as follows:

Harin Botan's theme data in Table 1 amounted to 0.25%. Students Fera, Expransa, and Jeni revealed that the theme of the five short stories is Harin Botan. Other students, Maria Vitrianadivi and Orlinda, emphasized this argument, saying that the five short stories tell about the community's belief in the existence of beautiful women who guard the sea in the East Nusa Tenggara Sea. The data of student comments are as follows:

Reference 1 - 0,01% Coverage

Data 6. Harin Botan is a sea guardian in the form of a beautiful woman. This theme fits perfectly with the five short stories, which tell about gorgeous women who live in the sea (Expransa).

Reference 3 - 0,02% Coverage

Data 7. The theme of these five short stories is the same: they tell the people's belief about the guardian of the sea known as "Harin Botan." She often transforms into a woman, an octopus, or a snake (Fera).

Reference 15 - 0,01% Coverage

Data 8. "Harin Botan" theme. This theme moves the traditions and beliefs of local communities in East Nusa Tenggara to maintain the balance of the sea (Maria Vitrianadivi).

The data below is an excerpt from a story that supports the student's argument.

Reference 14 - 0,02% Coverage

Data 9. "*Ya, karena ia akan muncul dari dalam laut sebagai sesosok perempuan cantik beraroma kerang*"

"Yes, because she will emerge from the sea as a beautiful woman with a shellfish scent" (Piran, 2018b).

Reference 19 - 0,01% Coverage

Data 10. "*Ia berjalan begitu anggun, amat sangat anggun, dan rumbai gaunnya dipegang dengan mulut – mulut ikan yang berbaris di belakangnya*" "She walked so gracefully, so very gracefully, and the tassels of her dress were held by the mouths of the fish that lined up behind her." (Piran, 2018b).

Students' understanding of Harin Botan in the five short stories shows that this theme focuses on the mythological figure of a beautiful woman who guards

the sea in East Nusa Tenggara (data 8). Students Fera, Expransa, and Jeni identified Harin Botan as an attractive woman with the ability to transform into a snake or octopus (data 7).

Maria Vitrianadivi went on to say that this theme reflects local beliefs about the myth of the sea guardian, which is important in sea traditions and balance. The short story quote, "The figure of a woman with the scent of shells and the dress used by Harin Botan," supports the argument that this theme describes the role of mythology that integrates elements of local beliefs with the lives of coastal communities.

Overall, the results of the interpretation of students' understanding of the Harin Botan theme show that they are able to link elements of mythology, local beliefs, and ecological messages contained in the five short stories. They recognize the role of Harin Botan as a symbol of faith and tradition that integrates cultural aspects with environmental conservation practices in coastal communities.

Next, in addition to questions about the theme, this study examined students' understanding of characters who have environmentally conscious characters in literary works or short stories.

Literary works can inspire the formation of attitudes and have a significant influence on the formation of environmentally conscious characters (Juanda et al., 2024). Table 1 shows that the character who has an environmentally conscious character in the five short stories is Harin Botan, with a percentage of 1.60%. A student named Pricilia said that the character Harin Botan has cruel actions. However, his actions were a form of disappointment towards greedy fishermen (data 11). The following are student comments.

Reference 64 - 0,03% Coverage

Data 11. Harin Botan Character. This character wants to protect the sea. He represents nature's voice, urging humans to treat it fairly and wisely. His cruel actions towards fishermen illustrate that nature will punish them if they break the rules. Harin Botan may seem cruel, but his actions reflect his disappointment towards greedy and destructive humans (Pricilia).

Students named Sherly (data 12), Sindi, Theresia, and Desi support the data. Harin Botan killed fishermen who destructively caught fish. Here are the students' comments.

Reference 79 - 0,04% Coverage

Data 12. In the short story, the one who tries to protect the sea is Harin Botan. Harin Botan kills the fishermen who take the fish. "Terumbu karang rusak karena bom. Ikan - ikan kecil dan besar mati karena diracuni potas". Bombs damage coral reefs. Small and large fish die from being poisoned by potassium (Sherly).

This opinion was emphasized by a student

named Ira. Harin Botan's caring character is shown when he emerges from the seabed and transforms into a human. He interacts with fishermen and teaches them how to catch fish properly. Harin Botan's attitude shows his concern and devotion so that the sea remains abundant. The following is an excerpt from the short story taken by a student named Ira.

Reference 74 - 0,03% Coverage

Data 13. *"Ia datang dengan semangat membara kepada kami. Ia memperkenalkan diri sebagai seorang yang peduli pada laut. Katanya lebih lanjut, ia berasal dari kota dan ingin tinggal dikampung kami, mengajarkan kepada kami bagaimana menangkap ikan yang baik dan menjaga laut agar tetap berlimpah. Ia peduli bahkan katanya berulang-ulang bahwa ia sangat mencintai laut. Hidupnya ingin iaabdikan sepenuhnya kepada laut"*.

"He came with a burning passion. He introduced himself as someone who cares about the sea. He went on to say that he is from the city and would like to live in the village, teach us how to catch good fish and keep the sea abundant. He cares, and he repeatedly expresses his love for the sea. He wants to dedicate his life to the sea" (Piran, 2019).

Students identified Harin Botan as a character who cares about the environment and has actions that reflect concern for the ocean. Although Harin Botan sometimes seems cruel, such as when punishing fishermen who damage the sea with bombs or poison, these actions are considered a reflection of disappointment with the damage caused by humans. In addition, Harin Botan also tries to educate fishermen on how to catch fish properly to maintain the abundance of the ocean. In short, Harin Botan shows environmental concern through preventive actions and education to preserve the sea.

Green literature research reflects the connection between humans and nature in literary works (Schneider-Mayerson et al., 2023; Siwi et al., 2022). One of the topics discussed in Garrard's ecocritical study is environmental damage. This section answers the third question in the questionnaire regarding the issue of environmental damage in short stories.

Environmental problems were found, namely damage to fish populations and seawater pollution. This data was presented by students named Maria Susanti, Maria Antonia, and Inocentes, which is in accordance with the research of Garrard (2012a)

First, data on the problem of fish population damage amounted to 0.51%. Students connect the context of the story to everyday reality about the habits of fishermen using tiger trawls. The data shows that fishermen are exploitative, so the fish population is decreasing (data 14). The following is an excerpt from student comments.

Reference 26 - 0,03% Coverage

Data 14. This short story describes the phenomenon of damage to the sea and the animals that live in it. Fishermen currently use their knowledge to catch fish with tiger trawls. The population of sea fish is decreasing (Inocentes).

Second, pollution-related data accounted for 0.29%. This data was found by students named Lisbeth, Selfiana, Ira, and Fera. Coastal communities pollute seawater with plastic waste and the use of poisons like potassium (data 15). As described in the story excerpt, this degrades water quality and leads to fish deaths. Thus, these short stories also highlight how environmental pollution affects the marine ecosystem as a whole. The following are student comments.

Reference 4 - 0,02% Coverage

Data 15. Environmental damage, including seawater pollution, is a recurring theme in these five short stories. Fishermen catch fish using potassium, which kills both large and small fish. Garbage also pollutes the coastline (Fera).

The following is an excerpt from the short story.

Reference 5 - 0,04% Coverage

Data 16. *"Ikan kecil dan besar mati karena diracun potas. Bagaimana ikan bisa hidup jika tiap hari laut dicemari dengan sampah-sampah?"* "Small and large fish die from potash poisoning. How can fish survive if the sea is polluted with rubbish every day?" (Piran, 2019). *"Lautmu kotor, tercemar, dan bau."* "Sampah-sampah plastik memenuhi pesisir tempat ia mendamparkan sampannya". "Your sea is dirty, polluted, and smelly. Plastic trash litters the shore where he beached his boat" (Piran, 2022).

Students' understanding of the issue of environmental damage in the five short stories shows that they reflect two main problems: damage to fish populations and seawater pollution. In short, these short stories highlight the negative impacts of unsustainable fishing practices on fish populations.

Overall, students understand that these short stories depict the negative effects of human activity on the ocean. The presentation of issues like overfishing and marine pollution highlights how human behavior harms the aquatic ecosystem.

Environmental preservation can be done by utilizing local wisdom (Afandi et al., 2024). Local wisdom as a way of life and knowledge and various life strategies in the form of activities carried out by local communities to meet their needs (Hamid et al., 2024). Local wisdom data was found by students named Markus and Maria Susanti. Table 1 shows local wisdom: a) ritual traditions 0.74%, b) beliefs 0.27%, c) local knowledge 0.27%, and d) customary norms/laws 0.09%.

First, the ritual tradition. Coastal communities

perform rituals that have been passed down from generation to generation. The goal is to honor the traditions of their ancestors, who bequeathed them not to take anything excessive from the sea (data 17, 18). Here are excerpts from student comments.

Reference 1 - 0,04% Coverage

Data 17. In the five short stories I read, I found local wisdom, namely ritual traditions. They perform rituals before going down to the sea, namely carrying eggs, cotton, and miniatures. According to the elders, the community performs the ceremony to honor and respect their ancestors (Maria Susanti).

Reference 8 - 0,02% Coverage

Data 18. The elders bequeath rituals, beliefs, and respect for the sea". The role of local wisdom in environmental conservation is that when taking marine products, at least something must be given in return, and something must not be taken excessively (Markus).

The comments put forward by Maria Susanti are supported by the following short story quote.

Reference 2 - 0,02% Coverage

Data 19. *"Wasiat itulah yang sampai sekarang masih ia pegang dengan teguh. Hanya ada satu larangan, tidak boleh mengambil sesuatu secara berlebihan. Sementara pada bulan sabit, ia membawah telur, kapas, miniatur, piring yang terbuat dari daun lontar yang dianyamnya sendiri. Piring itu berisi beras lalu dibawa ke pantai. Menurut leluhur, Ia membuat serimonial semacam itu, untuk menghormati pertemuan antara raja laut dan raja darat di pantai"*. "That is the will that he still holds firmly until now. There is only one prohibition: not to take anything excessively. While on the crescent moon, he brings eggs, cotton, miniatures, and plates made of palm leaves that he woven himself. The plates are filled with rice and then taken to the beach. According to his ancestors, he held a ceremony to honor the meeting between the sea and land kings on the beach (Piran, 2017).

Some fishermen use ancient methods. Before going to sea, they scoop up a little "bala" and then wrap it in cotton. The cotton is then placed in a corner of the beach. After that, they recite a spell among the mangrove trees (data 20). Here are the students' comments.

Reference 8 - 0,02% Coverage

Data 20. The short story "In the Circle of the Sea" displays local wisdom, such as ancient techniques for catching fish by scooping up "bala," wrapping it in cotton, and placing the cotton in a corner of the beach after reciting a mantra among the mangroves (Sherly).

The ritual tradition, as stated by Maria Susanti and Markus, is a tradition of respect for the people of East Nusa Tenggara to their ancestors before going to sea, including the use of eggs, cotton, and miniatures as part of the ritual to honor the sea. This ritual reflects an effort to maintain a harmonious relationship between humans and the sea and ensure that there is no overexploitation of marine resources.

Second, trust. Students named Irma, Pricilia, Maria Orilia, Jeni, Selfiana, and Maria Antonita found data on trust. This data also represents comments from students who have similar answers.

A student named Maria Antonita said Harin Botan is a myth believed by the Flores tribe in East Nusa Tenggara. Harin Botan can only appear to certain people. In the Lamaholot belief, Flores, Harin Botan is a figure who guards the sea (data 21).

Reference 9 - 0,02% Coverage

Data 21. The Lamaholot community in Flores believes that Harin Botan is the guardian of the sea. He appears to certain people (Maria Antonita).

Local beliefs, as expressed by Maria Antonita and other students, include myths about Harin Botan, who appear in certain forms as guardians of the sea. These beliefs reinforce the importance of protecting the sea by obeying the rules related to Harin Botan's existence.

Third, knowledge. The knowledge in question is how to catch fish traditionally. Students named Apolonia, Inocentus, Martha, and several others found this data. The students said that some fishermen catch fish with simple tools such as rowing boats, simple fishing equipment, arrows, and spears only for large fish. This method shows the community's attachment to traditional methods that have been passed down from generation to generation (data 22, 23). The following are student comments and short story excerpts.

Reference 7 - 0,01% Coverage

Data 22. The Koli use traditional fishing gear inherited from their ancestors, such as rowing boats and simple fishing rods (Priscilia).

The following is an excerpt from the short story.

Reference 9 - 0,02% Coverage

Data 23. *"Saat orang-orang mengandalkan ilmu pengetahuan untuk menangkap ikan, Koli masih menggunakan cara lama. Mengeruk sedikit "bala" dan membungkusnya ke dalam kapas, lalu meletakkan kapas itu di sudut pesisir setelah merapalkan mantra di antara bakau, dan satunya dilarungkan ke laut"*. "While people rely on science to catch fish, Koli still uses the old way. Scooping up a little "bala" and wrapping it in cotton, then placing the cotton in a corner of the coast after reciting a spell among the mangroves, and the other is thrown into the

sea” (Piran, 2017).

Fourth, norms and customary law. Norms and customary laws were discovered by students named Regina, Sherly, and Guenelya. Fishermen have rules for going to sea. The consequences for fishermen who violate the rules will receive sanctions, or what is called customary law.

A student named Regina said that fishermen go to sea from November to March. Before going to sea, they must perform a ritual. Those who do not perform the ritual are given customary sanctions. The norms and customary sanctions can be seen in the following short story excerpt.

Reference 1 - 0,04% Coverage

Data 24. *“Dulu mereka menutup laut, tidak menangkap ikan selama beberapa bulan. Biasanya mulai dari bulan November hingga bulan Maret. Bagi warga yang melanggarnya akan mendapat sanksi berupa memberi makan warga sekampung, menyiapkan seekor babi, dan beberapa karung beras”*. “They used to close the sea and stop catching fish for several months, usually from November to March. Residents who violate it will be punished by feeding the entire village and preparing a pig and several sacks of rice” (Piran, 2019).

Regina and other students identified customary laws and norms. These norms involve rules of fishing followed by specific rituals, with sanctions for those who break them (data 24). These norms ensure the sustainability of fishing practices and protect marine resources from unsustainable exploitation.

Overall, students understand that local wisdom in the short stories includes ritual traditions, beliefs, local knowledge, and customary norms. This local wisdom emphasizes the importance of a harmonious relationship between humans and the sea, acting as a guideline to protect and preserve the environment from damage caused by human activities.

Finally, the students' expectations after reading the short story were discussed. Table 1 shows that 1.34% of students have expectations regarding the importance of environmental preservation and local wisdom. The horizon of expectations is a collection of expectations held by readers when they approach a text (Jauss, 1982; Meretoja, 2023; Sorvari, 2024).

A student named Nelsiana said that environmental conservation is increasingly clear and important to do (data 25). These five short stories describe the relationship between humans and the sea. Nelsiana understands that marine life is very valuable. The sea contributes to the lives of fishermen.

Selfiana Ngambut also expressed her hope that fishermen will not damage the sea and pollute it with garbage (data 26). Students Maria Glotilda, Ira, and Mariana Oviyani supported this opinion. They hope that fishermen will not throw trash on the seashore (data 27).

Another message and hope were expressed by a student named Adrianus (data 28). In the midst of rapid technological advances, we must remember traditions and customs, such as ritual ceremonies, before going to sea, which is in line with research by Singh & Pratima (2022). Studies that examine reader understanding are literary reception studies. This theory shifts the focus from the author and the text itself to the relationship between the text and the reader (Jauss, 1982; Meretoja, 2023; Sorvari, 2024). The following is an excerpt from student comments.

Reference 35 - 0,08% Coverage

Data 25. After reading the short story, preserving the environment becomes clearer and more important. This story describes the relationship between humans and the sea. The message conveyed through this story is that marine life has valuable value, so it must be protected. By preserving the sea, we not only maintain the environment but also ensure the survival of humans and other species that depend on it (Nelsiana).

Reference 13 - 0,04% Coverage

Data 26. We need to learn how to preserve marine life. Pollutants have a significant effect on the environment. Garbage pollutes the air, and the seawater becomes contaminated. As a result, properly disposing of waste can help to reduce pollution. Excessive fishing by fishermen depletes the fish population and damages marine habitats. The hope for fishermen is that they refrain from using methods that will harm the fish ecosystem (Selfiana).

Reference 27 - 0,03% Coverage

Data 27. We must maintain and preserve the sea to keep it clean and beautiful, as well as to ensure that the sea's animals thrive. One example of how we can help to preserve the beach is to dispose of garbage in its proper location rather than on the seashore (Magdalena).

Reference 30 - 0,04% Coverage

Data 28. Of the five short stories I read, "In the Circle of the Sea" impressed me the most because it teaches the importance of environmental preservation and local wisdom. The modern world's influence has forced our fishermen to forget traditions, customs, and rituals before catching fish (Adrianus).

The horizon of student expectations shows expectations of the importance of preserving the sea and local wisdom for the survival of humans and marine ecosystems, as well as maintaining cultural heritage, which is in line with research (Murphy, 2024; Ojebode, 2023). Environmental issues and local wisdom must be addressed immediately (Primayanti & Puspita, 2022).

Overall, the student's horizon of expectations shows awareness and hope for the importance of preserving the sea and local wisdom for the sustainability of the ecosystem and human life. They expect changes in attitudes and behavior in maintaining the cleanliness of the sea, avoiding excessive exploitation, and maintaining traditions and customs as part of environmental conservation efforts. This interpretation shows that students have a positive understanding and attitude towards environmental conservation and local wisdom, as well as a strong desire to maintain valuable cultural heritage amidst the challenges of modernization.

This study complements Juanda's (2024) research. This study tests the reader's ability through essay questions (questionnaires) so students can express their diverse and in-depth opinions. Through this study, students learn about their environment and culture. According to Ferdi et al. (2024), local culture is important to preserve and integrate into education. Digital short stories significantly influence the formation of environmentally conscious characters (Juanda, et al., 2024). Thus, using digital short stories can provide students with an in-depth understanding of local wisdom and environmental issues, thereby forming an environmentally conscious character and a tool you have for cultural preservation.

CONCLUSIONS

Based on the student's understanding, the results conclude that the themes contained in the five short stories are the theme of the sea and the theme of Harin Botan. The character who has character who cares about the environment is the character of Harin Botan, a mythical creature who guards the sea in East Nusa Tenggara. The issue of environmental damage in the short stories includes the problem of damage to fish populations and marine pollution. Several forms of local wisdom were found, including traditional rituals, beliefs, local knowledge, and customary law. Students have hopes that fishermen will not pollute the sea. In addition, students hope that fishermen will refrain from exploiting fish excessively.

This research contributes to students by deepening their understanding of environmental issues and local wisdom. However, there are limitations, such as limited samples and the use of qualitative methods. Therefore, future research can use quantitative and qualitative methods (mixed methods) with several samples from different universities. Researchers can use comparative studies to see the literacy skills of students from several universities. In addition, qualitative methods are needed to explain students' understanding in depth and comprehensively.

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REFERENCES

- Afandi, I., Anshari, A., Agussalim AJ, A., & Juanda, J. (2024). Local wisdom through online short story literacy as a means of marine conservation. *Asian Journal of Social and Humanities*, 2(5), 1042-1055. <https://doi.org/10.59888/ajosh.v2i5.238>.
- Dewey, J. (2004). *Democracy and education: An introduction to the philosophy of education*. Aakar Books.
- Hasan, M. F., Monita, D., & Sukiman. (2024). Revitalisation of Rejang tribal local wisdom: Integration of cultural values in the operational curriculum innovation of elementary schools in Rejang Lebong, Indonesia. *Education 3-13*, 1-18. <https://doi.org/10.1080/03004279.2024.2318246>.
- Garrard, G. (2012a). Endgame: Beckett's "ecological thought." *Samuel Beckett Today - Aujourd'hui*, 23, 383-397. <https://doi.org/10.1163/18757405-023001025>.
- Garrard, G. (2012b). Teaching ecocriticism and green cultural studies. In *Teaching Ecocriticism and Green Cultural Studies*. <https://doi.org/10.1057/9780230358393>.
- Hamid, A., Ritonga, S., & Muda Nst, A. (2024). Kearifan lokal Dalihan Na Tolu sebagai pilar toleransi beragama pada masyarakat Tapanuli Selatan. *Jurnal Ilmu Sosial Dan Humaniora*, 13(1), 132-143. <https://doi.org/10.23887/jish.v13i1.74809>.
- Jauss, H. R. (1982). *Toward an aesthetic of reception*. University of Minnesota Press.
- Juanda, Djumingin, S., Mantasiah, R., Afandi, I., & Intang, D. (2024). Ecoliteracy digital short stories among students in Indonesia. *Journal of Turkish Science Education*, 21(2), 254-270. <https://doi.org/10.36681/tused.2024.014>.
- Juanda, J., Afandi, I., & Yunus, A. F. (2024). Digital short story literacy and the character of environmentally concerned students. *Journal of Language Teaching and Research*, 15(2), 415-427. <https://doi.org/10.17507/jltr.1502.10>.
- Lickona, T. (2009). *Educating for character: how our schools can teach respect and responsibility*. Random House Publishing Group.
- Matthew B. Miles, Michael Huberman, & Johnny Saldana. (2019). *Qualitative Data Analysis* (4th Ed.). Sage.
- Meretoja, H. (2023). On implicated readers and spectators: A response piece. *Parallax*, 29(4), 516-526. <https://doi.org/10.1080/13534645.2024.2329412>.
- Murphy, E. (2024). Healing landscapes and grieving eco-warriors: Climate activism in children's literature. *Children's Literature in Education*. <https://doi.org/10.1007/s10583-023-09567-3>.
- Ojebode, A. O. (2023). Seven Falls from Olumirin's Pot: African eco-spirituality and myths of Erin-Ijesha Waterfalls in Nigeria. *Green Letters*, 27(3), 371-389. <https://doi.org/10.1080/14688417.2023.2272942>.
- Piran, J. (2017). *Dalam lingkaran laut*. Ruang Sastra. <https://ruangsastra.com/10384/dalam-lingkaran-laut/>

- Piran, J. (2018a). *Harin Botan*. Ruang Sastra. <https://ruangsastra.com/13233/harin-botan/>
- Piran, J. (2018b). *Yang bernyanyi pada Malam Dingin*. Ruang Sastra. <https://ruangsastra.com/14864/yang-bernyanyi-pada-malam-dingin/>
- Piran, J. (2019). *Pemanggil Kematian - Ruang Sastra*. Ruang Sastra. <https://ruangsastra.com/16612/pemanggil-kematian/>
- Piran, J. (2022). *Laut Mengambil Cintaku*. Ruang Sastra. <https://ruangsastra.com/26942/laut-mengambil-cintaku/>
- Primayanti, N. W., & Puspita, V. (2022). Local wisdom narrative in environmental campaign. *Cogent Arts & Humanities*, 9(1). <https://doi.org/10.1080/23311983.2022.2090062>.
- Schneider-Mayerson, M., Gustafson, A., Leiserowitz, A., Goldberg, M. H., Rosenthal, S. A., & Ballew, M. (2023a). Environmental literature as persuasion: An experimental test of the effects of reading climate fiction. *Environmental Communication*, 17(1), 35-50. <https://doi.org/10.1080/17524032.2020.1814377>.
- Singh, R., & Pratima, P. (2022). Jauss' theory of reception. *International Journal of Health Sciences*, 6(S6), 2151-2162. <https://doi.org/10.53730/ijhs.v6ns6.10261>.
- Siwi, P., Arafah, B., Wulan, S., Purwarno, P., Ekalestari, S., & B. Arafah, A. N. (2022). Treatment of nature: An ecocriticism approach in 'Komat Kamit' of Tejo and Kamba's Tuhan Maha Asik. *Theory and Practice in Language Studies*, 12(7), 1278-1285. <https://doi.org/10.17507/tpls.1207.05>.
- Sorvari, M. (2024). The reception of post-Soviet Russian fiction through the peritexts of Finnish translations. *Perspectives*, 1-14. <https://doi.org/10.1080/0907676X.2024.2355189>.

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