



Microblog Content to Instill Care for Natural Environment Character in High School Students

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Abstract

Instilling the character of caring for the natural environment in students is needed to increase awareness and active participation in natural conservation. With Instagram's popularity, microblog content has great potential to be used in instilling the character of caring natural environment more effectively. This study aims to explain the process of preparing environmental care microblog content, implementation on social media, and student responses to microblog content. With a quantitative approach and one-shot case study method, data collected through validation, tests, questionnaires, and documentation. The results showed that 1) The content preparation are considered very valid (material experts 90%, media experts 93%), 2) implementation on Instagram is designed to deliver messages effectively, and 3) student responses (cognitive, affective, conative) indicate that this content is able to provide understanding, motivation, and real encouragement to act caring for the environment. This indicates that microblog content contributes significantly to instilling environmental awareness in students.

Keywords: Microblogging, Social Media, Instagram, Environmental Awareness, Caring for the Natural Environment

Abstrak

Penanaman karakter peduli lingkungan alam pada siswa sangat dibutuhkan untuk meningkatkan kepedulian dan peran serta aktif dalam pelestarian alam. Dengan semakin populernya Instagram, konten mikroblog memiliki potensi yang besar untuk digunakan dalam menanamkan karakter peduli lingkungan alam secara lebih efektif. Penelitian ini bertujuan untuk menjelaskan proses penyusunan konten mikroblog peduli lingkungan, implementasi pada media sosial, dan respon siswa terhadap konten mikroblog. Dengan pendekatan kuantitatif dan metode one-shot case study, pengumpulan data dilakukan melalui validasi, tes, angket, dan dokumentasi. Hasil penelitian menunjukkan bahwa 1) Penyusunan konten dinilai sangat valid (ahli materi 90%, ahli media 93%), 2) implementasi pada Instagram dirancang untuk menyampaikan pesan secara efektif, dan 3) respon siswa (kognitif, afektif, konatif) menunjukkan bahwa konten ini mampu memberikan pemahaman, motivasi, dan dorongan nyata untuk bertindak peduli lingkungan. Hal ini menunjukkan bahwa konten mikroblog memberikan kontribusi yang signifikan dalam menanamkan kesadaran lingkungan pada siswa.

Kata kunci: Mikroblog, Media Sosial, Instagram, Kesadaran Lingkungan, Peduli Lingkungan Alam

A. Introduction

Human life is greatly influenced by the state of the natural environment, and the other way around, the natural environment is influenced by human activities. The natural environment provides various resources needed by humans, while the natural environment requires humans to utilize and maintain its sustainability (Handoyo, 2021). However, what frequently happens is that human activities in fulfilling their needs cause natural environmental problems. Natural environmental problems arise from the lack of human concern for the balance and harmony of the natural environment itself (BPS-RI, 2018). The main point of the emergence of natural environmental problems is none other than the actions of humans in fulfilling their daily demands and consideration for the balance and harmony of the natural environment. (Kutanegara, Pitoyo, Kiswanto, Sumini, & Nugroho, 2018). The lack of concern for the natural environment is frequently noticed in every Indonesian citizen. (Leksono, Setyowati, & Hardati, 2020). Currently, various damage and problems in the environment have become serious problems that must be faced, where not caring about the environment, will cause various kinds of damage and new problems. The damage caused by human not caring about protecting

their environment has a variety of negative impacts on human life itself, even for future human life (Purnamasari, Hanif, & Pribadi, 2024).

A person's environmental indifference behavior also occurs in the school environment, where students show low concern for the environment (Leksono et al., 2020). The form of environmental indifference behavior that occurs in students in the school environment can be seen from the number of students who still litter, damage plants, do not save energy, scribble on school tables, benches, or walls, do not keep school toilets clean, and do not maintain environmental cleanliness by not carrying out the cleaning picket schedule (Novrizal, Rushayati, & Wijayanto, 2019). This form of behavior is carried out intentionally or unintentionally which shows an undisciplined and uncaring attitude towards the environment. The number of environmental problems that are getting worse emphasizes the urgency of increasing awareness of the natural environment in students.

School as one of the formal educational institutions is responsible not only for improving students' knowledge and intelligence but also for shaping students' character, one of which is the character of caring for the environment (Ismail, 2021). The character of caring for the environment is an attitude and action that always seeks to prevent damage to the natural environment around it and seeks to repair existing damage (Sitorus et al., 2022). One of the ways to realize humans who have environmental care character is to provide an understanding of the importance of preserving the environment through educational institution (BPS-RI, 2018). Instilling the character of caring for the environment is intended so that students recognize the environment around them, when students are able to love the environment, caring values will be embedded in them (Santoso, Setyowati, & Wasino, 2020). Environmental care character includes three main components, namely cognitive, affective, and conative which generate understanding, emotional awareness/attitude, and behavioral tendencies to maintain and preserve the environment. (Qodriyanti, Yarza, Irdalisa, Elvianasti, & Ritonga, 2022). Paryumi (2021) provides indicators of environmental care character consisting of 1) waste management, 2) attitude towards energy, 3) attitude towards water, air, and soil, 4) attitude towards flora and fauna, and 5) attitude towards humans and the social environment.

Schools are useful as a means of supporting the implementation of environmental character education through knowledge, awareness, and rational and responsible attitudes and behaviors towards environmental issues (Nafisah, Setyowati, Banowati, Priyanto, & Hamid, 2022). SMA Negeri 1 Kradenan as one of the schools in

Grobogan Regency has tried to instill the character of environmental care through various programs such as the Friday and Saturday clean movement, habituation of garbage disposal, maintaining and planting trees, recycling, managing school gardens, and class cleaning competitions. However, observations show that these programs have not been fully effective, students are often only participating in environmental care activities because of obligation or pressure from rules, not from personal awareness. This indicates the need for more effective educational efforts to increase awareness and environmental care behavior in students. So as an educational institution, schools have the responsibility to build the character of students who care about the environment through innovative and interesting approaches (Pramudita & Setyawati, 2023).

Advances in technology, particularly social media, offer new opportunities to educate about the need for environmental sustainability. The results of a study by Mallick & Bajpai (2019) stated that the delivery of messages through social media can be done quickly, making it a suitable platform for interacting, sharing information, and creating awareness of the environment. Instagram, as one of the popular social media platforms among students, is currently plays a role as an educational platform for campaigning for environmentally conscious and loving behavior. (Wiguna, Malafitri, Nabilah, & Zuhri, 2022). Some examples of Instagram accounts that have campaigned for the movement of caring for the natural environment are @ecoton.id, @pandawara, and @siapdarling. The results of research Putra & Rochimaniah (2023) also state that education through Instagram can reach many people and inspire them to join the campaign for environmental awareness. One of the ways to educate through Instagram is with microblog content. According to Bangsawan, Noviadji, Wahyutiar, & Nugraha (2024), A microblog is a new type of blog that allows users to written short messages of less than 200 characters that are shared on social media platforms for all users to read, and microblogs can be created in various formats, for example, audio, photo, video, and text. The existence of microblog content on Instagram makes it easier for writers to reach a huge audience quickly. Microblogging on Instagram, developed with a unique and appealing style, has proven to be beneficial in enhancing understanding and receiving highly interesting reactions from students. The existence of microblog content on Instagram makes it easier for writers to reach a huge audience quickly. Microblogging on Instagram, developed with a unique and appealing style, has proven to be beneficial in enhancing understanding and receiving highly interesting reactions from students. (Veygid & Setyawati, 2022).

In terms of the urgency of instilling the character of caring for the natural environment and the condition of SMA Negeri 1 Kradenan students, Instagram has become part of their daily lives, so it has great potential as a means of education about the importance of preserving the environment. Through environmental care microblog content, this research was conducted as one of the innovations in instilling the character of environmental care in students, so that a generation that is aware and ready to preserve the environment can be created. The choice of using microblog content on Instagram as a means of instilling the character of environmental care in students is based on the results of research by Wiguna et al. (2022) who stated that movements or actions aimed at young people are more effective when delivered through social media, specifically Instagram. As a result, the purpose of this research is to discover: (1) how the process of preparing environmental care microblog content to instill the character of caring for the natural environment, (2) how the implementation of microblog content, and (3) how students respond to microblog content on cognitive, affective, and conative aspects. The preparation of microblog content with the theme of caring for the natural environment is expected to have an effect and get a positive response among students.

B. Research Methodology

This research was conducted in SMA Negeri 1 Kradenan, Grobogan Regency, Central Java, Indonesia, using a quantitative approach with a one-shot case study experimental method. The one-shot case study experimental method was chosen because it aligns with the research objectives, which are to determine students' responses to the existence of microblog content caring for the natural environment after being given specific treatments. In the one-shot case study method, treatment is given to the research subject, then the results are measured without comparing with the control group.

The study population included all 10th-grade students at SMA Negeri 1 Kradenan in 2024/2025. The research sample was determined using a proportional stratified random sampling technique, to obtain representative data from each subpopulation, yielding a sample of 99 students representing 11 class groupings. Data collection was carried out through validation test, test, questionnaire, and documentation. In the Validity test, the research involved material expert validators and media expert validators to assess the validity of the microblog content. Tests and questionnaires were used to obtain data related to student responses. Then, documentation was used to obtain various kinds of image data that were useful as supporting material for analysis.

The data analysis techniques applied in this study are descriptive analysis and descriptive percentage analysis.

C. Discussion

1) Microblogging Content Preparation

The preparation of environmental microblog content is carried out through systematic and planned steps through two main stages, namely content planning and technical process of content preparation. The content planning stage is carried out by determining content topics based on the educational needs of students in understanding and instilling the character of environmental care. Topics raised in the content include 1) the concept of caring for the natural environment, 2) problems and efforts to conserve the water environment, 3) problems and efforts to conserve soil, and 4) problems and efforts to conserve air. These topics are then developed by integrating the character values of environmental care in each content. By inviting students to recognize the environment affected by pollution, it can be useful to instill the character of environmental care in them (Santoso et al., 2020).

The preparation process stage involves various technical and aesthetic aspects so that the microblog content is attractive but still informative. There are 10 important steps in the process of preparing microblog content about the natural environment. The steps for preparing microblog content are described as follows.

a) Composing Mind Mapping

The preparation of mind mapping is done by identifying the main points to provide a benchmark in the preparation of microblog content caring for the natural environment. Mindmap becomes a framework for planning and developing microblog content, starting from identifying the main points as a benchmark, then given the flow and strategy that will be done in the preparation of microblog content so as to help visualize the flow in the preparation of microblog content. The results of the preparation of mindmapping can be seen in Figure 1 below.

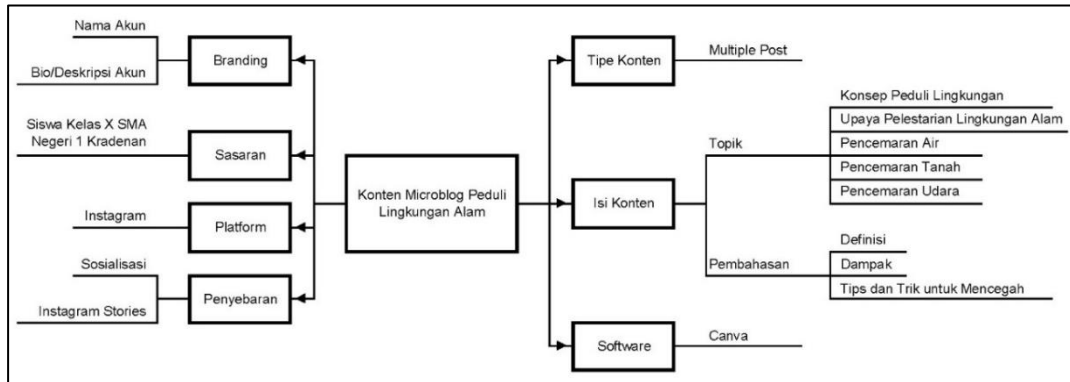


Figure 1. Mindmapping

b) Attention to Verbal Strategies

Verbal strategy involves the selection of words and language styles to be used in the content, which includes determining the tone of voice, language style, and narrative used in microblog content. The use of words that include slang and contemporary language or language that is informal but still informative, a language style that is light, interactive, and relevant to students' daily lives will be more easily accepted. Some of the verbal texts used such as “Kamu Harus Tahu Nih”, “Yuk Simak”, dan “Ternyata ini Lohh”.

c) Determine Moodboard

Moodboard is a collection of visuals that define the desired aesthetic style for microblog material. It serves as a visual tool for determining the aesthetics and environment, as well as maintaining visual consistency in the content to be published. Figure 2 shows that the selection of photos is based on their relevance to the topic and discussion in the microblog material.



Figure 2. Moodboard

d) Attention to Visual Strategy (Color and Font)

Visual techniques include the use of colors and fonts to make microblog material appealing. The use of attractive colors and easy-to-read typefaces can improve the visual appeal of microblogs. Figure 3 shows the chosen colors: light blue (#03aacd), light green (#a1cc00), and white (#ffffff).



Figure 3. Color Pallete

The font type used to create this microblog content is sans-serif. Sans-serif fonts were chosen for their simplicity, modernity, and clarity, the fonts chosen are League Spartan-Bold for the title and sub-title and Poppins-Regular for the text, as seen in Figure 4.

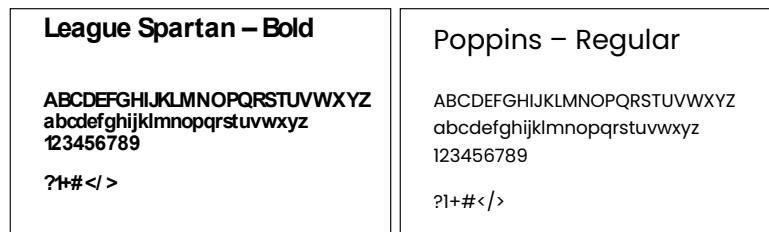


Figure 4. Display Font used

e) Use Visual Element

Visual elements such as icons and graphics are used to help understand the information conveyed. The selection of visual elements is based on the need within the microblog content to add visual appeal to the content. Some of the visual elements used, such as in Figure 5.

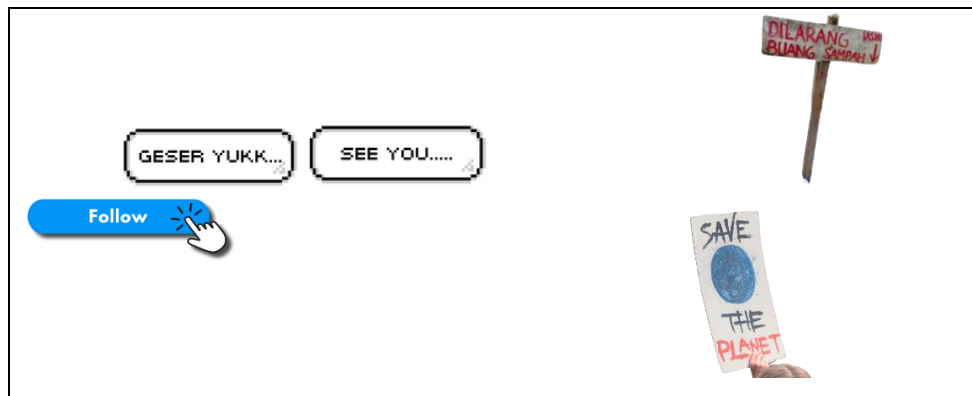


Figure 5. Visual Elements Used

f) Insert a Call to Action (CTA) Sentence

CTAs are meant to encourage audiences to take action on Instagram content posts (Alvian Hasby, Armayuda, & Nurrul Haq, 2020). CTA is interactive and direct; to use it in environmental microblog material, incorporate it within the content. Figure 6 shows an example of how CTA is applied.



Figure 6. Example of Call to Action Sentence Implementation

g) Designing Interesting Microblog Content

Microblog content is designed with a multiple-post format, which allows publishing several contents in one post narratively in several slides up to 10 slides. Microblog content is created with a multiple-post style, allowing for the narrative presentation of different contents in a single post across up to ten slides. This format is ideal for expressing complicated and thorough ideas in a single post, especially when the information being sent is about caring for the natural environment and requires a progressive and in-depth explanation. Figure 7 shows the results of designing microblog content in this style.



Figure 7. Microblog Content Design View

h) Setting Up an Instagram Account

This setup includes selecting a meaningful username, an informative bio, and a profile photo that reflects the microblog's brand. The Instagram username "@pepelingalam" stands for "Pemuda Peduli Lingkungan Alam". "Menginspirasi Generasi Muda untuk Mencintai dan Melestarikan Lingkungan Alam" is the objective of the account, as stated in the bio. The account's profile picture is a logo that reads "Pepeling Alam". Figure 8 shows the account view.



Figure 8. Instagram Account @pepelingalam

i) Determine Captions and Hashtags

The caption summarizes the substance of the information while asking the audience to interact. The hashtags #PeduliLingkunganAlam, #PepelingAlam, and #Koncoalam are added after each content caption.

j) Create an Upload Schedule

Veygid & Setyawati (2022) emphasizes the importance of creating a planner posting schedule in the development of Instagram-based microblog content. Creating a

posting planner helps in maintaining consistency and regularity of content, as well as creating a regular pattern of message delivery so that audiences can routinely access the information given. The publishing frequency is three times per week, resulting in the posting schedule illustrated in Table 1 below.

Table 1. Upload Schedule

Week	Content Plan		
1st	Introduction & Concepts of Natural Environment		
	Monday	Wednesday	Friday
	Apasih Lingkungan Alam Itu?	Ini Nih Permasalahan Lingkungan Alam Di Sekitar Kita	Pencemaran Lingkungan Di Sekitar Kita
2nd	Concept of Caring for the Environment		
	Monday	Wednesday	Friday
	Ternyata Masalah Lingkungan Terjadi Karena Ulahmu Loh	Coba Deh Lihat Video Ini	Kenapa Sih Kita Harus Peduli Lingkungan?
3rd	Problems and Efforts to Conserve the Water Environment		
	Monday	Wednesday	Friday
	Yuk Kenali, apa itu pencemaran air	Coba deh, lihat penyebab pencemaran air ini	Yuk, lakukan ini agar kamu dapat ikut melestarikan air
4th	Problems and Efforts to Conserve the Soil		
	Monday	Wednesday	Friday
	Yuk Kenali, apa itu pencemaran tanah	Tanah rusak, loh kok iso?	Lakukan ini, agar tanah dapat subur Kembali
5th	Problems and Efforts to Conserve the Air		
	Monday	Wednesday	Friday
	Yuk Kenali, apa itu pencemaran udara	Ini, dampak pencemaran udara bagi kehidupan manusia	Bagaimana sih, cara mencegah pencemaran udara?

2) Expert Validation

Expert validation involved four expert validators: two subject matter experts and two media experts. The expert validation procedure is carried out using an expert validation sheet instrument to verify the validity of microblog material that cares for the natural environment. The data obtained is then analyzed and classified based on product feasibility criteria, as shown in Table 2 below.

Table 2. Product Eligibility Criteria

Score	Criteria	Description
85,01% - 100,00%	Very Valid	Usable without revision
70,01% - 85,00%	Moderately Valid	Usable, minor revisions required
50,01% - 70,00%	Less Valid	Not recommended for use, major revisions required
1,00% - 50,00%	Invalid	May not be used

After all the data has been collected, analyzed, and processed, the results of validation by experts are presented in Table 3 below.

Table 3. Expert Validation Results

Validators	Presentation	Criteria
Subject Matter Expert	90%	Very Valid
Media Expert	93%	Very Valid

Table 3 demonstrates that, overall, the validation results show that the microblog content about caring for the natural environment qualifies under the highest criteria. So that this information can be declared acceptable and used to impart the value of environmental responsibility to students at SMA Negeri 1 Kradenan. This is consistent with Akbar's statement (in Veygid & Setyawati, 2022) that media with a validation percentage between 81%-100% can be classified as very valid media, with a declaration that the product can be used without revision or as needed.

3) Microblog Content Implementation

The purpose of implementing microblog content on environmental care on social media is to determine how to implement it so that it may reach students and deliver the message contained within it. The implementation process begins with the preparation step and continues through the deployment stage. During the preparation

period, microblog content is routinely published on the @pepelingalam Instagram account on a set timetable (Monday, Wednesday, and Friday). This method is reinforced by Veygid & Setyawati (2022), which underline the importance of adopting a posting planner while developing microblogs on Instagram. This consistency produces a consistent pattern of message delivery, allowing audiences to routinely access the information given.

The distribution stage was carried out in two ways: socializing with the students and using the Instagram stories function. In-class socialization was carried out by presenting the @pepelingalam Instagram account, which was utilized to post the previously produced microblog content. Furthermore, students were advised to visit and follow the @pepelingalam Instagram account, as well as read the posted content. During breaks, all X-grade groups of SMA Negeri 1 Kradenan were socialized.

Dissemination with the Instagram Stories feature is accomplished by producing Instagram Stories about newly published content. As a result, fresh posts will reach more students who follow the @pepelingalam account. This function serves to share a snapshot of the arrival of new microblog content postings, along with an invitation to visit the main post of microblog content, so that students may obtain more full information.

4) Student Response

This research is conducted to determine how students react to the presence of microblog content in establishing the character of caring for the natural environment. According to Aisyah (2019), student response refers to the acceptance, response, and attitude demonstrated by students during or after the learning process. The notion of student reaction is based on Qodriyanti et al. (2022) states that environmental care has three crucial components: cognition, emotional, and conative. The outcomes of the student responses are shown in the discussion below.

a. Cognitive Response

Cognitive responses in this study reflect students' level of knowledge, understanding, and perception of messages in microblog content about the natural environment. To see the level of knowledge, understanding, and perceptions of students, student score category processing was carried out so that a score category criteria table was obtained as in table 4 below.

Table 4. Score Category Criteria

Category	Formula Range	Value Range
Very High	$> \text{Mean} + 1 \text{ Std. Dev}$	> 17
High	Mean to $(\text{Mean} + 1 \text{ Std. Dev})$	14,8 – 16,9
Low	$(\text{Mean} - 1 \text{ Std. Dev})$ to Mean	12,6 – 14,8
Very Low	$< \text{Mean} - 1 \text{ Std. Dev}$	$< 12,5$

Based on the score category criteria table, the results of student response data processing on cognitive aspects are presented in Table 5 below.

Table 5. Results of Student Responses on Cognitive Aspects

Category	Frequency	Presentation
Very High	24	24%
High	37	37%
Low	23	23%
Very Low	15	15%
Total	99	100%

Table 5 shows that the natural environment microblog content assisted students to learn about and understand the natural world. This is demonstrated by the higher proportion of students in the very high (24%) and high (37%) categories compared to those in the low (23%) and very low (15%) categories.

Providing knowledge about the environment is important in shaping students' environmental care character (Irlansari & Hardati, 2019). The results of cognitive responses indicate that microblogs as a medium for instilling the character of caring for the natural environment are able to increase student understanding in the aspect of knowledge (cognitive) as a foundation for the formation of attitudes of caring for the natural environment. This is in line Mallick's (2019) statement, that social media is an effective tool for interacting, educating, sharing knowledge, and raising awareness about the environment.

b. Affective Response

The affective aspect measures students' emotions, interests, and attitudes towards microblog content, based on table 6 shows very positive results with a percentage of 85.8%. This result shows that students are not only interested but also

feel inspired by the messages delivered. Azwar (2011) defines emotional reactions as affective components that are significantly influenced by beliefs or what we believe. Thus, this conclusion is consistent with Zuchdi (1995) remark that if someone believes that an action would have a good impact on him, he will be more likely to take it, and conversely.

According to the affective response results, it shows that students are very supportive and enthusiastic about the presence of microblog content caring for the natural environment, and they believe that it will be able to bring positive things to themselves.

Table 6. Results of Affective and Conative Aspects of Student Responses

Students Response Aspects	Presentation	Criteria
Affective Response	85,8%	Very Positive
Conative Response	83,9%	Very Positive

c. Conative Response

The conative aspect measures the tendency of student behavior to act caring for the natural environment, based on Table 6 the results show a percentage of 83.9% with very positive criteria. This conative response shows that students not only understand and support the message conveyed, but are also encouraged to implement concrete actions in protecting the natural environment. This is consistent with Azwar (2011) statement that how people respond under given settings and in response to specific stimuli is governed by their beliefs (cognitive) and feelings (affective) about the stimulus. These findings suggest that microblog material not only changes students' comprehension and attitudes but also encourages them to act in real life. This conclusion supports Natasari (2023) claim that the presence of educational content about the environment on Instagram helps raise awareness and mobilize positive actions for the environment.

The results of the three aspects of student responses overall show that the microblog content of caring for the natural environment gets a very positive response by students. The very positive results of student responses indicate the success of microblog content in instilling and strengthening the character of caring for the environment in students. The microblog content of caring for the natural environment not only provides a cognitive understanding, but is also able to touch the affective side

and encourage students to care for the environment in real life. These results are in line with the statement Balitbang Puskurbuk (2011) that character education not only instills an understanding (cognitive) of what is right and wrong, but is also able to feel (affective) good values and habitually act (conative) in reality. By touching these three aspects, students not only know, but also want and are able to carry out what they know the truth about (Ismail, 2021).

D. Conclusion

The preparation of Microblog Content is carried out systematically and planned through two stages, namely content planning and content preparation process. Content planning is carried out by determining the topics covered in the content, including 1) the concept of caring for the natural environment, 2) problems and efforts to preserve the water environment, 3) problems and efforts to preserve the soil, and 4) problems and efforts to preserve the air which then integrates the material of each content with the character values of caring for the natural environment. The process of preparing content involves various technical and aesthetic aspects, starting with compiling mind mapping to making a posting schedule. Validity testing of microblog content obtained very valid results, with an overall score of 90% for material and 93% for media. So that microblog content is worth using to instill environmental care characters in SMA Negeri 1 Kradenan students. The strategy in the implementation stage has proven to help microblog content on the @pepelngalam account reach students through social media, so that the messages in it can be delivered. The students' responses to the microblog content to instill the character of caring for the natural environment as measured in cognitive, affective, and conative aspects showed positive results overall. These results indicate that the microblog content of caring for the natural environment is able to instill the character of caring for the natural environment by providing understanding, knowledge, inspiration, and motivation to students about the importance of having the character of caring for the natural environment. The overall results of this study indicate that microblog content with the theme of caring for the natural environment has successfully become one of the strategies in instilling the character of caring for the natural environment to class X students at SMA Negeri 1 Kradenan.

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