

Design of Teaching Materials to Criticize Information from Various Sources in Grade XII of High School Based on Language Motives in Cybercrime Actions

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Abstract

Purpose: The urgency of this research is the urgent need to accelerate digital literacy education for the younger generation as a preventive effort to deal with cybercrime. Currently, cybercrime is wrapped in complex persuasive, and manipulative language.

Methodology: This research is development research that adopts the Three-D (3-D) model, a modification of the Four-D model, which consists of three stages: Define, Design, and Develop. The focus of this research is to develop Indonesian language teaching materials for grade XII SMA Merdeka Curriculum students to critique information from various sources based on language motives in cybercrime actions. At the Define stage, researchers define the characteristics of persuasive language in cybercrime and their relevance to Indonesian language learning in high school. The Design stage includes data classification and categorization to design a learning design that focuses on language motives in digital communication that intends to deceive. At the development stage, teaching materials are refined and compiled based on the results of the analysis, accompanied by the preparation of a learning flow. Research data comes from literature reviews and electronic documents, including articles, journals, and digital texts, such as doxing, scamming, and phishing. The data collection techniques used are document study and content analysis, while the data analysis technique applies framework analysis with the stages of data reduction, coding, presentation, and interpretation. Data validity is maintained through triangulation of sources and methods.

Results: The results of this study are the results of the development of teaching materials and stages of learning to criticize information from various sources.

Applications/Originality/Value: In conclusion, the development of this teaching material is a preventive effort to deal with cybercrime and supports the development of digital literacy and 21st-century learning based on 4C.

Introduction Section

Technological disruption has brought complex changes to the way humans access and process information (Nugroho, 2020). Advances in information technology make it easier for individuals to obtain information from various sources easily and quickly (Siregar, 2020). However, the ease of information technology also increases the risk of spreading inaccurate, misleading, and even dangerous information (Rangel, 2020). This phenomenon is further exacerbated by the rampant language crimes in cybercrime that use language as a tool of manipulation to deceive victims. Language is used persuasively, manipulatively, and emotionally by cybercriminals to persuade victims to take detrimental actions, such as spreading hoaxes, online fraud, and phishing attacks (Cheng, 2023). Cybercrime which uses language as its main instrument is now a real threat to individuals, society, and the state.

The increasing number of cybercrimes shows the urgency of students' skills in criticizing information from various sources. In today's digital era, it is full of misinformation and hoaxes (Raila, 2023). Students must be able to distinguish valid information from false information and identify biases that may be contained in the information (Fadardi, 2023). In addition, students also need to critically evaluate the credibility of information sources. These skills are useful in everyday life, as well as being important provisions for facing increasingly complex challenges in the digital era (Büssing, 2024). In the context of 21st-century learning, digital literacy is an essential skill that must be integrated into the educational process to prepare students to become intelligent, critical individuals who can face various dynamics of information in the future (Özeren, 2024).

The rise of cybercrime is a phenomenon that must be addressed immediately through various preventive measures to prevent the increasing number of victims of cybercrime (Brunhöber, 2022). Various stakeholders related to the field of communication and information must act immediately to carry out defensive efforts, as well as eradicate cybercrime. In addition, all elements must work together in efforts to eradicate and minimize cybercrime cases (Toporetska, 2022).

Institutions that can contribute to providing the younger generation with education on forms of cybercrime are educational institutions.

This phenomenon requires defensive efforts, one of which is through learning that can encourage students to be more critical in accessing, evaluating, and utilizing information, which is very urgent (Ssenyonga et al, 2022). Increasing digital literacy integrated with the development of 21st-century skills, such as critical thinking, collaboration, creativity, and communication, is very relevant to dealing with the phenomenon of cybercrime (Özeren, 2023). Strong digital literacy can minimize the negative impacts of cybercrime, as well as prepare the younger generation to become responsible digital citizens, able to adapt to technological changes, and able to utilize technology for positive and productive interests (West, 2019).

Based on the urgency of digital literacy in countering messages and trap information on social media today. Efforts to educate on language motives that have the potential to be used in cybercrime are a primary need in improving digital literacy in Indonesia. Indonesia has an urgency to increase public awareness of online fraud tactics, encourage digital literacy, and develop effective policies and cooperation to address online fraud as a threat to the country (Almubaroq, 2023). This study aims to analyze the role of digital literacy in learning Indonesian as an effective medium for accelerating digital literacy education in the form of language motives in cybercrime. Learning Indonesian is a means of honing effective communication skills, honing critical thinking skills, and increasing students' intellectual power. Based on this, learning Indonesian is the most appropriate medium for accelerating cybercrime education based on language analysis. As supported by the statement of Nurfitriah Learning Indonesian in the 21st-century is not limited to teaching scientific aspects, but also teaching multicultural, multicontextual, and multimedia aspects (Dwinata, 2023).

This is relevant to the demands of today's education that require teachers to design actual and contextual teaching materials (Setiyaningtiyas, 2024). Cybercrime is a massive phenomenon in society. Therefore, by applying learning innovations based on language motive analysis in cybercrime actions, it can support students to be more actively involved, because the material studied is not only in the form of theory but also has direct relevance to everyday life. The surrounding environment presents a comprehensive and authentic picture, with very diverse conditions. The implications of phenomena in society in learning materials can provide opportunities for students to gain empirical experience in learning (Widiastuti, 2017). The closer the problem is to their environment, the easier it will be for students to understand and comprehend the problem and get answers and solutions faster (Wardani, 2023). This is also relevant to the statement, that students participating in learning can link theoretical concepts with practical experiences in real life, which can improve students' understanding of the learning material (Kurniadi, 2023).

In response to this phenomenon, it is necessary to develop teaching materials that can help students hone their ability to criticize information. These teaching materials need to be specifically designed for high school students, taking into account the characteristics of cognitive and psychological development. In addition, teaching materials also need to be relevant to real-life contexts, so that students can easily relate them to everyday experiences. The design of teaching materials for learning in Indonesian language criticizing information from various sources for class XII of the independent curriculum is intended to provide a significant impact on improving students' digital literacy and critical skills. Criticizing information from various sources is one of the chapters in the learning materials for class XII of the independent curriculum. The material on criticizing information from various sources aims to teach students to be careful, thorough, and critical of various information to ensure the truth of the information. Stated that critical thinking skills are important for students to have because critical thinking skills prioritize the ability to analyze, solve problems and evaluate problems (Suparman, 2023).

Teaching materials that introduce students to the forms of language motifs commonly used in cybercrime practices provide students with insight into the manipulative methods often used to mislead and manipulate information. Innovative and relevant teaching material design is the key to student learning success. Innovative learning is a learning strategy that emphasizes the delivery of learning materials to students in the form of expository, inquiry, problem-based learning, improving thinking skills, cooperative learning, contextual learning, affective learning and scientific approaches (Raharjo, 2018). Learning Indonesian with critical information content from various sources can develop a critical and alert attitude towards the information received, both in the digital and conventional realms. Students will be trained not only to receive information passively, but also to verify and evaluate the truth and reliability of the information they encounter.

In learning to criticize information from various sources, students learn to identify language that has the potential for cybercrime based on the characteristics of persuasive and manipulative language. Teaching about language education in cybercrime is the starting point for innovation in the field of education and teaching to build preventive efforts against cybercrime that use language as a tool of crime. This learning innovation forms a generation that is smarter, more critical, and responsible in facing the challenges of the disruptive digital world. Thus, this study aims to design effective teaching materials in criticizing information from various sources in grade XII of high school. This teaching material will focus on the analysis of language motives used in cybercrime. It is hoped that through this teaching material, students can improve their ability to identify language manipulation, evaluate the credibility of information sources, and make wiser decisions in dealing with information circulating in cyberspace. Based on the background regarding the urgency of massive cybercrime, as well as innovations in teaching materials that educate language motives in cybercrime. Therefore, the purpose of this study is to develop the design and stages of learning to criticize information from various sources based on language motives in cybercrime.

Previous research relevant to this study includes various innovations in the development of Indonesian language teaching materials integrated with local and global aspects of life. Kartini studied teaching materials based on local Luwu culture at Cokroaminoto University, Palopo (Kartina, 2019), while Utami & Rahmawati developed an interactive learning module for BIPA level A1 learners to overcome the limitations of teaching materials that are by learner characteristics (Rahmawati, 2020). Yunita & Pratiwi studied illocutionary speech acts in the Ministry of Health's public service advertisements on Instagram during the COVID-19 pandemic, the implications of which can be used as Indonesian language teaching materials for junior high school levels (Pratiwi, 2021). Triskawati & Silalahi's research, (2021) developed flipbook maker-based teaching materials for grade X students at SMAN 4 North Luwu to create teaching materials that are feasible, practical, and effective. Meanwhile, Arwan designed Indonesian language learning that is in line with maritime literacy in the context of the Merdeka Curriculum to increase students' maritime literacy capacity (Hernawan, 2023).

Although these studies have explored innovations in Indonesian language learning integrated with cultural aspects and local contexts, none have specifically linked Indonesian language learning with digital literacy to prevent cyber-crime. Therefore, this study presents something new by focusing on digital literacy as a preventive measure against cybercrime, while also providing education related to the language motives used in cybercrime. Through this approach, it is hoped that the acceleration of handling the threat of cybercrime can be achieved through more effective digital literacy-based learning.

Research Methods

This type of research is development research with a 3D model (Define, Design, Develop). According to Adam et al., (2022) the development model used is the Four-D (4-D) model which has been modified into a Three-D (3-D) model consisting of 3 stages Define, Design, and Develop. In the Define stage, the researcher identifies the characteristics of persuasive language motifs used in cybercrime, to define the need for developing teaching materials based on these language motifs. In the Design stage, the researcher classifies and categorizes the collected data to formulate a learning design to critique information from various sources with a focus on language motifs in cybercrime. Finally, the Develop stage refines and compiles teaching materials based on the results of the analysis, and describes the learning flow that will be applied in class XII of the Independent Curriculum High School. The results of the development of these teaching materials aim to provide students with critical skills in dealing with information from various potential sources related to cybercrime.

The research data focuses on the meaning of language motifs and examples of persuasive language used in cybercrime. Data sources include literature re-views such as scientific articles, journals, books, and research reports that discuss persuasive language in the context of cybercrime. In addition, electronic documents in the form of persuasive texts from various forms of digital communication are also used, including doxing, scamming, and phishing, as well as social communication on social media platforms. To enrich and validate the information, consultation with experts was carried out through discussions with experts in the field of Indonesian language learning.

The data collection techniques applied include document studies, researchers collect data from previous studies related to persuasive language used in cybercrime. Content analysis will be carried out to identify and examine in-depth texts containing elements of persuasive language from various sources, such as news articles, social media posts, emails, and relevant online advertisements. The data analysis technique used is framework analysis which consists of several stages. First, data collection is carried out by collecting documents, texts, and relevant information from various sources. Furthermore, the data will be reduced by sorting and classifying based on the category of persuasive language motifs. At the coding stage, the data will be organized based on the identified language motifs. Data presentation is carried out systematically to facilitate analysis, and ends with interpretation, researchers will interpret the data and relate it to the designed learning design. Data validity testing will be carried out through source triangulation, which involves checking the suitability and consistency of data obtained from various document sources, as well as the results of consultations with experts. Method triangulation is also applied using several data collection techniques, such as document studies and content analysis to verify and strengthen the findings obtained.

Research Results and Discussion

Learning Design Criticizing Information from Various Sources

Table 1. Learning Design.

Compiler	Zahy Riswahyudha Ariyanto
School Level	SENIOR HIGH SCHOOL
Phase/Class	F/XII
Subjects	Indonesian
Element	Reading and Viewing

Learning Outcomes	Students are able to evaluate ideas and views based on logical thinking rules from reading various types of texts (non-fiction and fiction) in print and electronic media.
Initial Competence	<ol style="list-style-type: none"> 1. Critical Analysis Students can critically analyze information. They need to be able to identify arguments, evaluate evidence, and identify potentially biased language in information sources. 2. Careful and Thorough Being careful in searching, finding, and sorting information from various sources is very important. Students need to be able to use various search tools and sort relevant information from irrelevant ones. 3. Ability to Argue Students can clarify their understanding of the information they receive. Students are equipped with the ability to ask questions, identify ambiguities, and seek clarity to ensure correct and accountable understanding.
Pancasila Student Profile	<p>The character profile of Pancasila students that is expected to be achieved in this learning is:</p> <ol style="list-style-type: none"> 1. Have faith and devotion to God Almighty, have noble character 2. Critical Thinking 3. Creative 4. Independent
Student Targets	Regular/Typical
Learning Mode	Face-to-face/Offline
Learning Approach	Scientific
Learning Model Used	Problem-Based Learning
Learning methods	Discussion
Learning objectives	Based on case identification in information, students are able to validate valid sources of information and are able to clarify their understanding in a relevant and effective manner.
Facilities and infrastructure	<p>Facilities: LCD, Laptop, Internet</p> <p>Resources: Videos, Display Materials, Textbooks, Google Sites</p>

Learning outcomes in criticizing information from various sources include the ability to find, identify, and sort information appropriately through scanning or speed reading strategies that are very relevant to the plan for developing teaching materials based on language motives in cybercrime. In the context of accelerating digital literacy, this ability is an essential focus because students need to understand and recognize accurate information among the many texts spread in cyberspace. The development of teaching materials that emphasize language motives in cybercrime aims to train students to quickly recognize manipulative and detrimental language patterns, which are often used in online fraud cybercrimes. This urgency is reinforced by Reddy Who defines digital literacy as an individual's ability to master various skills needed in the 21st century, especially in the work context, which involves understanding and using digital technology effectively? (Hussein, 2023).

This learning objective is also in line with efforts to strengthen students' critical literacy skills, especially when students have to use supporting sources such as dictionaries, encyclopedias, and thesauruses. By understanding the language motifs used in cybercrime, students will be better able to utilize these supporting sources to check the meaning of ambiguous or manipulative words or phrases in a digital context. This effort supports the development of Critical Information Literacy / CIL which can be defined as an educational approach that emphasizes the importance of critical understanding of the ever-changing information landscape (Torrell, 2020). Sorting information based on understanding parts of the text that are relevant to cybercrime motives also helps students be more aware of content that contains potential threats, as well as providing basic skills in dealing with digital information critically.

In this research on the development of teaching materials, this relevance will be strengthened by a method that encourages students to identify language motifs used to influence or manipulate recipients of information. This learning strategy equips students with the ability to criticize information in general, as well as improve their digital literacy in the context of cybersecurity. Thus, the development of this teaching material serves as an acceleration of digital literacy that

is in line with the needs of the modern world, when cybercrime is increasingly common and involves complex language manipulation.

Teaching Materials for Criticizing Information from Various Sources

Language motives in cybercrime are crucial objects that must be understood to analyze how cybercriminals manipulate victims. This is reinforced by the opinion The use of language motives in the form of metaphors such as war, games, pandemics, and crimes to describe and shape public understanding of security threats and the motives of cybercriminals (Imamgaiazova, 2020). In today's increasingly developing digital world, language is the main tool used to deceive, scare, or manipulate individuals into taking the actions desired by the perpetrators. Cybercrimes such as doxing, scamming, and phishing show the use of structured and systematic language to achieve the goals of deception and exploitation. Therefore, understanding the language motives used in each of these crimes is very important for formulating prevention and education strategies.

Previous research conducted by researchers has identified various language motifs used in cybercrime through a comprehensive study of messages and information circulating in cyberspace. The data was then analyzed using specific forensic linguistic studies with a pragmatic approach and critical discourse analysis, which provides an in-depth picture of how cybercriminals use language to achieve their goals. Language motifs in doxing, for example, center on threats and intimidation, while scamming uses emotional manipulation and trust. Phishing often exploits a sense of urgency and fear to obtain personal information from victims. In their research also suggest preventive efforts through a review of existing laws and the potential implementation of new regulations that are more relevant to technological developments (Faisal, 2023).

Before discussing the design of teaching materials that teach students to criticize information from various sources, understanding the language motives in cybercrime is an important foundation. Based on the understanding of the language motives used as a tool of manipulation in cybercrime, it is necessary to design a more effective learning strategy to increase students' awareness of the importance of being critical of information in the digital era. The exposure of these language motives will also be the basis for developing teaching materials that are relevant to the needs of 21st-century digital literacy, especially in the context of the Merdeka Curriculum learning. The following are the results of the identification of language motives in cybercrime actions that have been processed by researchers based on forensic linguistic studies with a pragmatic analysis approach and critical discourse analysis.

Language Motives in Cybercrime Actions

Table 2. Language Motives in Cybercrime Actions.

Action	Language Motive	Example
Doxing	Threats and Intimidation	Threatening to divulge the victim's personal information.
	Distribution of Responsibility	Saying the victim is responsible for certain actions.
	Identity Disclosure and Negative Accusations	Accusing the victim of being involved in illegal activities.
	Screening	Collecting personal information for harmful purposes.
	Manipulation and Distribution of Personal Information	Using personal data for further manipulation.
	Threat of Personal Information Disclosure	Threaten to release sensitive information if you do not comply with requests.
	Threat of Publication of Personal Data	Threaten to publish personal data if you do not comply.
	Intimidation Using Emergency Contacts	Threatening to contact the victim's closest people.
	Social Pressure	Encouraging victims to act by referring to social pressure.
	Control through Personal Mastery	Using power to control the victim.
Scamming	Use of Public Figure Names	Claiming to be a public figure to gain trust.
	Promise of Rewards	Offer attractive prizes as bait.
	Positive Emotion Manipulation	Using positive emotions to motivate the victim's actions.
	Use of Links for Further Communication	Redirecting victims to malicious links.
	Fake Testimonials	Presenting false testimonies to convince victims.
	Authority Motive	Claiming that the request came from authorities.
	The Lure of Prizes	Offering prizes as an attraction.
	Emotional	Using emotions to influence the victim's decisions.
	Compliance Motive	Expecting victims to comply without critical thinking.
	Familiar Motif	Use familiar language to get closer to the victim.

Phishing	Creating a sense of urgency and threat	Threaten to freeze an account if not responded immediately.
	Offering awards	Offering rewards if victims follow instructions.
	Promise compensation and create a sense of urgency	Promise compensation for prompt action.
	Presenting a tempting prize offer	Offer amazing prizes to attract attention.
	Taking advantage of public fame and trust	Using a well-known name to build trust.
	An Opportunity Offer That Can't Be Missed	Conveying that this opportunity is very rare.
	A sense of uncertainty	Making the victim feel uncertain and have to act.
	Dependence	Exploiting dependencies on certain services.
	Persuasive	Using persuasive techniques to influence the victim.
	Praise	Giving praise to build the victim's self-confidence.

Cybercrime actions, such as doxing, scamming, and phishing are increasingly common in today's digital society. These three actions have various language motives, which are used to deceive, threaten, and manipulate victims. These actions include language crime practices that are detrimental to the public. Language crime can be defined as the use of language that violates communication ethics and has the potential to harm individuals verbally (La'biran, 2023). Understanding the language motives used in these crimes has a high urgency to increase public awareness and minimize the risk of being trapped in a cybercrime trap. Doxing is the act of disclosing someone's personal information without permission, often accompanied by threats and intimidation. Language motives in doxing include threats to spread the victim's personal information, the perpetrator tries to control and manipulate the victim with fear. In addition, the spread of responsibility and the disclosure of negative identities are used to accuse the victim of being involved in illegal activities, thus creating a social stigma. Collectors of personal information are also part of this process, the perpetrator tries to obtain data for personal gain that can harm the victim.

Scamming, or fraud, uses language motifs designed to gain the trust of victims. For example, perpetrators often claim to be public figures to attract attention and gain the trust of victims. They offer promises of rewards or compensation, designed to encourage quick action from victims. Positive emotional manipulation is also a common technique in scamming, perpetrators create situations that touch emotions to influence the victim's decision. Thus, the use of malicious links and fake testimonials further strengthens this fraudulent effort. Furthermore, phishing is a form of fraud carried out via email or other electronic messages, perpetrators try to steal personal information by creating a sense of urgency. Language motifs in phishing actions include threats, such as threats to freeze accounts, if the victim does not respond immediately. In addition, perpetrators offer attractive rewards and offers that can tempt victims. The sense of uncertainty and dependence on certain services is exploited to encourage quick action from victims, often without thinking critically about the consequences. Thus, phishing perpetrators use various persuasive techniques to obtain important information from victims.

Amid the rise of cybercrime, understanding the language motives used in cybercrime is a preventive measure to protect yourself from the associated risks. Doxing, scamming, and phishing show how language can be used as a dangerous tool of manipulation. Therefore, by being aware of these techniques, individuals can be more vigilant and able to identify signs of fraud. The community needs to be empowered through education and awareness campaigns about cybercrime so that they can protect themselves from the negative effects caused by these detrimental language motives. Based on the very urgent urgency related to cybercrime education to the public. Therefore, it is necessary to immediately accelerate education on language motives in cybercrime. This acceleration can be done through educational media, namely by integrating the results of the study of language motives in cybercrime into the curriculum and learning in schools. This integration method can contribute to accelerating education for the younger generation through learning materials. The results of the study of language motives in cybercrime are relevant to Chapter 1 of the Grade 12 SMA independent curriculum. Chapter 1 of Grade 12 discusses critical information from various sources, so it is relevant to the results of this study to invite students to be more careful and critical in responding to information from various sources. Therefore, this study attempts to describe the design of teaching materials to criticize information from various sources based on language motifs in cybercrime actions.

Criticizing Information from Various Sources

Amid Critical information is an essential skill in the digital era full of complex in-formation (Fauziah, 2024). Critical and careful in responding to information today to ensure that the information received is accurate, relevant, and reliable. Today false in-formation and biased opinions can easily spread, the ability to criticize infor-mation is an individual skill to sort and validate information carefully, thereby preventing the spread of misunderstandings and ensuring more appropriate deci-sions (Eryuni, 2023). Criticizing information is also an important part of building effective digital literacy. Sharpening the ability to question, analyze, and evaluate infor-mation, individuals not only become smarter consumers of information but also more able to actively participate in informative dialogues and discussions. This ability not only strengthens one's credibility but also strengthens the foundation for better decision-making in various aspects of life (Ginusti, 2023).

Characteristics of Persuasive Language

Based on research into the forms and motives of language in cybercrime actions, the characteristics of persuasive language in cybercrime messages and information can be formulated as follows.

- a) **Use of Positive Words**
Persuasive language uses positive and constructive words to create a good image of an idea, product, or action. This aims to make the message sound interesting and invite sympathy from the listener or reader.
- b) **Emphasis on Benefits**
Persuasive language emphasizes the benefits of a proposed idea or ac-tion, either to the individual or to society as a whole. By emphasizing benefits, the speaker or writer tries to convince the listener or reader that the action they are suggesting will produce beneficial results.
- c) **Call to Action**
Persuasive language often invites listeners or readers to take action, such as buying a product, supporting a movement, or changing a behavior. This call to action aims to encourage listeners or readers to do something by the message conveyed.
- d) **Emotional Manipulation**
Persuasive language can manipulate the emotions of listeners or readers by touching sensitive points or using words that stimulate certain feel-ings, such as happiness, anxiety, or respect. This aims to influence their reactions or behavior.
- e) **Making a Promise**
Persuasive language often uses promises or compelling claims to grab the attention of the listener or reader. These promises can be promises of benefits, convenience, or satisfaction expected from the proposed action.
- f) **Illogical Information**
Persuasive language may use illogical or inaccurate information to sup-port an argument or claim. This can influence the listener or reader's thinking or decisions.
- g) **Suspicious Appeals/Requests**
Persuasive language may also include suspicious appeals or requests, such as asking for personal information or performing unusual actions. This may raise suspicions about the true purpose or motive of the message.
- h) **Promise of Rewards/Awards**
Persuasive language sometimes uses the promise of a reward or reward as an incentive to act on the message. This can increase the interest or motivation of the listener or reader to follow the proposed action.

Steps to Criticize Information from Various Sources

The steps in criticizing information from various sources are as follows:

- a) **Read the Entire Text Containing Information**
Understanding the context and details of information is the first step in critiquing a source of information. Read the text thoroughly, to better grasp the nuances, arguments, and claims being made. Reading thoroughly ensures that no information is missed or ignored in the evaluation.
- b) **Find Odd or Illogical Information**
Identify information that sounds unreasonable or inconsistent with common sense. Odd information includes claims that have no adequate support or multiple statements that contradict each other. Recognizing these inconsistencies will raise doubts about the veracity of the infor-mation and prompt further searches for stronger evidence.
- c) **Identifying Language That Refers to Persuasive and Manipulative Efforts**
The language used in information is often intended to influence the au-dience. Watch for words or phrases that are intended to appeal to emo-tions or produce a desired reaction. Persuasive language is often used to reinforce claims without strong evidence or to hide uncertainty.
- d) **Note down words or sentences that have the potential to be fraudulent attempts.**

Mark or note any parts of the information that raise suspicion or are potentially fraudulent. Such as unverifiable claims, references to unclear sources, or statements that contradict common knowledge. The data is recorded so that you can be more careful in looking for evidence to verify the truth of the information.

Learning Stages

Learning to criticize information from various sources for the grade 12 SMA Merdeka Curriculum is implemented with a problem-based learning approach that begins with problem orientation through a video of false information that directs students to provide initial opinions. Furthermore, the teacher and students discuss critical information and persuasive language analysis and provide worksheets to be identified in groups. The guidance process continues with an analysis of potentially manipulative texts, supplemented by verification from other sources. After that, students develop the results of the analysis by presenting the characteristics and forms of persuasive language and providing critical opinions in front of the class. This process ends with feedback, evaluation, and joint conclusions about the importance of being critical of information, accompanied by a prayer and a closing greeting. The following are the learning steps.

Table 3. Learning Stages.

STAGE	ACTIVITY	INNOVATIVE CONTENT (TPACK, Pancasila Profile, 4C)
Introduction	<ol style="list-style-type: none"> The teacher gives opening greetings and enthusiastic greetings. Students pray led by the class leader Students and teachers discuss learning objectives and the benefits achieved in everyday life. Students and teachers discuss the scope of the material to be taught and the assessment techniques to be used. 	P5: Have faith, be devoted to God Almighty, and have noble character
Core activities	<p>Syntax 1: Problem Orientation</p> <ol style="list-style-type: none"> Students are given an initial introduction in the form of a video about false information (Observing). Students are given the opportunity to give their opinions using a mentimeter. <p>Syntax 2. Organizing Students</p> <ol style="list-style-type: none"> Students and teachers discuss critical information, characteristics of persuasive language, procedures for criticizing, and values in information interactively (asking questions). Students are given worksheets containing text by the teacher to analyze the characteristics of persuasive language, forms of persuasive language, and critical opinions. Students form groups to discuss problems presented by the teacher. <p>Syntax 3. Giving Guidance</p> <ol style="list-style-type: none"> Students identify and analyze texts given by the teacher (Collecting Information and Data). Students analyze language that has the potential to refer to manipulation and false information based on procedures that have been conveyed by the teacher (Analyzing Data). Students verify by comparing information from other sources. Students formulate the characteristics of persuasive language, forms of persuasive language, and critical opinions regarding the information presented. <p>Syntax 4. Developing Work Results</p> <ol style="list-style-type: none"> Students express their opinions regarding the text that has been criticized. On this occasion, students convey the characteristics, forms of persuasive language, and opposition/support for the truth of the information accompanied by reasons in front of the class (Communicating). Other students provide feedback on the group's presentation. <p>Syntax 5. Analysis and Evaluation</p>	<p>Syntax 1 PACK: Technological Knowledge</p> <p>P5: Critical Reasoning 4C: Critical Thinking</p> <p>Syntax 2 P5: Critical thinking, collaborative work 4C: Collaboration</p> <p>Syntax 3 P5: Critical thinking, collaborative, independent 4C: Collaboration</p> <p>Syntax 4 P5: Critical thinking, collaborative, creative 4C: Collaboration, Communication</p> <p>Syntax 5 P5: Critical thinking, collaborative work 4C: Collaboration, communication</p>

	16. Students and teachers conclude the meaning of valid information, and why they should be critical of information.	
Closing	17. Students and teachers conclude learning to criticize information from various sources.	P5: Have faith, be devoted to God Almighty, and have noble character
	18. Students end the learning with prayer and closing greetings.	

The critical information learning process begins with an important preliminary stage to build a conducive classroom atmosphere. In this step, the teacher greets students with an opening greeting and enthusiasm, which aims to create positive interactions. Next, students pray led by the class leader, signaling the start of learning activities with awareness and focus. Discussions about learning objectives and their benefits in everyday life provide students with a real context regarding the importance of this skill. This encourages them to be more involved and appreciate the learning process that will take place. The core activity stage consists of several syntaxes designed to actively engage students. Starting with problem orientation, students are introduced to the issue of false information through educational videos. This is a strategic step to attract their attention. Through platforms such as Mentimeter, students are given the opportunity to provide opinions, thus creating a dynamic discussion space. Then, the teacher and students discuss critical information, the characteristics of persuasive language, and procedures for analyzing information, which emphasize critical thinking and collaboration.

In the syntax of organizing students, they are divided into groups to encourage discussion of the issues raised. Students are given a worksheet containing text to analyze, so that they can directly engage in the critical process. This activity emphasizes the importance of cooperation and communication in understanding information, they ask and answer each other, strengthening collective understanding of the material. Teacher guidance during the analysis process is key to helping students identify potentially manipulative language. By verifying information from other sources, students learn not to accept information raw, but to cross-check it. This step trains them to think analytically and critically, which is very important in dealing with various forms of information in today's digital era. Through the formulation of the characteristics and forms of persuasive language, students can develop a deeper understanding of information manipulation techniques.

At the end of the learning, the analysis and evaluation stage is carried out to conclude the understanding of valid information. The application of feedback given by other students, so that they not only learn from the results of their group's work but also from the perspective of their friends. The conclusions made at the end of the session, along with the closing prayer, indicate that they not only understand the material but are also ready to apply these critical skills in everyday life. Learning about critiquing information from various sources is a strong foundation for improving their digital literacy.

Learning Media, Student Worksheets, and Assessment Rubrics



Figure 1. Google Sites Media



Figure 2. Google Sites Media

Indonesian Language learning in grade XII of high school with the topic of cri-tiquing information from various sources adopts Google Sites-based media to optimize the teaching and learning process. Through this platform, all learning assets have been integrated, including learning objectives, triggers, teaching materials, student activities or assignments, and reflections. This integration aims to provide a more structured and in-depth learning experience for students while making access to materials more flexible and easier. Thus, students can access all learning components anytime and anywhere, adjust to the most appropriate time for them, and enable them to learn independently and more optimally.

The implementation of Google Sites as a learning medium allows flexibility and active involvement of students in the process of learning Indonesian. The various features available make it easy for teachers to design interactive and reflective tasks that can be followed by students so that the process of evaluating and reflecting on the material being studied becomes more effective. Students are not only given information but also guided to understand and criticize various sources of information wisely, which is an important skill in this digital era. With the use of Google Sites, the process of learning Indonesian is expected to not only broaden students' understanding in analyzing information but also encourage them to be more careful and critical in responding to the various digital content they encounter.

Lembar kerja
Mengkritisi Informasi dari Berbagai Sumber
 AKTIVITAS 1

Petunjuk Lembar Kerja:
 1. Buat kelompok 3-4 orang
 2. Amati informasi di bawah ini
 3. Lakukan prosedur mengkritisi informasi dari berbagai sumber!
 4. Identifikasi ciri-ciri dan bentuk bahasa pada tindakan persuasi!
 5. Berikan pendapat kritis anda di dalam lembar kerja!

Kelompok: (.....)
 Anggota Kelompok:

Informasi:
 Saya menghubungi Anda dari Tiktok Media untuk memberi tahu Anda tentang pekerjaan paruh waktu online, kami bekerja sama dengan Shopee untuk menjalankan program ini. Kami mengelola berbagai kelompok kerja menggunakan Telegram sebagai platform. Pengerjaannya sederhana dan Anda dapat melakukannya kapan pun Anda punya waktu luang. Yang Anda butuhkan hanyalah tiktok dan telegram. Kami membantu penjual online mempromosikan produk mereka dengan video Tik Tok, dan peran Anda di platform kami adalah mengikuti dan menyukai video yang kami kirimkan kepada Anda, dan mendapatkan bayaran, video seperti itu memakan waktu 1-2 Anda tidak perlu khawatir karena pendaftaran sepenuhnya GRATIS.

Ciri-Ciri Bahasa Persuasi yang Ditemukan:
 Jawaban:

Bentuk-Bentuk Bahasa Persuasi:
 Jawaban:

Pendapat Kritis:
 Jawaban:

Figure 3. Student Worksheet (LKPD).

Student Worksheets (LKPD) are specifically designed to guide students in criticizing information in more depth. After receiving material on language motifs in cybercrime texts, students are given an understanding of how manipulative language is often used in online fraud. Through this LKPD, students can understand and identify language motifs that commonly appear in cybercrime acts, such as exaggerated claims or urgent calls. The use of realistic examples in the teaching materials allows students to hone their skills in recognizing suspicious language patterns, which are the basis for developing their critical thinking skills towards online information.

In the next activity, students are asked to work on LKPD by facing cases in the form of information that contains the potential for manipulation. In this task, students will identify the characteristics of language motifs, and manipulative forms, and provide critical assessments of the validity of the information. This activity trains students to analyze whether the information provided is valid or false based on linguistic signs and logical arguments. Through this approach, it is hoped that students will be able to validate information independently, improve digital literacy, and be aware of misleading information in cyberspace.

Aspek yang dinilai	Sangat Baik(4)	Baik (3)	Cukup (2)	Perlu Bimbingan (1)
Penguasaan ciri-ciri, bentuk bahasa persuasi dalam informasi dari berbagai sumber.	Mengidentifikasi seluruh (5-6) ciri-ciri, bentuk bahasa persuasi dalam informasi dari berbagai sumber.	Mengidentifikasi sebagian besar (3-4) ciri-ciri, bentuk bahasa persuasi dalam informasi dari berbagai sumber.	Mengidentifikasi sebagian kecil (1-2) ciri-ciri, bentuk bahasa persuasi dalam informasi dari berbagai sumber.	Tidak dapat (0) mengidentifikasi ciri-ciri, bentuk bahasa persuasi dalam informasi dari berbagai sumber.

Figure 4. Assessment Rubric.

This assessment rubric is designed to evaluate students' ability to identify the characteristics and forms of persuasive language in various information. This rubric uses four assessment categories: Very Good, Good, Sufficient, and Needs Guidance. In the "Very Good (sangat baik)" category (4), students can identify all (5-6) characteristics and forms of persuasive language completely, which shows a deep understanding of the material. Students who meet the "Good (baik)" criteria (3) successfully identify most (3-4) characteristics, which shows a fairly good understanding, although there are still some aspects that are not perfect.

The "Enough (cukup)" category (2) indicates that students are only able to identify a small part (1-2) of the characteristics or forms of persuasive language, which reflects that students need further reinforcement. Meanwhile, the "Need Guidance (perlu bimbingan)" category (1) indicates that students are unable to identify the characteristics and forms of persuasive language at all, which indicates the need for intensive guidance. With this rubric, teachers can monitor the extent of students' understanding of persuasive language in information and provide appropriate interventions to improve students' analytical skills in assessing the credibility and objectivity of information from various sources.

Implications for Digital Literacy & 4C

Table 4. Implications for Digital Literacy & 4C.

Learning Aspects	Implications
Strengthening Digital Literacy	Students are trained to access, understand, evaluate, and produce digital information. They learn to verify and compare information from various sources, increasing awareness of hoaxes and misinformation. They contribute to a healthier digital ecosystem.
Critical Thinking	This learning hones students' ability to analyze, question, and evaluate information. They learn the characteristics of persuasive language and information manipulation techniques and use evidence to connect and make decisions regarding the truth of information.
Collaboration	Students engage in group work to discuss and analyze information together. They practice communication skills, task sharing, and respect for each other's opinions. This collaboration enriches perspectives and increases productivity in teamwork.
Creativity	Students are given the freedom to develop critical analysis of information. They are encouraged to think out of the box in finding solutions and use digital tools to express their ideas in creative and visual ways.
Communication	Students practice their public speaking skills and communicate persuasively when delivering analysis results. Group discussions also strengthen their ability to convey ideas clearly and listen to others' opinions.

Learning to critique information from various sources has a direct impact on strengthening students' digital literacy. Digital literacy involves the ability to access, understand, evaluate, and produce information in the digital world. Through the problem-based learning approach applied students learn to verify and compare information from various sources, including social media, online news, and websites. This trains students to be more aware of hoaxes and misinformation so that they can contribute to a healthier digital ecosystem by spreading valid information.

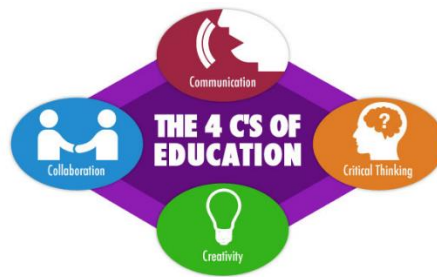


Figure 5. 4C Aspects.

Source: explorationsinliteracyblog.wordpress.com

21st-century learning is learning designed for students to be able to keep up with the times. The rapid development of science and technology requires the younger generation to have various skills that are included in 21st-century learning. Advanced technology makes information from various sources easily and quickly accessible to anyone and from anywhere. Collaborative activities can also be carried out easily, anytime and anywhere with this 21st-century learning (Mulyani, 2020). Learning to criticize information from various sources also supports the development of 4C. The components of 4C are Critical Thinking, and this learning emphasizes this aspect. These 4C skills are also considered essential to help the younger generation compete globally, stay relevant, and prepare for future challenges. Students are not only invited to passively receive information but to analyze, question, and evaluate the information they receive (Sohaya, 2020). Using a problem-based approach, students learn to identify the characteristics of persuasive language and information manipulation techniques. Participants are also trained to think logically in linking information with the evidence found and to consider various perspectives before making decisions regarding the truth of the information. Collaboration, a learning stage that involves group work encourages effective collaboration among students. Collaboration skills are skills that a person must have to be able to work together and tolerate effectively with team members, as well as train smooth decision-making to reach a mutual agreement (Taim, 2023). They are faced with the task of discussing and analyzing information together, which requires cooperation, good communication, and a clear division of tasks. By collaborating, students not only hone their critical thinking skills but also learn to respect other people's opinions and enrich perspectives through interactive discussions. This collaboration also trains them to work productively in teams, which is an important skill in the modern workplace.

Creativity is also honed in this learning, especially when students are given the freedom to express their opinions and develop critical analyses of the information they find. They are encouraged to think out of the box in finding solutions to the problems they face, as well as formulating new ways to present their opinions. The use of digital tools such as Mentimeter opens up space for students to be creative in expressing their ideas visually and attractively. This stimulates their imagination in constructing strong and innovative arguments. In Indonesia, efforts to improve the quality of learning and explore student creativity have become a major focus. The "Independent Learning" program is one of the significant efforts that has brought about fundamental changes in the approach to education (Chiam, 2023).

Communication is an important element in this learning process, especially when students are asked to present their analysis results in front of the class. They not only learn to organize opinions logically and systematically but also practice public speaking skills and communicate persuasively. These communication skills are strengthened through group discussions, where students must exchange information and views. The ability to convey ideas clearly and listen to others' opinions are important skills they develop in this learning. Student communication skills can be interpreted as interpersonal skills that include written and oral communication, peer evaluation, and self-reflection. These skills are part of 21st-century competencies (Dori, 2023).

Learning to criticize information also fosters awareness of digital ethics, which is part of digital literacy. Digital ethics is part of digital literacy because relationships in the digital environment must be based on moral norms such as responsibility, self-discipline, and mutual respect (Zvereva, 2023). Students are taught to be responsible for the information they consume and share. They are trained not to spread information that has not been verified as true, and to understand the impact of spreading hoaxes or misleading information. By criticizing information from various sources, they learn that every piece of information has consequences, both for themselves and the wider community. This digital ethics helps them become more responsible and wise digital citizens. The learning process involving the analysis of persuasive language and information manipulation techniques has a significant impact on the development of student's analytical skills. They learn to identify the elements that make up information, such as source credibility, argumentation patterns, and communication goals. This ability is very important in digital literacy, where students need to have the skills to filter information and make decisions based on strong evidence. This analysis also trains them to be more careful and not rush to conclusions.

Improving Learning Independence Problem-based learning applied in this activity also encourages learning independence. Students are taught not to rely solely on teachers, but to take the initiative in exploring information, asking critical questions, and seeking answers independently. This independence is very important in the information-rich digital

world, where they need to learn to find, manage, and understand information independently. It also strengthens their ability to find solutions to complex problems. By honing critical thinking, communication, collaboration, and creativity skills, this learning indirectly prepares students to face future challenges in the digital era. They learn how to adapt quickly in situations that require complex information analysis, as well as collaborate with others to solve problems. The 4C skills they develop will be very useful in various contexts, both in the world of work, further education, and everyday life in an increasingly digitally connected world. This skill involves the ability to recognize, analyze, and solve problems encountered, which is very important in the teaching process (Güleç, 2020).

The final implication of this learning is the formation of critical and responsible student characters in dealing with information in the digital era. They learn to question and evaluate every piece of information they encounter. In addition, they are also taught to have moral responsibility in disseminating information, as well as being aware of the impact of the information they consume and disseminate. This character formation is an important foundation for sustainable digital literacy, where students are expected to be able to become intelligent, critical, and responsible individuals in the ever-evolving information era. As stated (Aggarwal, 2020) The advancement of digital technology requires an ethical approach that takes into account diverse cultural perspectives and values. A digital ethics approach that focuses on universal values allows technology to be better adopted in various social and cultural contexts.

Implications for Digital Literacy & 4C



Figure 6. Learning Opener.

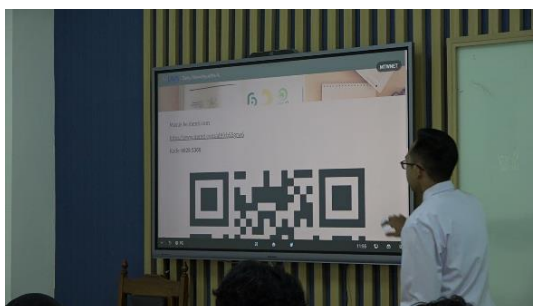


Figure 7. Interactive Lighter.

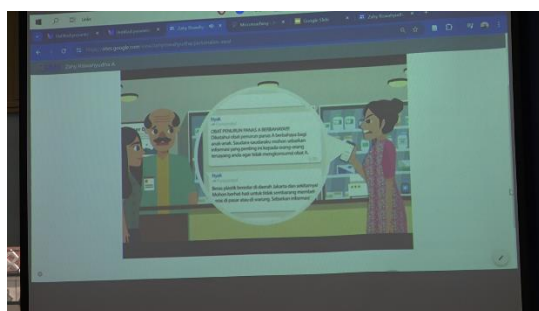


Figure 8. Video & Materials.



Figure 9. Discussion & Assignment.

The innovation of teaching materials designed to critique information from various sources has been implemented in the classroom, involving interaction with peers. The implementation of this initial trial aims to assess the effectiveness of teaching materials in improving students' ability to analyze and evaluate the information they receive. In this context, students are allowed to discuss and collaborate, so that the learning experience becomes more interactive and contextual. This practice is directly supervised by experts in the field of Indonesian Language Learning to provide direction and input regarding the implementation of learning. The curriculum is considered relevant if it emphasizes a scientific approach. This shows that the teaching materials developed must be designed by scientific methods and can facilitate students' comprehensive understanding (Hayati, 2022).

The implementation of this trial also involved an assessment by experts in the field of language learning, who provided input on the structure and methodology of the teaching. The results of this practice showed that the innovation of this teaching material was relevant, as well as improving students' digital literacy skills. Through a participatory and collaborative approach, students were able to better understand how to identify accurate information and avoid the spread of misinformation, especially in the context of cybercrime which is currently rampant. Thus, this innovation of teaching material is very much in line with the needs of students, especially in terms of digital literacy and understanding of forms of cybercrime that use language. The success of this early trial emphasizes the importance of developing a curriculum that is responsive to the challenges of the times and prepares students to become critical and wise consumers of information. This initiative is expected to accelerate education about cybercrime, as well as equip students with the skills needed to adapt to an increasingly complex digital world.

Conclusion

The language motives used in cybercrime acts such as doxing, scamming, and phishing show how language manipulation can be a very dangerous tool in trapping victims. Understanding the language motives in these crimes is a crucial step in preventing further victims and protecting yourself from various forms of fraud in the digital world. Therefore, the urgency of education about language motives in cybercrime must be responded to immediately through integration into the school curriculum, especially in the material on criticizing information in grade 12 of the Independent Curriculum. Teaching the younger generation how to recognize and analyze these motives will make them more critical and alert in dealing with complex and manipulative information in the digital era.

In addition, the learning process of criticizing information from various sources has a significant positive impact on building students' digital literacy through a problem-based learning approach. 4C skills (Critical Thinking, Collaboration, Creativity, Communication) can develop through structured learning stages, involving group discussions, and the use of relevant digital media. Thus, students can identify valid information and can think critically, work together, and communicate better in facing information challenges in the digital world. This learning prepares the younger generation to become smart, creative, and responsible digital citizens in the future.

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