

# Analysis Of The Information Processing Learning Implementation In Indonesian Debate Material In High School

Sutra<sup>1\*</sup>, Nurhadi<sup>2</sup>, Esti Swatika Sari<sup>3</sup>

<sup>1</sup> Student of Postgraduate Program, S2 Indonesian Language and Literature Education,  
Universitas Negeri Yogyakarta, Indonesia

<sup>2,3</sup> Postgraduate Program of S2 S2 Indonesian Language and Literature Education,  
Universitas Negeri Yogyakarta, Indonesia

\*Corresponding Author:

Email: [sutra.2022@student.uny.ac.id](mailto:sutra.2022@student.uny.ac.id)

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## **Abstract.**

*In 21st century learning, it is important for students to master the intellectual abilities of critical thinking and problem solving. Indonesian subject matter that is in accordance with this mission is debate material. This study aims to describe the analysis of the implementation of information processing learning in Indonesian debate materials in class X SMA Negeri 2 Nunukan. This research was conducted because the learning of information processing in Indonesian debate material trains students in critical thinking and reinforces character education values as demanded by 21st Century learning. This research uses a qualitative descriptive method. The data used in this study are observation notes, documentation, and interviews of class X.MIPA.1 students at SMA Negeri 2 Nunukan in learning Indonesian on debate material. Based on data analysis, it was found that the implementation of the information processing learning model can make students more actively involved in processing or processing information to improve their capabilities in Indonesian debate material. From this learning model, the learning strategy that is in accordance with the character of class X.MIPA.1 students at SMA Negeri 2 Nunukan in implementing information processing learning in Indonesian debate material is an inductive thinking strategy.*

**Keywords:** Information processing, Indonesian debate and high school.

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## **I. INTRODUCTION**

Indicators of 21<sup>st</sup> Century skills that students need to have, also important to be facilitated by educational institutions, are critical thinking, communication, creativity, and collaboration. The National Education Association [1] suggests that these four skills are known as Learning and Innovation Skills-4Cs. Furthermore, these four skills are the most important skill aspects for students to master at the elementary to tertiary education level. Putu Arnyana [2] states that the way to master Learning and Innovation Skills-4Cs in the world of education is by having them directly implicated in the learning curriculum. According to Inayati [3], the concrete effort that has been made by the Indonesian government regarding the development of a curriculum that is in accordance with the Learning and Innovation Skills-4Cs is the Implementation of the *Kurikulum Merdeka*. In fact, learning Indonesian is vital in *Kurikulum Merdeka*. Based on the Decree of the Head of BSKAP No. 8 of 2022, underlined the importance of Indonesian Learning Outcomes as the basic framework of the *Kurikulum Merdeka*. In addition, in the rationale for Indonesian subjects it is stated that language skills, literature, and thinking are the foundation of literacy skills. This is because learning Indonesian is literacy learning for various purposes of communicating in the Indonesian socio-cultural context. On the other hand, the Indonesian subject is also the basic capital for studying and working in other fields of study because it focuses on literacy skills, namely language and thinking. Thus, Indonesian subjects can foster and develop students' self-confidence as communicators, critical and creative thinkers, as well as Indonesian citizens who master digital and informational literacy.

Therefore, fostering and developing good Indonesian skills will form Pancasila individuals who believe in, fear God Almighty and have noble character, think critically, be independent, creative, work together, and have global diversity. One of the essential materials in the Indonesian subject in the Implementation of the Independent Curriculum and supporting indicators of achieving 21<sup>st</sup> Century Proficiency is debate material. According to Ranem [4], debate material in Indonesian requires students to be

skilled at speaking in a position to agree or disagree with a predetermined theme in response to a problem. This opinion is in accordance with Tarigan [5] who mentions debate as a venue for mutual argumentation between individuals or between groups of people with the aim of achieving one side's victory. On the other hand, according to Melvin [6], debate is also a valuable learning method for increasing thinking and contemplation, especially if students are expected to be alone. In line with that, Dawn Hall [7] reveals that debate is useful, among other things, for: (a) stimulating critical thinking skills in various ways, (b) stimulating research on controversial topics, (c) listening and finding out the positive and negative sides of an issue, (d) learning to think systematically and analytically, and (e) learning to communicate the results of ideas to others. The debate also complies with the competency criteria in the characteristics of Indonesian Learning Outcomes at *Kurikulum Merdeka*, both receptive (listening and watching) and productive (presenting). In debates, debate participants practice listening skills, namely the ability to receive, understand, and interpret the information heard in a good manner so that they can respond to the interlocutor.

Furthermore, in debate training viewing skills, namely the ability to understand, interpret, interpret, and reflect on printed, visual and/or audiovisual presentations according to their goals and interests to develop their attitudes, knowledge, skills and potential. Finally, in the debate also trains speaking skills, namely the ability to convey ideas, responses, and feelings in oral form politely.

According to Handayani, et al. [8], here are the complete parts of an Indonesian debate:

1. A motion is a matter or topic being debated.
2. Affirmative team, namely a team that agrees that there is a matter being debated (motion).
3. The negative or opposition team, namely the team that disagrees with or challenges the motion.
4. Neutral team, namely people who provide 2 sides either support or disapproval of the motion.
5. Moderator, namely the person who leads and helps the course of the debate.
6. Minutes, namely people who write the conclusions of a debate.

All parts of this debate are related to a fairly complex process, especially when information related to a motion is processed by the student's brain. Starting from this thought, there are problems that arise related to how to provide the right learning model so that students are trained to think critically when processing a motion in the Indonesian debate. Moreover, motions are the most important part of a debate activity because they relate to the matter or topic being debated. Of all the existing learning models, there is a learning model related to students' thinking processes, namely the information processing learning model. According to Solso [9], the information processing learning model emphasizes memory processes and thinking processes. Thus, information processing is related to a person's ability to receive stimuli from the environment in organizing data and solving problems and finding concepts using verbal and nonverbal symbols [10]. In addition, in information processing there is an interaction between internal conditions and individual external conditions. Internal conditions are conditions within the individual that are needed to achieve learning outcomes and cognitive processes that occur within the individual, while external conditions are stimuli from the environment that affect individuals in the learning process [11]. Thus, the information processing learning model is suitable for increasing students' critical thinking power. This is in accordance with the opinion of Joyce, Weil, & Callhoun (2009), which states that the information processing learning model is a learning model that focuses on activities related to processing or information processing activities to increase student capabilities through the learning process. The author assumes that in information processing learning, the information processed by students is in the form of Indonesian debate motions which will be solved so that they enter the problem solving stage.

According to Robert M. Gagne [12], there are eight phases of the information processing learning model, namely:

1. Motivation, namely the initial phase of starting learning with the encouragement to take an action in achieving certain goals (intrinsic and extrinsic motivation).
2. Understanding, namely individuals receive and understand the information obtained from learning. Understanding is gained through attention.
3. Acquisition, namely the individual gives meaning/perceives all information that reaches him so that the storage process occurs in the memory of students.

4. Withholding, namely withholding information/learning outcomes so that they can be used for the long term. This is a process of long-term memory.

5. Recall, which is to issue back the information that has been stored, when there is stimulation

6. Generalization, namely using learning outcomes for specific purposes.

7. Treatment, namely the embodiment of changes in individual behavior as a result of learning

8. Feedback, namely the individual gets feedback from the behavior he has done.

Based on initial observations in class *X.MIPA.1* of *SMA Negeri 2 Nunukan*, the teacher had carried out the eight phases of information processing learning well. However, there are still questions about how the learning strategies are appropriate to the character of class *X.MIPA.1* students at *SMA Negeri 2 Nunukan* in the implementation of information processing learning in Indonesian debate material? Therefore, this research seeks to answer it. Research on similar topics has been discussed by Suryana, et al. (2022) which describes how information processing theory can have implications for learning. The results of this study state that all information obtained can be stored in memory, but not all information can last a long time in memory or be lost because there are some influences. Meanwhile, research related to debate learning has been researched by Ranem (2018). Ranem described the development of teaching materials for debate material using the role playing method for class *X SMA* students.

Based on his research, the role playing learning method succeeded in increasing the character and skills of students in mastering debate knowledge material. Finally, there is a study related to the application of inductive thinking information processing learning models in Geography subjects by Sidauruk and Zandroto (2011). Based on the results of his research, it is proven that the application of inductive thinking information processing learning models can improve student learning outcomes and increase complex thinking in Geography subjects. Based on these things, the writer needs to examine how the information processing learning model is applied to debate material in Indonesian subjects. This is related to the characteristics of the debate material which greatly support 21<sup>st</sup> Century Skills, namely critical thinking, communication, creativity, and collaboration. In addition, the author also needs to state how the characteristics of class *X.MIPA.1* students at *SMA Negeri 2 Nunukan* process information related to learning Indonesian debate. This relates to the author's initial findings on a number of students at *SMA Negeri 2 Nunukan* who excelled and won prizes in the Indonesian Debate Competition at the National level.

Based on this background, the writer needs to describe the data that the writer found to see how the analysis of the implementation of the learning model is carried out. Therefore, the author will discuss:

1. What is the stage of forming the concept of the information processing model in learning Indonesian debate in class *X.MIPA.1* of *SMA Negeri 2 Nunukan*?

2. How is the data interpretation stage of the information processing model in learning Indonesian debate in class *X.MIPA.1* of *SMA Negeri 2 Nunukan*?

3. What is the application stage of the principle of applying the information processing model in learning Indonesian debate in class *X.MIPA.1* of *SMA Negeri 2 Nunukan*?

## II. METHODS

This research is included in the type of qualitative descriptive research because it is in accordance with the objectives to be achieved to obtain class discourse analysis in the implementation of student debates in learning. Furthermore, the data retrieved is data that really happened at that time and was not made up. This research was conducted at *SMA Negeri 2 Nunukan*. The subjects studied in this study were students in class *X.MIPA.1*. The time of this research was carried out on 17 October 2022 – 18 November 2022. In this study, several data collection techniques were used, namely observation, documentation study, and interviews. The data analysis technique used in this study is to use the steps as proposed by Miles and Huberman [13], namely "data reduction, data description, and conclusion drawing".

## III. RESULT AND DISCUSSION

The data presented were obtained from research conducted on class *X.MIPA.1* of *SMA Negeri 2 Nunukan*. From that class, the data was reduced to 18 subjects from 6 groups of students. The six groups





Moti : pentingnya keterwakilan perempuan dalam Pemilu  
 Pembicara 2 : Dhea Ananda

**DPO**

Sadari status quo saat ini menunjukkan bahwa keterlibatan perempuan dalam pemilu masih sangat kurang. Adanya peraturan 30% keterwakilan perempuan masih belum terpenuhi, sehingga mekanisme yang ada sekarang terbukti gagal dalam melibatkan perempuan dalam pemilu.

Keterlibatan perempuan bukan hanya sebagai anggota DPR ~~semisal~~ semisal sehingga kita bisa mengatakan bahwa ketua DPR sekarang dijabat perempuan sehingga tidak perlu lagi kita melibatkan perempuan. Namun perlu diketahui bahwa perempuan dalam pemilu itu luas tugasnya, juga bisa mengisi bangku2 pemerintahan seperti badan anggaran yang sangat minim keterwakilan perempuan.

- Disclaimer: Kami tidak mengatakan bahwa saat ini perempuan sama sekali tidak terlibat dalam pemilu, namun perlunya parti-partai politik untuk lebih mengaktifkan keterwakilan dan melibatkan perempuan dalam pemilu.
- Adapun argumen mengapa kami setuju akan mosi ini yaitu:
  1. Teori perempuan sebagai penjaga bumi artinya ketika terjadi sesuatu hal yang merusak bumi sebenarnya perempuan yang disalahkan. Itu hal simpel namun banyak berpengaruh perempuan diabaikan karena tidak mampu mengelola sumber. Untuk contoh ketika semisal peraturan kesehatan tidak memuat larangan anak-anak sakit yang akan disalahkan adalah ibunya. Padahal pemerintah lah yang salah dalam hal ini karena tidak mampu menyediakan teknologi, makanan atau bahkan Para-Pura tidak bisa akses masalah yang terjadi.
  - mengapa hal ini berarti harus melibatkan perempuan dalam pemilu atau pemerintahan?
- 2. Pemerintah adalah Pusat yang mengambil keputusan
  - ketika perempuan diabaikan pada pemilihan bahwa ia adalah bagian yang seharusnya diperhatikan hal ini menyalakan Cahat. Pemerintah, maka perempuan untuk dapat diikutsertakan pemerintahan.
  - hal ini terjadi beberapa adanya sumbu sil atau keadilan dalam membuat keputusan dalam pemerintahan. Hal ini juga bisa sumbu tegak: check and balance dalam pemerintahan.

**Fig 2.** Answers to Subject 8 from Pro Team

Based on Figure 2, it can be seen that Subject 8 has been able to process the information contained in the motion in the form of images. Just like Subject 3, Subject 8 also started the information processing process from the stage of forming a concept by making a classification based on certain characteristics. This is evidenced by the statement: *“Sadari status quo saat ini menunjukkan bahwa keterlibatan perempuan dalam pemilu masih sangat kurang. Adanya peraturan 30% keterwakilan perempuan masih belum terpenuhi, sehingga mekanisme yang ada sekarang terbukti gagal dalam melibatkan perempuan dalam pemilu.”* Translated into: "Realizing the current status quo shows that women's involvement in elections is still lacking. The rule of 30% women's representation has not been met, so the current mechanism has proven to be a failure in involving women in elections." From this stage, Subject 8 then interprets the data by making logical conclusions from the information that has been obtained.

This is evident from Subject 8's statement in the sentence: *“Keterlibatan perempuan bukan hanya sebagai anggota dpr semisal sehingga kita bisa mengatakan bahwa ketua dpr sekarang dijabat perempuan sehingga tidak perlu lagi kita melibatkan perempuan. Namun perlu diketahui bahwa perempuan dalam pemilu itu luas tugasnya, juga bisa mengisi bangku2 pemerintahan seperti badan anggaran yang sangat minim keterwakilan perempuan.”* Translated into: "women's involvement is not only as members of the DPR, for example, so we can say that the chairman of the DPR is now held by a woman, so we no longer need to involve women. However, it should be noted that women in elections have broad duties, they can also fill government seats such as budget bodies where there is very little representation of women." Next, Subject 8 applies the principle by looking for relevant arguments and examples that can strengthen the predictions that have been made. This is evident from Subject 3's statement in the sentence: *“Adapun argumen mengapa kami setuju akan mosi ini yaitu (1) 1. Teori perempuan sebagai Penjaga Bumi, dan (2) Pemerintah adalah pusat yang mengambil keputusan.”* Translated into: "and the arguments why we agree to this motion are (1) 1. The theory of women as Guardians of the Earth, and (2) The government is the center that makes decisions."

**Motion 3**

The following is a transcript of answers based on a sample of subjects from two groups of students against the motion "The Bad Effects of Social Media in Elections".



Therefore, the basis for considering the message processing process is used as a learning strategy by Indonesian teachers in class *X.MIPA.1* of *SMA Negeri 2 Nunukan*. The Indonesian teacher in class *X.MIPA.1* of *SMA Negeri 2 Nunukan* gave tips to his students, namely how to solve problems in motion with an inductive strategy. With an inductive strategy, material or learning materials are processed from the specific to the general (generalization). In other words, students look for certain characteristics and characteristics of various phenomena or data, then draw conclusions that these characteristics or traits are present in all types of phenomena [15]. Thus, the authors assume that the information processing learning model with an inductive thinking strategy is a learning model and strategy that is appropriate to the character of class *X.MIPA.1* students at *SMA Negeri 2 Nunukan* in the implementation of information processing learning in Indonesian debate material. This is in accordance with the opinion of Sidauruk [16], who says that the model used is a direct learning model in the form of active transactions between students and data that develops gradually from simple to higher/complex stages. In addition, in the implementation of the information processing learning model on Indonesian debate material in class *X.MIPA.1* of *SMA Negeri 2 Nunukan*, there are 3 (three) Inductive Thinking Strategies [17], namely:

1. Shaping the Concept

This stage includes three main steps: list items (sheets, drafts), along with labels (with concept names).

2. Data Interpretation

This stage includes interpreting, concluding, and generalizing and leads to conceptual attainment (i.e. students develop deductive abilities),

3. Principle Application

This stage includes predicting consequences, explaining and/or supporting the predictions, and testing and generalizing.

#### IV. CONCLUSION

The implementation of learning information processing in Indonesian debate materials in class *X.MIPA.1* of *SMA Negeri 2 Nunukan* aims to train students to think at a higher level in solving complex problems. In practice, students process information based on consideration of processing messages from specific things to general matters or (generalization). This is part of the information processing learning model with inductive thinking strategies. There are three stages of inductive thinking learning strategies, namely: (1) forming concepts, (2) interpreting data, and (3) applying principles. All of these stages have been carried out by class *X.MIPA.1* students of *SMA Negeri 2 Nunukan* in learning Indonesian debate.

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