

## AN ANALYSIS OF DEFINITION AND DESCRIPTION CONCEPT IN SCIENTIFIC ARTICLE

GITA RAMADHANI<sup>1</sup>, HADIAN FIRMAN SYAHREZA<sup>2</sup>, WANAPRI PANGARIBUAN<sup>3</sup>,  
YUNIARTO MUDJISUSATYO<sup>4</sup>

<sup>1,2,3,4</sup> UNIVERSITAS NEGERI MEDAN

### Abstract

*The concept of definition is a basic discussion in a study. The objectives of this study is to analyse the definition and description concept contained in scientific article. The definition and description is considered as an important thing to comprehend the concept of discussion. The analyzed article is entitled “Effects of Educational Management on Quality Education in Rural and Urban Primary Schools in Ghana” Heliyon Journal published by Elsevier Ltd. This research uses a qualitative descriptive method and a theory from Miles and Huberman as a technique of data analysis. There are five data found in article classified as a definition and description. The result shows that all the data categorized as a real definition and there is no nominal definition in the article.*

**Keywords:** *definition; description; scientific article.*

## INTRODUCTION

Definition is a study of philosophy of logic which involves a systematic thinking process. The word definition comes from the Latin *definitio* which means limitation. A definition is referred as a limitation because the function of the definition is to provide a clear, precise, and concise meaning of something being defined. Definition is a disclosure of the meaning, information or main characteristics of a person, object, process or activity Rohmadi and Irawati (2020: 17). This point of view about definition is in line with the definition meaning based on the Cambridge dictionary which states that a definition is a description of the features and limits of something (Cambridge University Press & Assessment, n.d.). Moreover, definition is a formulation of scope and characteristic of concept that is the subject of discussion or study Rahayu (2004: 68). It can be concluded through definition it delivered the concept of something that is defined through a description which is given boundaries of the meaning.

The characteristics possessed by a definition include; having a defined word or terms called as *definiendum*, then the definition must have word, phrases or sentences functioned to described the meaning called as *definiens*. The selection of words to be defined can be a noun or not. Then, followed by to be as a separator between the *definiendum* and the *definiens*. Example ; Innovation is the process of introducing new ideas, methods or products, often leading to positive changes in various fields. In that sentence, “innovation” is a *definiendum* and the sentence after to be “is” is a *definiens*.it gives the boundaries about innovation meaning. Furthermore, definition can be formulated as below.

**Table 1:** The formula of definition

No	$X = G + ta + tb + tc + \dots + tn$	Information
1	X	is <i>definiendum</i> (defined word)
2	=	to be (is/are)
3	G	is General
4	ta	is the main characteristic of the <i>definiendum</i>
5	tb,tc,tn	are the additional characteristic of the <i>definiendum</i>

There are some aspects should be fulfilled in a definition, that are ; the definition must have the same area between the word being defined and the description itself when it turn back and forth it still shows the same portion. Definitions should not be written in negative form if it can be formulated in positive form. A word being defined may not be included in the description of the definition itself. Furthermore, there are two types of definition based on Rohmadi and Irmawati in their book titled *Dasar-Dasar Logika*.

The first type is Nominal Definition. It is a definition explains a term by explaining the meaning of the word sufficiently. It can be done by providing synonyms, explaining the origin etymology, or the meaning of the word according to the dictionary. Second, Real Definition is a definition that shows a thing or object that is limited. This definition can be in the form of description, the purpose of the word being defined, a definition provides a causal cause, a description in narrow or broad form, or an operational definition that shows the steps.

Based on Finoza in Dalman, description comes from the word describe which means to “write about”. Description is a form of writing aims to expand the reader’s knowledge and experience by describing the true nature of the object. There are several characteristics of description ; (a) Description provides more details or events about the object, (b) Description describes something that can be heard, seen, and felt, for example objects, nature, colors and people. (c) Description conveys the nature and details of the forms that can be found in the object (Dalman, 2015). It can be concluded that a description is a depiction of the characteristics of an object.

Definition and description is the most basic thing in understanding and discussing an issue. It can be seen when reading a book or article on a particular topic, the most important thing is to discuss the definition of the topic being discussed. The first chapter mostly talks about the definition. It shows how important to know the definition first before discussing the further information. A fundamental in building a clear and consistent basis to avoid ambiguity in meaning and concepts. Therefore definition has a significant place in a discussion. Especially in the scientific field where the concept must be neatly arranged from the most basic to complicated issue. However, the comprehension about definitions and how important they are is not yet considered critical. Definition is considered trivial, some people know about things but sometime it is difficult to define it in a description. Study regarding definition, research article of definition has not been found so far. This research analyzed the concept of definition since it counts as a crucial thing.

## **METHODOLOGY**

This research was conducted a descriptive qualitative method. The descriptive research is a method carried out on independent variables without making comparisons or connecting them with other variables so that the variables studied are independent. The aim of this research is to accurately describe the characteristics of an individual, condition, symptom or particular group or to determine the frequency or distribution of a symptom Abubakar (2021: 17). Meanwhile, qualitative research is research that produces discoveries that cannot be achieved using statistical procedures or other methods of quantification Murdiyanto (2020:150). A qualitative approach is a research and understanding process based on a methodology that

investigates a social phenomenon and human problem. In this approach, researchers create a complex picture, examine words, detailed reports from respondents' views and conduct studies in natural situations Creswell (1998: 14). This research was conducted to reveal the phenomenon regarding the definition concept in scientific article.

Miles and Huberman theory used in this research as a technique of analysis data. This theory clarify three step to analyze data; data reduction, to selecting, processing, sorting, grouping, simplifying, reduce the unimportant data that has been collected in order to observe which data is required in the research. Second, data display used to shown the data in many ways such as diagram, table, matrices or chart. Third, verification, to recited and take a final decision, the conclusion may be discover a new pattern or not Miles, Matthew B and Huberman (1994:13).

**FINDINGS**

The data collected of scientific article from Heliyon Journal published by Elsevier Ltd. The title is “Effects of Educational Management on Quality Education in Rural and Urban Primary Schools in Ghana” Donkoh et al., (2023:3). Every line in article was sorted and selected in data reduction step by Miles and Huberman to clearly separate which one the definition sentence and which one is not. The data display below are the sentence indicate the definition in the article mentioned.

No	Sentence	Type	Information
1	Educational management is a key and the pivot for the survival of any institution. It involves a systematic process of strategic planning, monitoring and supervision, organizing resources effective school dicipline, drawing policies, and controlling activities to train pupils to be acceptable in the organization, institutions and society.	Real Definition	This sentence classified as a definition. It is because after the noun phrase <i>educational management</i> followed by to be “is”, it indicates the characteristic of definition, then followed by the description after to be. The sentence is also an action of describing and give a brief explanation about <i>educational management</i>
2	Quality education is the diverse plans and reforms of the educational institutions, intending to achieve	Real Definition	The sentence classified as a definition. The sentence function is to give a meaning

	efficiency and effectiveness by complying with the standards established.		of the word <i>quality education</i> . After the noun phrase <i>quality education</i> followed by to be <i>is</i> and description about the noun being defined
3	The educational institutions is an open system that manages itself by exchanging materials in the environment.	Real Definition	This sentence classified as a definition. It is because the sentence try to define the phrase “the educational institutions”. After the phrase followed by to be <i>is</i> and a brief definition about the phrase itself.
4	Internet facilities are a game changer in the educational sector, hence it has positive effects on most variables in the educational field.	Real Definition	This sentence classified as a description. It is because the sentence is described that internet facilities is important.
5	This research is cross-sectional and employs a quantitative approach for data collection and analysis.	Real Definition	This sentence classified as a definition. It is because after the noun phrase <i>this research</i> followed by to be “ <i>is</i> ”, it indicates the characteristic of definition, then followed by the description after to be. The sentence is given a brief explanation about the research.

First sentence is count as a Real Definition because the sentence describing about educational management. Based on the real definition, it is in the form of description, the purpose of the word being defined, a definition provides a causal cause a description in narrow or broad form, or an operational definition that shows the steps. The sentence purposed to emphasize that educational management is a center or foundation in institutions. Furthermore, it gives the explanation that educational management is a strategic planning. On the other hand, some

experts have dealt with the definition of educational management. One of them told that Educational Management is a field of study and practice concerned with the operation of educational organization. Educational management is centrally concerned with the purpose or aims of education Pal (2019: 15). Educational management is a function of execution for fulfilling decided policies and made a distinction between educational management and educational leadership Dey (2018: 17).

Based on that definition (Pal and Dey), both are support the definition clarified by article. It shows how important an educational management in education institution. It is like a pivot, a center and fundamental who organize, regulate and make sure the process in educational management run well as the purpose.

The second sentence is a real definition which gives a description by giving the aim of the definiendum itself. It can be seen on the sentence, the objectives of quality education in achieve efficiency and effectiveness. Another opinion revealed about what quality education is. Based on UNICEF, quality education is included a healthy learners, healthy environment, a good content, quality process and quality outcomes Colby and Witt (2000: 68). There is a difference between the definition about quality education stated by articles and by UNICEF. The definition clarify in that article emphasize the definition by giving objectives. On the other hand, the definition by UNICEF described the definition by emphasizing the characteristic of quality education itself. Both of definitions are classified as a real definition with a different way of description.

The third sentence is real definition because the sentence (definiens) gives the description of what an educational institution is (definiendum). Another definition is found about educational institutions are classified as either public or private according to whether a public agency or a private entity has a ultimate power to make decisions concerning the institution's affairs (Wobmann, 2000). It can be seen there are similarities found in both definition. Both definitions are real definitions. Then, both of definition were clarified that educational institution has their own power and control in managing the organization itself.

The fourth sentence is a real definition because it gives the definition of internet role by illustrating the caused of internet. The sentence emphasize internet facilities is a great tool in education since it gives a positive effect in education process. One of the real definition form is provided a causal cause. In another point of view, stated an internet facilities is a great way to assist academic staff who are responsible for teaching and research in university, such as World Wide Web, FTP, E-mail, Google, Yahoo, E-books, E-Journals and many more (Suleiman & Aliyu, 2013). The data found in article give explanation by describe a causal cause. It is diverse to definition of internet facilities clarified by Suleiman and Aliyu which focus to describe by

giving the examples of internet facilities in education. Both of the definition is classified as a real definition.

The last sentence classified also as a real definition because it illustrate and describe the study itself. The sentence gives the information about the kind of method used in the research. The sentence give a specific description related their own article. It is not a general definition about general definiendum. Therefore, no need to proof or give a different perspective from another expert because the description is told about the article itself.

## **CONCLUSIONS AND SUGGESTIONS**

The analysis of definition concept in scientific article count as a critical. As a scientific article, it helps many people in many specific purposes. It is crucial to provide a great definition which followed the formulation of definition in every research. It is due to definition and description is the basic aspect which illustrate the concept of what is being discussed. Definition and description concept mostly find in the first chapter of book to start the discussion. In article, definition and description concept normally located in introduction.

The definition found in that article has completed. Total five sentence indicate as a definition and description concept. All the sentences are real definition. There is no nominal definition sentence in the article. It can be more well-turned to provide a definition from some expert both in real definition or nominal definition. However, the nominal definition can help reader to understand carefully the actual meaning of something.

On the other hand, research regarding definition and description concept is minor. As a suggestion, there will be more research regarding definition and description concept to deeper and more developed.

## **ACKNOWLEDGEMENTS**

The authors would like to express the deepest gratitude to Allah SWT for his mecry and giving a full strength to complete this article. The sincere gratitude to our lecturers (Dr.Ir. Wanapri Pangaribuan, M.T., M.M and Dr. Yuniarto Mudjisusatyo, M.Pd) for their guidance and support in this collaboration.

## **REFERENCES**

- Abubakar, R. (2021). *Pengantar Metodologi Penelitian*. Suka-Press UIN Sunan Kalijaga.
- Cambridge University Press & Assessment. (n.d.). *Definition Cambridge Dictionary*. Cambridge Dictionary.
- Colby, J., & Witt, M. (2000). *Defining Quality in Education (Education Section)*.
- Creswell, J. W. (1998). *Qualitatif Inquiry and Research Design*. SAGE Publications Inc.
- Dalman. (2015). *Menulis Karya Ilmiah*. Rajagrafindo Persada.
- Dey, N. (2018). *Education Administration vs Education Management. In Principles of Educational Management*. House Pvt. Ltd.

- Donkoh, R., Lee, W. O., Ahoto, A. T., Donkor, J., Twerefoo, P. O., Akotey, M. K., & Ntim, S. Y. (2023). *Effects of Educational Management on Quality Education in Rural and Urban Primary Schools in Ghana*. Heliyon.
- Miles, Matthew B ; Huberman, A. M. (1994). *Qualitative Data Analysis (Vol. 1304)*. SAGE Publications Inc.
- Murdiyanto, E. (2020). *Penelitian Kualitatif. Lembaga Penelitian dan Pengabdian Pada Masyarakat*.
- Pal, K. (2019). *Educational Management*. USI Publications.
- Rahayu, M. (2004). *Bahasa Indonesia di Perguruan Tinggi*. PT Gramedia Widiasarana Indonesia.
- Rohmadi, Y., & Irawati, W. (2020). *Dasar-Dasar Logika*. EFUDEPRESS.
- Suleiman, I., & Aliyu, M. (2013). *The Use of Internet Facilities in Teaching and Research by Academic Staff of School Management and Information Technology*, Modibo Adama University of Technology Yola. *The Information Manager*, 13(1&2), 59–68.
- Wobmann, L. (2000). *Schooling Resources, Educational Institutions and Students Performance : The International Evidence*.