PAPER – OPEN ACCESS

Teacher Stimulus in Leading Students to the Creation Level in Learning Activities

Author : M. Nur Mustafa et al
DOI : 10.32734/lwsa.v7i2.2081
Electronic ISSN : 2654-7066
Print ISSN : 2654-7058

Volume 7 Issue 2 – 2022 TALENTA Conference Series: Local Wisdom, Social, and Arts (LWSA)

LWSA Conference Series 07 (2024)
TALENTA Conference Series
Available online at https://talentaconfseries.usu.ac.id

Teacher Stimulus in Leading Students to the Creation Level in Learning Activities

M. Nur Mustafa, Hermandra, Zulhafizh

Universitas Riau, Jl. Binawidya, KM. 12, 5, Pekanbaru, Riau, Indonesia, 28293

m.nur@lecturer.unri.ac.id, hermandra@lecturer.unri.ac.id, zulhafizh@lecturer.unri.ac.id

Abstract

The aim of this study was to explain the instructional words that are used and conveyed intensively by the teacher to lead students to the level of creation. This study was undertaken with a qualitative approach. The study was developed with descriptive method. The study was conducted at SMA Negeri 4 Pekanbaru. The research subjects were teachers who carried out learning assignments. The research sample was 30 people. Data collection techniques used a questionnaire. The questionnaire was developed from Bloom's revised taxonomy. The questionnaire contained six cognitive aspect operational verbs namely creating or making. Data analysis techniques by describing operational words that are the choice of respondents in stimulating students. The finding indicated that there were 40 operational words used by the teacher in giving learning instructions so that students could reach a creative level. Some teachers who provided variations of operational words till 35 so that students can experience and get an adequate learning experience. The many and varied ways of teaching encourage a diversity of students to reach a creative level. Creative activity is the highest level cognitively. The level of creation is the step towards achieving a learning experience at the highest level. Learning responsibility towards students will be achieved by using the operational word create.

Keywords*:* teacher; creation level; learning activities

Abstrak

Penelitian ini bertujuan untuk menjelaskan kata-kata instruksional yang digunakan dan intensifnya disampaikan oleh guru untuk mengantarkan siswa pada level mencipta. Penelitian dilaksanakan dengan pendekatan kualitatif. Penelitian dikembangkan dengan metode deskriptif. Penelitian dilaksanakan di SMA Negeri 4 Pekanbaru. Subjek penelitian adalah para guru yang menjalankan tugas pembelajaran. Sampel penelitian berjumlah 30 orang. Teknik pengumpulan data dengan menggunakan angket. Angket dikembangkan dari taksonomi Bloom yang telah revisi. Angket berisi kata kerja operasional aspek kognitif 6, yaitu mencipta atau membuat. Teknis analisis data dengan mendeskripsikan kata-kata operasional yang menjadi pilihan para responden dalam menstimulus siswa. Hasilnya menunjukkan bahwa terdapat 40 kata-kata operasional yang digunakan guru dalam memberikan instruksi pembelajaran agar siswa bisa mencapai level mencipta. Ada guru yang memberikan ragam kata-kata operasionalnya hingga dan 35 agar siswa dalam mengalami dan mendapatkan pengalaman belajar yang memadai. Banyak dan bervariasinya dalam memberikan instruksi mendorong bervariasinya siswa mencapai level mencipta. Kegiatan mencipta sebagai level tertinggi secara kognitif. Level mencipta sebagai langkah mencapai pengalaman belajar di tingkat paling tinggi. Tanggung jawab pembelajaran terhadap siswa akan bisa dicapai dengan penggunaan kata-kata operasional mencipta.

Kata Kunci: guru; pembelajaran; stimulus; mengarahkan; mencipta; siswa

1. Introduction

Learning activities which take a place in schools are oriented towards educational goals. As a teacher, learning does not merely share an information but also attempt to provide the best experience. This encourages students to understand information so that they have the ability to create from the information and experience provided. To achieve these expectations, the learning carried out by the teacher is student-oriented. Assert that based on the results of research that has been undertaken, student-focused learning gives strength to students to achieve their learning goals [1], [2]. In fact, students will gain various experiences from the learning activities they have gone through

In order to realize students who have experience, teachers need to provide the widest possible space for students to explore themselves. The teacher's task is to assist and direct students to achieve their learning expectations. Explain that students who are accompanied and continuously motivated to learn are able to encourage their learning achievements [3]. Student enthusiasm is the success of learning. Conversely, students who do not get learning support from teachers or those around them can weaken the quality of their learning. That students who explore their learning activities can improve their learning, on the contrary, if mentoring is not carried out it can cause limitations in achieving their expectations and learning experiences [4]. It implies that teacher assistance has a very important position for students.

Selection and peer-review under responsibility of The First International Seminar on Language, Literature, Education, Arts, and Culture (1st ISoLLEAC) 2024
p-ISSN: 2654-7058, e-ISSN: 2654-7066, DOI: 10.32734/lwsa.v7i2.2081

Further, the teacher also does not merely give guidance and direction but tries to stimulate students to be able to act or act according to the expected standards. Adopting the view put forward to make students reach their learning bills, students are also required to achieve success in learning to create. It was further stated that creating is the success of understanding and mastering theory and practice [5], [6]. Someone who is capable and reaches the stage of creating or being creative shows that his competence is complete. Someone will not be able to create if they do not have the ability to remember, understand, apply, analyze, and evaluate [7]. Creating or being creative is an ability that is at the highest level so that the quality of one's learning is completely complete [8], [9], [10].

Students' ability at the creative level is the highest expectation in learning [11], [12]. To achieve these expectations and abilities, support and direction from the teacher is needed. It indicates that the teacher must have a scenario so that students can achieve this target. For example, the teacher gives instructions that can encourage students to do or create. The teacher attempts to explore students so that they are at a creative level. The process of creating will be successful if students are able to understand, apply, analyze, and evaluate well [13], [14]. Students who are able to be at the creative level show that they understand and have good knowledge. This is clarified by research that students at the creation level have more academic abilities than other levels [15].

Teachers who carry out learning and have succeed in encouraging students to the level of creating are extraordinary efforts. On the other hand, students who are directed by the teacher, they can follow and carry out these instructions. In this context, both teachers and students are components that must work together so that the quality of learning that is passed is extraordinary. Thus, this article attempts to find out the stimulus efforts undertaken by the teacher in giving instructions to students so they are able to create. Research on the efforts made by teachers to direct students to be able to create is carried out through problem-based learning models [11], learning with heuristic concepts [16], implementing independent learning [17], [18], [19], based on student engagement with the environment [20].

Several previous studies have tended to observe students' ability problems related to the level of creating design-oriented through various strategies, approaches, and learning methods and models. Besides, it encourages students to a real environment so that students know about the process that must be implemented. However, this article focuses on the use of instructional words that direct students to do or create. The more often this instructional use is given, the more it encourages students to continue to do and create. The lack of instructions is carried out, so the potential for hope to create is achieved [21]. That is, the expression or use of instructional words in encouraging students to create has a very important position. Thus, this article also aims to explain the instructional words used and intensively conveyed by the teacher to students.

2. Method

This study was undertaken through qualitative approach. This study also was developed with descriptive method. It was undertaken at SMA Negeri 4 Pekanbaru. The research subjects were teachers who carried out learning assignments. The research sample was 30 people. Data collection techniques using a questionnaire. The questionnaire was developed from the revised Bloom's taxonomy. The questionnaire contained cognitive aspect 6 operational verbs, namely creating or making. The responses given are based on careful data and analysis of the teacher's efforts to stimulate and direct students to create in learning activities. Technical analysis of data by describing operational words that are the choices of respondents in stimulating students. The variety and number of operational words used show the variety of ways teachers stimulate students to reach the level of creation.

3. Finding and Discussion

3.1. Description of Respondents

The teacher's actions in stimulating students to achieve the target of creating competence are quite diverse. Actions taken are an expectation of students. This hope will be good when students participate in following the orders conveyed by a teacher. Conversely, if students do not maximize in carrying out these orders, the targets and expectations are not optimal. Argue that students must be enthusiastic in carrying out directions under the teacher's creative guidance [22]. The results of the description of the respondent's data related to the use of operational words in stimulating students can be observed in Figure 1 below.

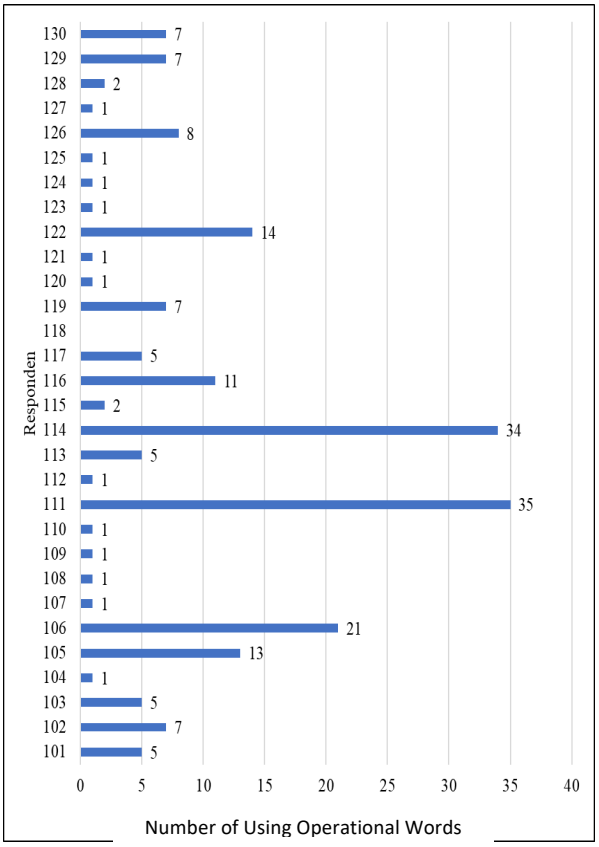

Figure 1. Description of Respondents

Regarding to Figure 1, it provides information that there are teachers who do not make efforts to stimulate students to reach the level of creation, such as teachers with code 118. Meanwhile other teachers have tried to stimulate students with various uses of operational words. Based on the 30 teachers who were questioned via a questionnaire, there was one person who did not respond to efforts to encourage students to create or create. Basically, each subject and certain basic competencies have provided key words which in student learning must reach the stage of creating. If this creative activity is not carried out and there is no encouragement or motivation from the teacher, then students will not reach the stage of instructional creative ability.

Motivation in learning and during learning is very necessary in achieving learning goals. Teachers and students must have the same target and effort to gain maximum results [23]. Teachers as managers in learning can design learning that can encourage students to act. Various scenarios must be prepared beforehand so that efforts to provide stimulus to students are not constrained and students participate in following the order [24]. Conversely, teachers who do not have or do not prepare scenarios when they are in class can interfere with the effectiveness of achieving learning objectives. Various obstacles can occur such as what actions will be taken during learning, both from preparation in class, learning design, strategies for achieving goals, as well as efforts to anticipate various obstacles that might occur. Thus, ideally teachers do not come to class without bare hands or preparation [25], [26].

3.2. Description of Operational Words Usage

The use of operational verbs that focus on the achievement of creative competence is important. These words are a means of control by the teacher against students. Students can act according to the keywords used by the teacher. Operational words mediate students for the actions they will take. In this context, operational word choice errors can lead to wrong actions by students. As a teacher, you must understand operational words that show competence at the level of creation. Furthermore, the teacher must also think about the placement of these operational words as command or question keywords thus, there is no misunderstanding. Information related to the use of operational words used by the teacher when giving stimulus to students to reach the level of creation can be seen in Figure 2.

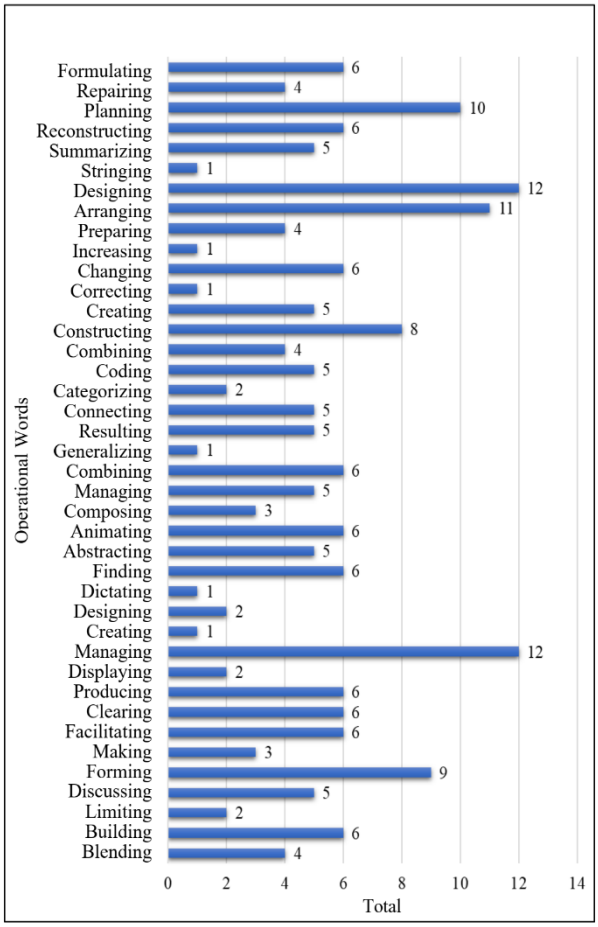

Figure 2. Description of the Use of Operational Words

Regarding to Figure 2, it can be obtained information on the most popular operational words used by teachers to encourage and direct students to create, namely creating, composing, compiling, and planning. In addition to the operational word to compose, other words are also used, namely: to create, to create, to combine, to produce, to compose and so on. On the other hand, there are also operational words that are rarely used by teachers when carrying out learning, especially in encouraging students to create, such as: assembling, improving, changing, producing, inventing, and designing. In this context, operational words are rarely or often used and are closely related to learning materials and indicators. The higher the demand for learning outcomes and targets, the potential use of these operational words the higher the intensity used. The form of stimulus given by the teachers so that students reach the level of creation is:

a. Assemble a series-parallel circuit with equal electric current at each branch using 12 resistors each 5, 8, 12, 14, 56, 76, 2, 40, 100, 20, 5, 5 (ohm units)!
b. Create a poster using command and prohibit sentence patterns!
c. Create the following tale into a short story!
d. Change this demand curve if there is a change in price!
e. Create pictures / paintings with naturalism!
f. Create a circuit to see the effect of the strong electric current on the interaction of two parallel wires!
g. Turn a few sentences into a paragraph!
h. Create an equation for the acceleration of an object rolling on an inclined plane by applying Newton's Second Law!
i. Questions on logic material. Prove the equality of -(if p then q) if and only if (-p and -q)!
j. Create a diffusion process in space that has the principle of decentralization and includes most of the rural population in development!
k. Connect with frequent cabinet changes and Indonesia's deteriorating economy!
l. Create a poem *Sebab "Dikau"* by Wayan Sunarta into a beautiful musical poetry!
m. Convert the following demand, supply and equilibrium price data into the form of a demand, supply and equilibrium price curve!

n. Write 2 stanzas of a poem with your title?
o. Design a simple experiment that shows the specific heat data of copper!
p. Design tools according to Pascal's law!
q. Arrange the following words into one sentence in the simple past tense!
r. Write an essay about the importance of diversity in our daily life!
s. Develop the formula for the area of a triangle 1/2 base x height using the cosine rule and the sine rule!

Assert that giving emphasis on using clue words is related to creating so that students are able to reflect on the things what they are learning [27]. This method aims to provide experience to students after completing learning activities. Furthermore, stated that encouraging students to do what they are told makes them more skilled. That is, the skills possessed are a form of application and implementation of the instructions given. Providing varied instructions can lead to variety in creation [27]. Provides an explanation that the operational words used by the teacher in giving instructions in learning are an effort of learning responsibility [28]. This explanation emphasizes that in order to achieve learning responsibility, variations are needed in giving instructions. The more varied and routine giving instructions to create indicates that the achievement of learning responsibilities is getting easier.

Acknowledgements

Thank you to the leadership of the University of Riau for giving permission to carry out the research. Thank you also to the respondents who agreed to participate in this research activity.

References

[1] D. W. Drewery, T. J. Pretti, and D. Church, "Signaling 'Student-Oriented' job Opportunities Enhances Job Attractiveness in Work-Integrated Learning Programs," *High. Educ. Res. Dev.*, vol. 41, no. 2, pp. 346–359, 2022, doi: 10.1080/07294360.2020.1857346.
[2] S. Ayub, G. Gunawan, A. Ramdani, and G. Afifah, "Student Oriented Learning in Floating and Drowning Concept," *J. Phys. Conf. Ser.*, vol. 1471, no. 1, pp. 1–6, 2020, doi: 10.1088/1742-6596/1471/1/012062.
[3] M. N. Mustafa, H. Hermandra, Z. Zulhafizh, and N. Hermita, "The Significance of Language Motivation Learning: Correlation Analysis," *Adv. Sci. Lett.*, vol. 24, no. 11, pp. 8380–8383, 2018, doi: 10.1166/asl.2018.12568.
[4] E. Hargreaves and D. Elhawary, "Professional Development Through Mutually Respectful Relationship: Senior Teachers' Learning Against the Backdrop of Hierarchical Relationships," *Prof. Dev. Educ.*, vol. 45, no. 1, pp. 46–58, 2019, doi: 10.1080/19415257.2018.1500390.
[5] D. Maulina, S. Slamet, and M. Indriayu, "Higher order thinking skills (HOTS) instrument in social studies learning for elementary school students in grobogan regency," *Proc. 1st Semin. Work. Res. Des. Educ. Soc. Sci. Arts, Humanit.*, vol. 1, no. 1, pp. 1–7, 2019, doi: 10.4108/eai.27-4-2019.2286828.
[6] Y. Sudrajat, "Techniques writing lesson plan (RPP)," *Int. J. Educ. Inf. Technol. Others*, vol. 1, no. 1, pp. 107–115, 2018, doi: 10.5281/zenodo.1423182.
[7] J. Glaesser, "Competence in Educational Theory and Practice: A Critical Discussion," *Oxford Rev. Educ.*, vol. 45, no. 1, pp. 70–85, 2019, doi: 10.1080/03054985.2018.1493987.
[8] R. Gul, S. Kanwal, and S. S. Khan, "Preferences of the Teachers in Employing Revised Blooms Taxonomy in their Instructions," *Sir Syed J. Educ. Soc. Res.*, vol. 3, no. 2, pp. 258–266, 2020.
[9] M. Pikhart and B. Klimova, "Utilization of Linguistic Aspects of Bloom's Taxonomy in Blended Learning," *Educ. Sci.*, vol. 9, no. 3, pp. 1–9, 2019, doi: 10.3390/educsci9030235.
[10] O. Sagan, O. Los, O. Kazannikova, and I. Raievska, "A System of Effective Tasks in Blended Learning on the Basis of Blooms Taxonomy," *E-learning STEM Educ. E-learning Ser.*, vol. 11, pp. 671–689, 2019.
[11] E. E. Siagian, P., & Napitupulu, "Development of Problem-Based Learning Device to Improve Metacognition Ability," *Int. J. Multicult. Multireligious Underst.*, vol. 7, no. 8, pp. 310–317, 2020, [Online]. Available: https://ijmmu.com/index.php/ijmmu/article/download/1878/1528.
[12] T. Wrahatnolo and Munoto, "21St Centuries Skill Implication on Educational System," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 296, no. 1, pp. 1–7, 2018, doi: 10.1088/1757-899X/296/1/012036.
[13] Y. Tavoosy and R. Jelveh, "Language Teaching Strategies and Techniques used to Support Students Learning in A Language Other than Their Mother Tongue," *Int. J. Learn. Teach.*, vol. 11, no. 2, pp. 77–88, 2019.
[14] T. Korhonen, L. Salo, and K. Sormunen, "Making with Micro:bit : Teachers and Students Learning 21st Century Competences through the Innovation Process Korhonen," *ACM Int. Conf. Proceeding Ser.*, vol. 1, no. 1, pp. 120–123, 2019, doi: 10.1145/3311890.3311906.
[15] S. Mahanal, S. Zubaidah, I. D. Sumiati, T. M. Sari, and N. Ismirawati, "RICOSRE: A learning model to develop critical thinking skills for students with different academic abilities," *Int. J. Instr.*, vol. 12, no. 2, pp. 417–434, 2019, doi: 10.29333/iji.2019.12227a.
[16] H. Tambunan, "Impact of Heuristic Strategy on Students' Mathematics Ability in High Order Thinking," *Int. Electron. J. Math. Educ.*, vol. 13, no. 3, pp. 321–328, 2018, doi: 10.12973/iejme/3928.
[17] K. Karatas and I. Arpaci, "The Role of Self-directed Learning, Metacognition, and 21st Century Skills Predicting the Readiness for Online Learning," *Contemp. Educ. Technol.*, vol. 13, no. 3, pp. 1–13, 2021, doi: 10.30935/cedtech/10786.
[18] T. H. Morris, "Creativity Through Self-Directed Learning: Three Distinct Dimensions of Teacher Support," *Int. J. Lifelong Educ.*, vol. 39, no. 2, pp. 168–178, 2020, doi: 10.1080/02601370.2020.1727577.
[19] S. Lemmetty and K. Collin, "Self-Directed Learning as a Practice of Workplace Learning: Interpretative Repertoires of Self-Directed Learning in ICT Work," *Vocat. Learn.*, vol. 13, no. 1, pp. 47–70, 2020, doi: 10.1007/s12186-019-09228-x.
[20] F. Martin and D. U. Bolliger, "Engagement Matters: Student Perceptions on the Importance of Engagement Strategies in the Online Learning Environment," *Online Learn. J.*, vol. 22, no. 1, pp. 205–222, 2018, doi: 10.24059/olj.v22i1.1092.
[21] W. J. Shyr and C. H. Chen, "Designing A Technology-Enhanced Flipped Learning System to Facilitate Students' Self-Regulation and Performance," *J. Comput. Assist. Learn.*, vol. 34, no. 1, pp. 53–62, 2018, doi: 10.1111/jcal.12213.
[22] Herman, A. M. Shara, T. F. Silalahi, Sherly, and Julyanthry, "Teachers' Attitude towards Minimum Competency Assessment at Sultan Agung Senior High School in Pematangsiantar, Indonesia," *J. Curric. Teach.*, vol. 11, no. 1, pp. 1–14, 2022, doi: 10.5430/jct.v11n2p1.
[23] S. Abramovich, A. Z. Grinshpan, and D. L. Milligan, "Teaching Mathematics through Concept Motivation and Action Learning," *Educ. Res. Int.*, vol. 13, pp. 1–13, 2019, doi: 10.1155/2019/3745406.
[24] S. Mahmood, "Instructional Strategies for Online Teaching in COVID-19 Pandemic," *Hum. Behav. Emerg. Technol.*, vol. 3, no. 1, pp. 199–203, 2021, doi: 10.1002/hbe2.218.

[25] N. Dietrich *et al.*, "Attempts, Successes, and Failures of Distance Learning in the Time of COVID-19," *J. Chem. Educ.*, vol. 97, no. 9, pp. 2448–2457, 2020, doi: 10.1021/acs.jchemed.0c00717.
[26] M. Y. Anis and A. Arifuddin, "Kaidah Penamaan Leksem Benda-Benda Kecil (Ism Taṣgīr) dalam Kamus al-Munawwir Arab-Indonesia (Analisis Morfosemantik)," *Cent. Middle East. Stud. J. Stud. Timur Teng.*, vol. 3, no. 1, pp. 64–79, 2020.
[27] M. Hill, M. Peters, M. Salvaggio, J. Vinnedge, and A. Darden, "Implementation and Evaluation of A Self-Directed Learning Activity for First-Year Medical Students," *Med. Educ. Online*, vol. 25, no. 1, pp. 1–10, 2020, doi: 10.1080/10872981.2020.1717780.
[28] G. García Botero, F. Questier, and C. Zhu, "Self-Directed Language Learning in A Mobile- Assisted, Out-of-Class Context: Do Students Walk The Talk?," *Comput. Assist. Lang. Learn.*, vol. 32, no. 1–2, pp. 71–97, 2019, doi: 10.1080/09588221.2018.1485707.