JURNAL UPI

JURNAL ASESMEN DAN INTERVENSI ANAK BERKEBUTUHAN KHUSUS

Jurnal homepage: https://ejournal.upi.edu/index.php/jassi/index

Development of Contextual Teaching and Learning for Deaf Students

Muhammad Mufti Rakadia[*]

Kedutaan Besar Republik Indonesia Tashkent, Uzbekistan

Correspondence: E-mail: muftirs96@gmail.com

ABSTRACT

Development of CTL (Contextual teaching and learning) learning to understand learning material on energy sources for deaf children. This research method uses a qualitative descriptive method to gather information thoroughly. The subjects of this study were deaf students in grade 5 at an extraordinary elementary school in Bandung. The results of this study are the development of CTL learning for deaf students to understand learning material on energy sources for deaf children. Energy sources learning material adapted to the material being studied by students at this time. The results of this study are expected that the development of CTL learning for deaf students can benefit research subjects (students, teachers) from school institutions to improve the learning process.

ARTICLE INFO

Article History:
Submitted/Received 01 Jun 2022
First Revised 01 Aug 2022
Accepted 02 Sep 2022
First Available online 01 Dec 2021
Publication Date 01 Dec 2021

Keyword:
CTL learning, deaf students, energy sources.

1. INTRODUCTION

Learning needs to be continuously developed, and currently learning needs to be implemented based on learning that is innovative, creative, and fun (Aini, 2019). Learning development needs to be given to deaf students because deaf students have different learning needs compared to children in general. Deaf students have an impact on their development period, namely the language acquisition period, causing deaf students to have a little vocabulary that is understood (Winarsih, 2017). The lack of language possessed by deaf students requires an intervention that can help the learning process for deaf students. The learning process needs to be meaningful so that it can help deaf students to be active and independently able to understand concepts and their application in everyday life. Contextual teaching and learning (CTL) learning is a type of learning that helps students explore their competence by studying concepts in theory and applying them in life (Femisha & Madio, 2021). CTL learning can support students' understanding of science material, namely energy sources. The scope of science material includes living things, energy and changes, the earth and the universe, and processes as well as their properties, this material cannot be understood in theory but needs to be implemented in real life. So, in the science learning process, a teacher must convey it by linking theory to life (Adim & Herawati, 2020).

Currently, there is research discussing CTL learning, including The Effect of CTL Learning with Early Mathematics Ability on Understanding of Mathematical Concepts for Elementary School Students (Rambe el., al 2021), Contextual Teaching And Learning (CTL) Learning Models Aided by Environmental Miniature Media to Improve Social Studies Learning Outcomes (Sulfemi, 2019), Application of the Contextual Teaching and Learning (CTL) Learning Model to the Activities of Class X Students at SMA Negeri 5 Lubuklinggau Model for the 2018/2019 Academic Year (Srilisnani el., al 2019), Application of the Contextual Teaching and Learning Model Learning (CTL) to Improve the Ability to Recognize Simple Fractions in Deaf Students (Sugiyanti, 2021), and the Effect of the CTL Learning Model on the Mathematical Problem Solving Ability of Grade VII Middle School Students (Adhyan el., al 2022). However, until now there has been no research discussing the development of CTL (Contextual teaching and learning) learning to understand learning materials for energy sources in deaf children.

For deaf students to understand learning material requires learning development, one of which is using CTL learning. CTL learning needs to be developed to be applied to deaf students. A qualitative descriptive method was used in this study to obtain overall information. CTL learning is implemented in class 5 deaf students at special elementary schools in Bandung City. Understanding learning materials for energy sources is the aim of this research so it is hoped that the development of CTL learning can be beneficial for research subjects (students, teachers) of school institutions to improve the learning process.

2. METHODS

This research focuses on the development of CTL learning on energy sources material for deaf students. The subjects of this study were deaf students in grade 5 at SDLB in Bandung. This study uses a mix of methods with qualitative descriptive data processing. The qualitative descriptive method is used to obtain objective data. We carried out several stages in this research.

DOI: http://dx.doi.org/10. 17509/xxxx.xxxx
p- ISSN 1412-9337 e- ISSN 2776-8783

Figure 1 reveals how the research process carried out included the stages of preparation, implementation, and evaluation to develop CTL learning to understand learning materials on energy sources for deaf children.

Figure 1. Research Procedure

To find out the information at the preparatory stage, we carried out data processing techniques with descriptive statistics.

3. RESULTS AND DISCUSSION

3.1. Demographic Subject

This research was implemented on deaf students in grade 5 SDLB. A deaf student is someone who has lost their ability to hear due to the malfunctioning of some or all their hearing organs (Rizqita & Susetyo, 2023). The impact of hearing loss for deaf students causes deaf students to be less able to get audio stimuli or other stimuli related to the sense of hearing (Rahmah, 2018).

3.2. Research Result Data Analysis

Deaf students in their learning process require an adjustment. Adjustment of learning in the classroom is adapted to the characteristics of deaf students. Learning for deaf teachers needs to choose the right learning model according to the circumstances and conditions of students (Anditiasani, 2002). Adjustments in learning, especially for deaf students, can also be called learning development. Learning development for deaf students is one of them in the CTL learning approach.

3.2.1. CTL learning approach

CTL learning according to Berns and Ericson is a learning concept that can help teachers and students in establishing a relationship between students and teachers whose learning is applied in real life. Meanwhile, according to Berns and Ericson, there are five approaches to CTL learning including; problem-based learning, cooperative, project-based learning, service learning, and work-based learning (Putri & Wulandari, 2020).

This CTL learning strategy needs to be developed to be applied to deaf students to understand material or learning.

3.2.2. CTL learning approach for deaf students

The CTL learning approach for deaf students consists of several components developed including:

3.2.2.1. Problem-based learning for deaf children.

As a result of deafness, we know that deaf children lack understanding of verbal information. This causes children to find it difficult to accept abstract material, so learning strategies are needed that can facilitate understanding

DOI: http://dx.doi.org/10.17509/xxxx.xxxx
p- ISSN 2775-8400 e- ISSN 2775-9857

The principle of learning for deaf children must start from easy things and then gradually move to a more difficult level. What is meant by easy here are real things, in the form of real experiences in his life.

The problem-based learning approach is very effective for deaf children because this approach involves students in solving problems by integrating various concepts and skills. With this approach, deaf children can interpret subject matter by collecting and integrating various information through discoveries they get from direct experience.

3.2.2.2. Cooperative learning for deaf children

Limitations in language for deaf children cause children to experience obstacles in interacting and communicating. This also has an impact on difficulties in following and understanding lessons. They tend to have difficulty understanding the concept of something abstract.

The implementation of cooperative learning for deaf children is very effective because in practice the children participate and work together in learning groups. When using cooperative learning strategies, children learn in groups with their friends where there is mutual respect for opinions and allowing others to express their opinions.

In addition to respecting the opinions of others, this cooperative learning can also activate the activities of deaf children, and develop thinking and answering skills in collaboration with one another.

The implementation of cooperative learning in deaf children is of course different from hearing children in general. Here the teacher as a facilitator must create a pleasant atmosphere because for deaf children, to express opinions and answers in the form of language, both spoken and signed, is something very tiring. Apart from that their opinions and answers are in the form of sentences, but the structure still has a lot of mistakes. Here the teacher oversees correcting the structure and providing corrections to the sentence structure.

3.2.2.3. Project-based learning for deaf children

The limitations of deaf children in receiving information cause them to experience difficulties in understanding a concept. These limitations and difficulties have an impact on teaching and learning activities. A learning approach is needed that makes it easier for children to understand real concepts in everyday life.

For deaf children, the conventional learning process, which usually only requires deaf children to pay attention to the teacher's explanation, has very little real experience for them because in this way they are not allowed to think about and find their concepts. The way the teacher teaches like this causes children to be passive because children do not express their ideas and opinions. Children are also reluctant to ask the teacher or ask their friends even though they cannot solve the problem given, so there is less communication between the child and the teacher.

DOI: http://dx.doi.org/10. 17509/xxxx.xxxx
p- ISSN 1412-9337 e- ISSN 2776-8783

Project-based learning (project-based learning) for deaf children is very appropriate to use because the concepts that children learn will be easier to understand and understand. In the project learning process, children are involved in solving problems and encouraging students to work independently to build learning and produce real work. In addition, children also learn to express reasons and explain what they know and want to know so that there are no misconceptions.

This project approach is effective in increasing the understanding of a concept because it involves students in solving problems and assignments. This project learning can use systematic steps, for example:

a. Define basic questions,
b. Designing project plans,
c. Arranging schedules,
d. Monitor students and project progress,
e. Test results, and
f. Evaluate experience.

3.2.2.4. Service learning for deaf children

Limitations in the ability to interact and communicate in deaf children require serious treatment because they live in a wider community. One of the learning approaches to anticipate these problems is service learning.

Service learning is considered very appropriate for deaf children because this learning approach provides a practical application of the new knowledge needed and skills sharing to meet needs in society through structured projects/tasks and other activities.

Service learning for the deaf must pay attention to their barriers and needs, including:

a. Doing group cooperation in completing structured tasks,
b. Cooperate in the practical application of new knowledge,
c. Carry out useful activities to meet needs in society (services related to structured assignments).

3.2.2.5. Work-based learning for deaf children

Work-based learning for deaf children is important to implement because this learning combines theory with practice and knowledge with the real world. This learning is very appropriate to be implemented in schools that handle children with special needs. With work-based learning, deaf children are offered opportunities to learn outside of traditional learning. This work-based learning will accommodate the demands of the world of work for deaf children with disabilities so that they can achieve higher quality, efficiency, and linkage of education to work.

In addition, work-based learning for deaf children can develop work skills for them after entering the world of work. Work-based learning is needed because of the needs of deaf children in their career development and professional development.

DOI: http://dx.doi.org/10.17509/xxxx.xxxx
p- ISSN 2775-8400 e- ISSN 2775-9857

One example of implementing work-based learning for deaf children is the approach where the workplace and activities are integrated into the classroom for the benefit of students and businesses. In its implementation, of course, it requires a partnership between schools and the business world (companies).

Learning programs for work-based learning for deaf children are formulated from the needs of the workplace. That's why school institutions must provide professional skills to help deaf children make the transition from school to work to enable them to find jobs and skills.

4. CONCLUSION

Learning development for deaf students can be applied in all ways, one of which is in the learning strategies used. If the CTL learning strategy is to be applied to deaf students, it needs to be developed. To obtain overall information in this study using a qualitative descriptive research method. The development of CTL learning is applied to 5th-grade students of special elementary schools in the city of Bandung. This study aims to enable deaf students to understand the material through CTL learning that has been developed so that it can benefit various parties.

5. ACKNOWLEDGMENT

Thank you to all parties who have supported and been involved in the Development of Contextual teaching and learning (CTL) learning for deaf students.

6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

7. REFERENCES

Adhyan, A. R., Sutirna, S., & Sopiany, H. N. (2022). Pengaruh model pembelajaran ctl terhadap kemampuan pemecahan masalah matematis siswa kelas VII SMP. *JPMI (Jurnal Pembelajaran Matematika Inovatif*), 5(6), 1749-1760.

Adim, M., Herawati, E. S. B., & Nuraya, N. (2020). Pengaruh model pembelajaran contextual teaching and learning (CTL) menggunakan media kartu terhadap minat belajar IPA kelas IV SD. *Jurnal Pendidikan Fisika dan Sains*, 3(1), 6-12.

Aini, Y. I. (2019). Pemanfaatan Media Pembelajaran quizizz untuk pembelajaran jenjang pendidikan dasar dan menengah di Bengkulu. *Kependidikan*, 2(25).

Anditiasari, N. (2020). Analisis kesulitan belajar abk (tuna rungu) dalam menyelesaikan soal cerita matematika. *Mathline: Jurnal Matematika Dan Pendidikan Matematika*, 5(2), 183-194.

Femisha, A., & Madio, S. S. (2021). Perbedaan peningkatan kemampuan koneksi dan disposisi matematis siswa antara model pembelajaran ctl dan bbl. *PLUSMINUS: Jurnal Pendidikan Matematika,* 1(1), 97-112.

Novitasari, E., Masykuri, M., & Aminah, N. S. (2016). Pengembangan modul pembelajaran ipa terpadu berbasis inkuiri terbimbing tema matahari sebagai sumber energi alternatif di kelas vii smp/mts. *Inkuiri,* 5(1), 112-121.

Putri, N. N., & Wulandari, B. (2022, December). Strategi pembelajaran konstekstual dengan media kahoot untuk meningkatkan kemampuan menyimak teks eksposisi. *In Prosiding Seminar Nasional Pendidikan Guru Sekolah Dasar* (Vol. 2, No. 1, pp. 29-39).

Rambe, A., Fauzi, K. M. A., & Nuriadin, I. (2021). Pengaruh pembelajaran ctl dengan kemampuan awal matematika terhadap pemahaman konsep matematis siswa sekolah dasar. *Journal of Education, Humaniora and Social Sciences* (JEHSS), 4(1), 203-209.

Rahmah, F. N. (2018). Problematika anak tunarungu dan cara mengatasinya. *Quality*, 6(1), 1-15.

Rizqita, A. J., & Susetyo, B. (2023). Effectiveness of know-want-learned learning strategies on improving comprehension in deaf Students. *edumaspul: jurnal pendidikan*, 7(1), 1373-1376.

Sulfemi, W. B. (2019). Model pembelajaran contextual teaching and learning (CTL) berbantu media miniatur lingkungan untuk meningkatkan hasil belajar IPS. *Edunomic Jurnal Pendidikan Ekonomi,* 7(2), 73-84.

Srilisnani, M., Amin, A., & Yolanda, Y. (2019). Penerapan model pembelajaran contextual teaching and learning (ctl) terhadap aktivitas siswa kelas X di SMA Negeri 5 model lubuklinggau tahun pelajaran 2018/2019. *silampari jurnal pendidikan ilmu fisika*, 1(1), 60-73.

Sugiyanti, E., Vernanda, G., & Nopprima, A. L. (2021). Penerapan model pembelajaran contextual teaching and learning (ctl) untuk meningkatkan kemampuan mengenal pecahan sederhana pada siswa tunarungu. *Sneed journal*, 1(2), 82-89.

Winarsih, M. (2017). Membaca ideovisual untuk siswa tunarungu. *Perspektif Ilmu Pendidikan*, 31(2), 130-133.

DOI: http://dx.doi.org/10.17509/xxxx.xxxx
p- ISSN 2775-8400 e- ISSN 2775-9857