



Komposis JURNAL PENDIDIKAN BAHAMASANTA DAN SEM

Komposisi: Jurnal Pendidikan Bahasa, Sastra, dan Seni

> Volume 24 Nomor 2, 2023 page. 102-116

Article History:
Submitted:
June 7th, 2023
Accepted:
November. 11th,
2023
Published:
November. 11th,

Cooperative-Problem Based Learning Model Design in Online Learning

<Desain Model Cooperative-Problem Based Learning dalam Pembelajaran Daring>

Syahrul Ramadhan^{1*}, Atmazaki¹, Vivi Indriyani¹ & Elfia Sukma²

¹Faculty of Languages and Arts, Universitas Negeri Padang

²Faculty of Science Education, , Universitas Negeri Padang

Jl. Prof. Dr. Hamka, Air Tawar Barat, Padang, Sumatera Barat

*Corresponding Author Email: syahrul r@fbs.unp.ac.id

Abstract

At this time, online learning is commonplace, although there are still analysis reveals that limitations. Needs individual predominates and that cooperative learning is difficult to implement, despite its significance. Based on this, the purpose of this research is to develop a Cooperative-Problem Based Learning model to be used as a distance learning model in learning Indonesian for high school students. This type of research uses the Plomp Model for development (preliminary research; prototype stage; and assessment stage). This study uses a descriptive data analysis approach. The data was obtained based on the validation results that have been carried out in 2 ways, namely self-evaluation and expert validation. Validation was carried out using instruments in the form of a questionnaire and the results of the questionnaire analysis were analyzed using descriptive statistics. The results showed that the teaching materials produced were classified as very valid and could be tested on students. The results of the study show that a language learning model is needed that allows students to learn cooperatively in groups even when distance or online learning is used. In addition, the learning model must adapt to the demands of students and develop following the progress of science and technology. A possible alternative is the Cooperative-Problem-Based Learning approach.

Keyword: Cooperative-Problem Based Learning Model, Cooperative Learning, Problem Based-Learning, Learning Model, Online Learning

Abstrak

Saat ini pembelajaran daring sudah menjadi hal yang lumrah, meskipun masih ada keterbatasan. Analisis kebutuhan mengungkapkan bahwa pembelajaran individu mendominasi dan bahwa pembelajaran



kooperatif sulit diterapkan, meskipun signifikansinya. Berdasarkan hal tersebut maka tujuan dari penelitian ini adalah mengembangkan model Cooperative-Problem Based Learning untuk digunakan sebagai model pembelajaran jarak jauh dalam pembelajaran bahasa Indonesia siswa SMA. Jenis penelitian ini menggunakan Model Plomp untuk pengembangan (penelitian pendahuluan; tahap perancangan; dan tahap penilaian). Penelitian ini menggunakan pendekatan analisis data deskriptif. Data diperoleh berdasarkan hasil validasi yang telah dilakukan dengan 2 cara yaitu evaluasi diri dan validasi ahli. Validasi dilakukan dengan menggunakan instrumen berupa kuesioner dan hasil analisis dianalisis menggunakan statistik deskriptif. kuesioner Hasil penelitian menunjukkan bahwa bahan ajar yang dihasilkan tergolong sangat valid dan dapat diujicobakan kepada siswa. Hasil penelitian menunjukkan bahwa diperlukan model pembelajaran bahasa yang memungkinkan siswa belajar secara kooperatif dalam kelompok meskipun menggunakan pembelajaran jarak jauh atau daring. Selain itu, model pembelajaran harus menyesuaikan dengan tuntutan siswa dan berkembang mengikuti kemajuan ilmu pengetahuan dan teknologi. Alternatif yang mungkin adalah pendekatan Cooperative-Problem-Based Learning.

Kata kunci: Cooperative-Problem Based Learning Model, Cooperative Learning, Problem Based-Learning, Model Pembelajaran, Pembelajaran Daring

Introduction

Under this COVID-19 outbreak, educators are trying their best to overcome teaching difficulties. Hence, the use of new technologies and innovative teaching strategies is implemented in these online classrooms (Chiablaem, 2021). Distance learning will continue to replace in-person learning in the future due to the pervasiveness of technology in our lives. Everything will be finished in a digital and technological setting (Telli & Altun, 2020). In addition, teachers should also look for different approaches to teaching online (Kanthimathi, S., and Raja, 2021). The Problem-Based Learning (PBL) paradigm is one of the available learning models. This is related because the PBL model is one of the models recommended for use in the Curriculum in Indonesia.

Related research concludes that in the online environment the use of PBL has increased (Tsai & Chiang, 2013). Students' attitudes and success rates were greater in the online setting, according to a comparison of face-to-face learning and online PBL (Gürsul & Keser, 2019). PBL has positive effects on learning that integrates theory and practice, hence increasing motivation to continue education (Silva, Bispo, Rodriguez, & Vasquez, 2018). Real-world issues are used in the learning process as part of PBL to help students develop their critical thinking and problem-solving skills (Al-Fikry et al., 2018). Learning using PBL focuses on challenges where students can construct their own knowledge in order to formulate a temporary solution to a (simple to difficult) problem that involves logical intelligence, boldness, and active solutions with real-world scenarios (Grasas & Ramalhinho, 2016; Kardoyo, Nurkhin, Muhsin, & Pramusinto,

UNP

2020). Based on that, previous researchers found that using PBL in learning had a positive impact on students' success in learning, increasing motivation, developing critical thinking skills and problem solving.

PBL is an innovative pedagogical approach that assists students in finding solutions to real-world issues through continuous engagement (Sousa & Costa, 2022). In this lesson, the teacher can introduce students to real-world problem situations and establish an environment where they can practice thinking, analyzing, and solving problems in groups (Chaidam & Poonputta, 2022). Through practice and reflection, these learning activities facilitate the construction of conceptual models and the development of independent learning habits (Sousa & Costa, 2022). PBL-based classes repeatedly reintroduce material in greater depth, employ interdisciplinary learning, encourage students' personal development, and place an emphasis on clear objectives (Theabthueng, Khamsong & Worapun, 2022). Collaboration, critical thinking, communication, creativity, adaptability, and better cognitive levels are just a few of the ideal 21st-century skills that PBL helps students develop (Lapek 2018; Mangione & Harmon, 2022). This will aid students in gaining a clear understanding of the problem, seeing alternative solutions that can increase their problem-solving strategies, and building knowledge and skills in thinking cycles and critical thinking actions (Chaidam & Poonputta, 2022).

PBL is student-centered learning that empowers students to become more proactive in sharing knowledge, wise decision-makers, encouraging teammates, and critical thinkers as well as to reach their highest level of language fluency (Wijaya, 2022). PBL implemented in schools can motivate students to actively construct knowledge-based experiences and enhance their question-organizing skills (Gewurzt, Coman, Dhillon, Jung, 2016; Mustofa & Hidayah, 2020; Lubis, Suryadarma, & Yanto, 2022). Students will be able to develop a more thorough grasp of the subject matter through more conducive learning when the teacher plays the role of a supportive learning facilitator when implementing PBL activities. Learning collaboratively with their study companions (Jumariati & Sulistyo, 2017). PBL also seeks to apply a variety of problem situations in an effort to gain new knowledge and implement it through experience (Bayram & Deveci, 2022).

Based on observations made through a questionnaire filled out by 108 Indonesian language teachers in West Sumatra, it was found that only 9.3% of teachers used group learning in online learning. In collaborative learning, PBL places a major emphasis on group work, resulting in a realistic team-based work environment and fostering a community of practice (Lin, 2017; Obaya, Vargas-Rodríguez, Lima-Vargas, & Vargas-Rodríguez, 2018). This model requires students to be able to collaborate in solving and compiling problems (Dakabesi & Louise, 2019). Based on the search results of previous researchers, students usually work based on stated problems to gather knowledge and choose the best investigative and problem-solving skills (Palupi, Subiyantoro, Rukayah, & Triyanto, 2020;

UNP JOURNALS

Surur, Degeng, Setyosari, & Kuswandi, 2020). This allows students to practice and exchange ideas when trying to solve problems in groups through discussion and question and answer activities, thereby increasing their understanding (Amin et al., 2020).

The impressions of online learning by students are contingent on "a sense of community." Individual differences in adaption to the online environment notwithstanding, classroom interactions have a motivating effect on student learning (Firdaus et al., 2017). Creating a PBL environment in an online environment is quite complicated, especially in a collaborative learning environment (Ali et al., 2010). Therefore, PBL needs to be innovated with a cooperative learning model to support group learning in an online learning environment. This is important to do because online learning makes students carry out learning independently, so it needs learning methods that support it to be able to make students learn cooperatively. In the next few years, it is possible that learning will be carried out online and collaborative learning needs to be considered, because cooperation can form important attitudes for students in learning. These attitudes, such as leadership, mutual assistance, tolerance, etc.

One of the cooperative learning models used to accommodate students with different ability levels is the Student Teams Achievement Division (STAD) model (Loza, 2018). One strategy for cooperative learning that can enhance small-group instruction for students is this one (Wyk, 2012)(Afinda et al., 2019). The use of this model aims to improve students' ability to communicate with their classmates through collaboration in groups so that students are more motivated to increase cooperation with other students and can increase the development of positive attitudes in students (Juliastuti et al., 2019). Cooperative learning settings teach students to assist one another by sharing knowledge and resources. Students who work in collaborative groups thus perform better than those who work independently or in opposition to one another (Yaduvanshi & Singh, 2019).

Slavin noted that STAD has been applied in a variety of areas, including mathematics, the arts, social sciences, and languages, and from elementary schools to universities (Yaduvanshi & Singh, 2019; Slavin, 2015). This technique is believed to promote learning outcomes and motivation since students work in groups to produce significant concepts and ideas for understanding the studied concepts (Damopolli & R., 2019). In addition, STAD can increase student activity in the learning process, because they are placed in study groups consisting of different academic and social levels (Ananda, 2017). STAD can encourage students to work in groups to support and aid one another in understanding the material being presented and to increase their knowledge that learning is important, relevant, and enjoyable (Gaith, 2003; Hijriah, Darmawan, & Zamzami, 2018). Kids can then be more engaged, content, motivated, and able to understand the material (Wyk, 2012; Tarim & Akdeniz, 2008; Nurulhikmah & Kristin, 2019).

Integrating two models simultaneously or modifying these two models in learning has been applied by previous researchers. (Mohd-Yusof et al., 2011; Yusof et al., 2012) combined CL and PBL to produce a Cooperative Problem-Based Learning (CPBL) model which provides a step-by-step guide for students to go through the PBL cycle in their teams, in accordance with CL principles (4)(7). Furthermore, Nurlina Mbay et al. (2017) applied a jigsaw type cooperative model and PBL to improve students' critical thinking and mathematical communication skills. This research was carried out using an experimental method by comparing the PBL learning process with a jigsaw type cooperative model. Apart from that, Hasanah (2017) implemented the Cooperative Problem Based Learning (CPBL) model integrated with SMA/MA chemistry teaching materials to improve learning outcomes and grow student character. This research was carried out using an experimental method by comparing the integrated Cooperative Problem Based Learning (CPBL) model of SMA/MA chemistry teaching materials developed with those in schools.

Amrullah & Suwarjo (2018) conducted experimental research to determine the effect of problem-based cooperative learning on increasing critical thinking and interpersonal intelligence for class V students. Furthermore, Jailani & Qudsiyah (2020) used PBL integrated with a cooperative learning cooperative script model for class This research is classroom action research with three cycles. In line with this, Alaloul & Qureshi (2022) in their research stated that the integration of cooperative learning and PBL methodology creates a supportive environment for students. However, for effective implementation of cooperative problem-based learning (CPBL) environments, close monitoring of student experiences is essential, and areas of deficiency must be corrected, as PBL is a dynamic process.

Although integrating or modifying PBL and CL has been carried out by previous research, it has not been found in online learning so innovation needs to be carried out by researchers in developing this model. Based on that, the purpose of this research is to develop a Cooperative-Problem Based Learning model to be used as a distance learning model in Indonesian language learning for high school students. The novelty of this research is the development of an innovative learning model by integrating the Cooperative-based Learning model with the PBL model. This research will produce a learning syntax that can be used in online learning.

Metode

106

This research is based on the development research process by adopting steps from Plomp's theory (1997) which is carried out with 3 activities, namely (1) preliminary research stage; (2) stage design; and (3) the assessment stage (Plomp & Nienke, 2013). This research was undertaken to create and evaluate the product's effectiveness. This research was undertaken in order to design a language learning model, namely the Cooperative-Problem Based Learning model for Distance Learning for Middle School Students. Based on the research

UNP JOURNALS

phases, this article will describe the design-phase research findings. This research use a descriptive data analysis technique to describe the learning model's validity. The instrument for research is a questionnaire. The questionnaire was developed based on several indicators, namely, appropriateness of content, appropriateness of presentation, appropriateness of language appropriateness of presentation. The instruments developed are validated by experts according to their field of expertise. For more details, the research process can be seen in the following table 1.

Table 1. Development Research Stages

Stage	Research Implementation and Instruments Used		
Preliminary Research	At this stage, researchers analyzed the needs of students and teachers, learning situations, analysis of student characteristics, curriculum analysis, and concept analysis. At this stage, data is obtained through observation reports with the help of observation sheet instruments. In addition, data were also obtained from the results of interviews with the help of interview guide instruments. Data was also obtained through a questionnaire filled out by teachers and students.		
Prototype Phase	At this stage, the researcher develops a product in the form of a model book to determine syntax, reaction principles, social systems and support systems. After the model is developed, it is evaluated first with the help of a questionnaire. After that, it is revised and validated by experts using an instrument in the form of a questionnaire. After the product is declared valid, then proceed to the next stage.		
Assessment Phase	At this stage, the product used is tested in schools. Trials are carried out by carrying out learning by applying the syntax that has been designed. After that, the students who were the subject of the research were given a test to determine the effectiveness of the developed learning model. In addition, with the help of questionnaires, teachers and students gave their opinions regarding the practicality of learning that had been carried out using the developed learning model.		

Result and Discussion

The need for developing a language learning model that can be used for online or distance learning so that students can study in groups or together was established on the basis of the needs analysis and literature assessment. This learning model is an innovation of the Cooperative Learning type of Students Teams Achievement Division (STAD) and Problem Based Learning. Based on this, this paradigm is used to online learning as an alternative to learning Indonesian through the use of technology.

The design of the learning model in the shape of the learning steps will be discussed in this article. (syntax). Teachers can use this grammar as a guide or as a starting point when teaching Indonesian. Syntax can be interpreted as learning steps that are applied in the classroom during the learning process. In addition, the sequence of activities or phases in learning is defined as a guide for educators in acting in the classroom so that learning becomes more effective and efficient. The syntax used in the development of the Cooperative-Problem Based

Learning Model in Indonesian language learning in secondary schools can be seen in Figure 1 and is explained as follows.



Gambar 1. Cooperative-Problem Based Learning Model Design

1. Introduction Problem

In this step, students pay attention to the teacher when introducing real-world problem situations. Real world problems that teachers can convey can be in the form of environmental problems or current disasters. For example, in this lesson, the teacher directs students about disasters that occur around students. These disasters can be in the form of natural disasters that occur according to the context of students or ongoing disasters such as COVID-19 which has occurred recently. Through problem situations it is hoped that students can be interested in learning and help them to gain a better understanding of the lesson. In this activity, teachers and students can ask questions. These questions are better if asked by students, so that students can think critically about the problem being discussed and in accordance with the context of the problem presented by the teacher.

2. Organazing Students for Study

List the In this step, the instructor evaluates the students' ability based on the results of prior lesson evaluations. The formation of small groups of four to six pupils takes into account gender, race, ethnicity, and, most crucially, academic aptitude. The teacher divides pupils into different groups and instructs them to arrange them by designating group leaders and dividing up work. In online learning, students can utilize WhatsApp for discussion because it is easier to use and can accommodate up to eight students in a group conversation. In this step, students can also read various related references regarding the material being studied. This

UNP JOURNALS

material can be read through teaching materials delivered by the teacher either orally, or through teaching materials such as textbooks or modules. In addition, students seek from various other sources, such as the internet regarding the material being studied to add references to knowledge independently. After the material is obtained, students can share and discuss this information with the group.

3. Facing Problem

In class, the instructor poses and explains challenges. Students and group members select the task they wish to perform based on the problem provided by the instructor. Students prioritize problems, arrange them, and form work plans. Each group discusses and examines the problem, its circumstances, and its components. Then, they develop a visual representation of the issue (modelling). In this task, students must demonstrate that their familiarity with difficult scenarios from their daily lives enables them to build representations of such circumstances.

4. Check Problem

The instructor requests that each group describe how they divided the labor to complete the problem-solving job. Each group is instructed to analyze the problem by finding its subconcepts. Each group then analyzes and reviews the problem in depth, confirms the scope of proposed solutions, and formulates an action plan. Students attempt to solve difficulties, investigate prior knowledge, and attempt to incorporate new ideas to address challenges. Students acquire data and read information from numerous sources for this reason.

5. Reviewing The Problem

The teacher requests that each group describe how they divided up the problem-solving tasks. The instructor instructs each group to analyze the issue by identifying its subconcepts. Based on this, each group discusses and evaluates the problem in depth, confirms the breadth of potential solutions, and develops an action plan. Students attempt to solve issues, investigate prior knowledge, and incorporate new concepts into problem-solving strategies. Students collect data and read from a variety of informational sources for this reason.

6. Generating Alternative Solution

The teacher encourages students to find solutions based on the results of the discussion to examine the problem. The best solution to the issue is selected by the students after they have exchanged ideas and solutions. These students' solutions were discovered using a number of student-discovered sources. Students working in groups attempt to connect the issue solution to the altered circumstances of the problem.

7. Presenting Solution

The teacher asks each group to report the results of the group discussion regarding the alternative solutions offered based on the problems discussed. Each group presents the solution to the problem with visual aids to present in front of the class. Presentations can be displayed by making videos or presenting power point slides. This step aims to motivate students to present ideas, opinions, opinions, and

others in front of the class so that students' presentation skills can be achieved optimally.

8. Analyzing and Evaluating Process

When students did not comprehend the performing group's presentation after it was finished, they asked questions. In discussions, students can share ideas and discuss in class, so students can add additional information to add alternative solutions for problem solving. Based on this activity, students can evaluate themselves, their groupmates, and the process.

9. Evaluation, Reflection and Conclusion

The teacher provides an evaluation of students' learning abilities based on the material being studied. Students are tested individually by completing tasks in the form of cognitive and psychomotor tasks. Students are assessed on an individual basis and the individual score is sought for the average value of group members so that the highest group score can be determined. Based on this value, the best group is given the promised award. After students are evaluated, the teacher provides opportunities for students to ask questions about the learning that has been carried out. This reflection is useful for the improvement of the next learning process. After that, the teacher and students conclude the lesson.

The learning syntax can be seen in the following Indonesian language learning scenarios. In this example, learning is carried out based on Basic Competency: Students are able to analyze the structure and language of explanatory texts. The learning scenario can be seen in the following table.

Table 2. Learning Process

Syntax	Learning Process			
Introduction	The teacher shows a video of the process of transmitting the COVID-19 virus			
Problem	to humans.			
	Students ask questions related to the event.			
	3. Students understand that a phenomenon has a procedure and can be conveyed in an explanatory text			
Organazing Students for	The teacher conveys material about the structure and language features of explanatory text.			
Study	5. Students read the material through teaching materials used in class.			
	6. Students search for various sources regarding the material and conclude the material.			
	7. Students form groups consisting of 4-6 diverse students.			
	8. The conclusions obtained by the students were discussed with the group and			
	the group's conclusions were written down based on the results of the discussions.			
Facing Problem	9. The teacher prepares several texts that have an unordered structure and text with lots of grammatical errors.			
	10. Students choose text according to the problem being discussed.			
	11. Students find that the text they read is an explanatory text that is not in			
	accordance with the theory they are learning.			
Check Problem	12. Students and groups analyze the text.			
	13. Students with groups find problems contained in the text they read.			
	14. Students explain to the teacher how students solve problems and how the			
	group divides the work.			
Reviewing The	15. Students and their groups re-read material related to the problems found,			

Problem			namely material regarding the correct structure and linguistic characteristics
			of explanatory text.
Generating		16. Students and groups improve the explanatory text according to the	
Alternative			they learn. The explanatory text is prepared based on the correct structure
Solution			and good and correct language.
Presenting		17.	Students and their groups present explanatory texts that they have analyzed
Solution			and revised for discussion in class.
Analyzing	and	18.	Other groups can provide other alternative solutions that can be considered
Evaluating			for groups that appear if there is an analysis that is not appropriate.
Process			
Evaluation,		19.	The teacher provides an evaluation of students' learning abilities based on the
Reflection	and		material studied.
Conclusion		20.	Students are tested individually by completing assignments and assessed
			individually and the individual scores are sought for the average value of
			group members so that the highest group score can be determined.
		21.	The best group is given the promised award.
		22.	After students are evaluated, the teacher gives students the opportunity to
			ask about the learning that has been implemented.
		23.	The teacher and students conclude the lesson regarding the structure and
			language of the explanatory text.

After the syntax has been developed, it is validated. Validation is accomplished in three methods (self-evaluation and expert validation). This validation is carried out in two ways. The first is the evaluation itself, together with the research team evaluating the product being developed and ensuring by discussing that the product to be used is suitable for testing based on the development team's assessment. After that, it is validated by experts according to their field of expertise. The results of this investigation are presented in the table below.

Table 3. Validation Result

Validation	Score	Category
Self Validation	89,76	Very Valid
Axpert Validation	90,90	Very Valid

The Cooperative-Problem Based Learning model was developed based on the innovation of two models, namely the Cooperative Learning Model and the Problem Based Learning Model. This developed model will adapt to distance learning or online learning to be used in language learning. Several researchers have previously adapted this model to learning. Some experts modify the syntax of this model which is tailored to the needs of students to overcome the problems in learning that are found.

We can see that the "original" model has been modified across all disciplines and in a variety of ways today when we look at the worldwide practice of PBL (Savery, 2006). The use of PBL in learning raises scientific debates about which steps are most effective and efficient for learning in various contexts and which of the most specific elements of PBL should emerge and be most effective (Scholkmann, 2020).

Sari, Sumarni, Utomo & Astina (2021) the syntax of the PBL model directs students to think, analyze, research, and compile research reports. In the classroom, PBL is implemented by analyzing real-world issue scenarios, conducting research, discussing and collaborating in groups, and delivering presentations (Othman et al., 2013). In the meantime, Nelson (2009)'s definition of collaborative problem solving is achieved through the use of nine stages. These steps are preparation, group formation and norms, problem situation determination, task division, solution completion, synthesis and reflection, formative and summative evaluation, and ending the process (Ozkara & Cakir, 2020).

As described by (Fogarty, 1997) and (Tan, 2004), Implementing PBL entails identifying problems, generating questions, generating hypotheses, reformulating the problem, generating potential solutions, and presenting a solution with reasoning, if possible. Summarized by Phumeechhanya & Wannapiroon (2014), PBL consists of five actions: studying content, presenting problems, planning problem solving, problem solution, and finding generalizations and principles derived from studying problems (Phuumeechanya & Wannapiroon, 2004).

Students are given problems by the teacher; students hold discussions in small groups; students conduct independent studies regarding problems to be solved; students return to their home groups to exchange information, learn from peers, and work collaboratively on problem-solving; and students present their solutions. Teachers support students in conducting evaluations relating to all learning activities (Gorghiu, Drăghicescu, Cristea, Petrescu, & Gorghiu, 2015; Alrahlah, 2016).

Reynold & Hancock (2010) summarize the PBL process as follows. First, students work in groups and analyze problems related to the real world using the knowledge they have previously acquired. Second, students determine problems related to the problem and determine sub-problems. Third, students determine problem priorities, organize problems, and develop work plans. Fourth, students attempt to solve issues, investigate prior knowledge, and incorporate new concepts into problem-solving. Fifth, students discuss their thoughts and solutions and choose the optimal solution to the challenge. Sixth, students assess themselves, their peers, and the process (Reynolds & Hancock, 2010).

While the STAD type Cooperative model adapted from Slavin (2015) describes the steps of the model in the following six steps. (1) Delivering goals and motivating students. (2) Presenting information. (3) Organizing students into study groups. (4) Guiding groups in work and study. (5) Evaluation. (6) Giving awards (Slavin, 2015).

Based on relevant research, it was found that the PBL and CL models have been widely used and developed before. However, in applying it in the learning process it is necessary to make adjustments to suit the needs and learning situation. Based on the results of this research, the developed learning syntax can be used as an alternative in learning. However, to find out whether this model is effective and practical, it is necessary to conduct trials beforehand.

Conclusion

This research is motivated by the implementation of learning that is carried out online as a result of the COVID-19 event. Based on that, online learning certainly has positive and negative impacts on learning. The positive impact is that students can learn by using innovative media in learning and the main benefit is to avoid transmission of COVID-19. Meanwhile, the negative impact is that students become independent learners and have minimal interaction with other students, so it is necessary to integrate cooperative learning into learning. Even though COVID-19 is over, it is possible that online learning will continue in the future. On the basis of study and debate, it has been determined that it is vital to establish a model for language learning that allows students to learn cooperatively in groups even when they are learning remotely or online. In addition, the learning model must adapt to the demands of students and evolve with the advancement of science and technology. A possible alternative is the Cooperative-Problem-Based Learning approach. The created learning model is believed to be applicable to the online distance learning process.

The results of the research at this stage are to produce Cooperative-Problem-Based Learning syntax, namely Introduction Problem, Organizing Students for Study, Facing Problem, Check Problem, Reviewing The Problem, Generating Alternative Solution, Presenting Solution, Analyzing and Evaluating Process, Evaluation, Reflection and Conclusion. The syntax has been validated and declared very valid, so that the developed learning model can be tested in schools by integrating it in the learning module. Based on the results of this study, the developed learning model can be used in the process of learning language in secondary schools in online learning. Although this research is aimed at online learning, it is possible that this model can be used in face-to-face learning.

References

- Afinda, B. N., Aisyah, R. S. S., & Wijayanti, I. E. (2019). Student team achievement division (STAD) dengan word square: Dampaknya terhadap motivasi dan hasil belajar. JIPVA (Jurnal Pendidikan IPA Veteran), 3(1), 17-27.
- Al-Fikry, I., Yusrizal, Y., & Syukri, M. (2018). Pengaruh model Problem Based Learning terhadap kemampuan berpikir kritis peserta didik pada materi kalor. Jurnal Pendidikan Sains Indonesia, 6(1), 17-23.
- Alaloul, W. S., & Qureshi, A. H. (2022). Cooperative problem-based learning experience and coaching strategies of engineering course. International Journal of Evaluation and Research in Education, 11(2), 848-861. https://doi.org/10.11591/ijere.v11i2.22243
- Ali, R., Hukandad, Akhter, A., & Khan, A. (2010). Effect of using problem solving method in teaching mathematics on the achievement of mathematics students. Asian Social Science, 6(2), 66-72.
- Alrahlah, A. (2016). How effective the problem-based learning (PBL) in dental education: A critical review. The Saudi Dental Journal, 28, 155-161.
- Amin, S., Utaya, S., Bachri, S., Sumarmi, & Susilo, S. (2020). Effect of problem-based learning on

- critical thinking skills and environmental attitude. *Journal for the Education of Gifted*, 8(2), 743–755.
- Amrullah, K., & Suwarjo, S. (2018). The effectiveness of the cooperative problem-based learning in improving the elementary school students' critical thinking skills and interpersonal intelligence. *Jurnal Prima Edukasia*, 6(1), 66–77. https://doi.org/10.21831/jpe.v6i1.11253
- Ananda, R. (2017). Peningkatan pembelajaran IPS dengan menggunakan model Koperatif TIPE Studen Team Achievement Division (STAD) Siswa Sekolah Dasar. *Jurnal Basicedu*, 1(2), 91–100.
- Chiablaem, P. (2021). Enhancing english communication skills of Thai University Students through Google Apps for Education (GAFE) in a digital era during Covid-19 Pandemic. *Shanlax International Journal of Education*, *9*(3), 91–98.
- Dakabesi, D., & Louise, I. S. Y. (2019). The effectiveness of problem-based learning model to increase the students' critical thinking skills. *Journal of Education and Learning (EduLearn)*, 13(4), 543–549.
- Damopolli, I., & R., R. S. (2019). The effect of STAD learning model and science comics on cognitive students achievement. *Journal of Physics: Conference Series*, 1—6, 1—6.
- Firdaus, F. M., Eahyudi, & Herman, T. (2017). Improving primary students' mathematical literacy through problem based learning and direct instruction. *Educational Research and Review*, 12(4), 212–219.
- Fogarty, R. (1997). Problem learning & other curiculum models for the multiple intelligences clasroom. Pearson.
- Gaith, G. (2003). Effect of Learning Together Model of Cooperative Learning on english as a foreign language reading achievement, academic self esteem, and feeling of school alienation. *Bilingual Research Journal*, 27(3), 451–474.
- Gorghiu, G., Drăghicescu, L. M., Cristea, S., Petrescu, A. M., & Gorghiu, L. M. (2015). Problem-based learning an efficient learning strategy in the science lessons context. *Procedia-Social and Behavioral Sciences*, 191, 1865–1870.
- Grasas, A., & Ramalhinho, H. (2016). Teaching distribution planning: A problem-based learning approach. *International Journal of Logistics Management*, *27*(2), 377–394.
- Gürsul, F., & Keser, H. (2019). The effects of online and face to face problem based learning environments in mathematics education on student's academic achievement. *Procedia Social and Behavioral Sciences*, 1, 2817–2824.
- Hasanah, U. (2017). Penerapan Model Cooperative Problem Based Learning (CPBL) Terintegrasi Bahan Ajar Untuk Meningkatkan Hasil Belajar Dan Menumbuhkembangkan Karakter Siswa Pada Reaksi Reduksi Dan Oksidasi. *Keguruan*, 5(1), 110–120. https://jurnal.uisu.ac.id/index.php/Keguruan/article/view/820/715%0Ahttps://jurnal.uisu.ac.id/index.php/Keguruan/article/view/820
- Hijriah, E. M., Darmawan, E., & Zamzami, M. R. A. (2018). Enhancing biology students motivation through classroom action research based STAD learning model. *Indonesian Journal of Biology Education*, 1(1), 9–16.
- Jailani, M., & Qudsiyah, U. (2020). Integrasi Problem Based Learning Dengan Model Cooperative Script Untuk Meningkatkan Hasil Belajar Ekonomi Pada Siswa Di SMA Muhammadiyah 1 Palangkaraya. Soedirman Economics Education Journal, 2(1), 55. https://doi.org/10.32424/seej.v2i1.2255
- Juliastuti, I. P., Dyah, W. E., & Surini, H. (2019). Peningkatan pemahaman konsep pecahan pembelajaran tema cuaca melalui model cooperative learning tipe STAD dan media origami pada kelas 3A SDN Purwantoro 2 Malang. *Jurnal Basicedu*, *3*(1), 130–135.
- Kanthimathi, S., and Raja, B. W. D. (2021). Covid-19: A challenging enigma to global education. Shanlax International Journal of Education, 221–224(9), 3.
- Kardoyo, Nurkhin, A., Muhsin, & Pramusinto, H. (2020). Problem-based learning strategy: its impact on students' critical and creative thinking skills. *European Journal of Educational Research*, *9*(3), 1141—1150.

UNP JOURNALS

- Lin, F. L. (2017). Impacts of the Problem-based Learning pedagogy on english learners' reading comprehension, strategy use, and active learning attitudes. Journal of Education and *Training Studies*, *5*(6), 109–125.
- Loza, M. (2018). Pendekatan model kooperatif tipe Students Achievement Dividion (STAD) untuk meningkatan motivasi dan prestasi pembelajaran kimia MAN 2 Kota Padang. Orbital: Jurnal Pendidikan Kimia, 1(1), 37-48.
- Mohd-Yusof, K., Helmi, S. A., Jamaludin, M.-Z., & Harun, N.-F. (2011). Cooperative Problem-Based Learning (CPBL). IJET, 6(3), 12-20.
- Nurlina Mbay, W. O., Anggo, M., & Sani, A. (2017). Efektivitas Model Pembelajaran Kooperatif Tipe Jigsaw dan Model Pembelajaran Problem Based Learning terhadap Kemampuan Jurnal Pendidikan Matematika, Kritis dan http://download.garuda.kemdikbud.go.id/article.php?article=1203010&val=7797&title=Efe ktivitas Model Pembelajaran Kooperatif Tipe Jigsaw Dan Model Pembelajaran Problem Based Learning Terhadap Kemampuan Berpikir Kritis Dan Komunikasi Matematik Siswa Sekolah
- Nurulhikmah, A., & Kristin, F. (2019). Improving mathematics achievement and students' activity at primary level using STAD learning model. *Jurnal Pendidikan Progresif*, 9(1), 105–112.
- Obaya, A., Vargas-Rodríguez, G. I., Lima-Vargas, A. E., & Vargas-Rodríguez, Y. M. (2018). Problembased learning: How long does pasteurized milk decompose at room temperature? Chemistry Education, 9(2), 99–109.
- Othman, H., Salleh, B. M., & Sulaiman, A. (2013). 5 ladders of active learning: An innovative learning steps in PBL process. In & F. A. P. K. M. Yusof, M. Arsat, M. T. Borhan, E. D. Graaff, A. Kolmos (Ed.), PBL across cultures (pp. 245-253). Aalborg University Press.
- Ozkara, B. O., & Cakir, H. (2020). Comparison of Collaborative and individual learning in online learning. TOJET: The Turkish Online Journal of Educational Technology, 19(4), 66-74.
- Palupi, B. S., Subiyantoro, S., Rukayah, & Triyanto. (2020). The effectiveness of Guided Inquiry Learning (GIL) and Problem-Based Learning (PBL) for explanatory writing skill. International Journal of Instruction, 13(1), 713-730.
- Phuumeechanya, N., & Wannapiroon, P. (2004). Design of Problem-Based with scaffolding learning activities in ubiquitous learning environment to develop Problem-Solving skills. Procedia - Soc. Behav. Sci. World Conf. Educ. Sci. - WCES, 116, 4803-4808.
- Reynolds, J. M., & Hancock, D. R. (2010). Problem-based learning in a higher education environmental biotechnology course. Innovations in Education and Teaching International, *47*(2), 175-186.
- Savery, J. R. (2006). Overview of problem-based learning: Definitions and distinctions. Interdisciplinary Journal of Problem-Based Learning, 1(1), 9–20.
- Scholkmann, A. (2020). Why don't we all just do the same? Understanding variation in PBL implementation from the perspective of translation theory. The Interdisciplinary Journal Od Problem Based Learning, 14(2).
- Silva, A. B. Da, Bispo, A. C. K. de A. Rodriguez, D. G., & Vasquez, F. I. F. (2018). Problem-based learning: A proposal for structuring PBL and its implications for learning among students in an undergraduate management degree program. Gestao Magazine/ Revista de Gestao, 25(2).
- Slavin, R. (2015). *Cooperative Learning teori riset dan praktik*. Nusa Media.
- Surur, M., Degeng, I. N. S., Setyosari, P., & Kuswandi, D. (2020). The effect of Problem-Based Learning strategies and cognitive styles on junior high school students' problem-solving abilities. International Journal of Instruction, 13(4), 35–48.
- Tan, O. S. (2004). Enchancing thingking trough Problem-based Learning Approache. International Perspective.
- Tarim, K., & Akdeniz, F. (2008). The effects of cooperative learning on Turkish elementary students' mathematics achievement and attitude towards mathematics using TAI and STAD methods. Educational Studies in Mathematics, 67(1), 77–91.

- Telli, Y. G., & Altun, D. (2020). The coronavirus and the rising of online education. *Journal of University Research*, 3(1), 25–39.
- Tsai, C., & Chiang, Y. (2013). Research trends in problem-based learning (PBL) research in elearning and online education environments: A review of publications in SSCI-indexed journals from 2004 to 2012. *British Journal of Educational Technology*, 44(6), 185–191.
- Wyk, M. M. van. (2012). The effects of the STAD-Cooperative learning method on student achievement, attitude and motivation in economics education. *Journal of Social Sciences*, 33(2), 261–270.
- Yaduvanshi, S., & Singh, S. (2019). Fostering achievement of low-, average-, and high-achievers students in biology through structured Cooperative Learning (STAD Method). *Education Research International*, 1–10.
- Yusof, K. M., Hassan, S. A. H. S., Jamaludin, M. Z., & Harun, N. F. (2012). Cooperative Problem-based Learning (CPBL): Framework for Integrating Cooperative Learning and Problem-based Learning. *Procedia Social and Behavioral Sciences*, 56(October), 223–232. https://doi.org/10.1016/j.sbspro.2012.09.649

UNP JOURNALS ISSN 1411-3732