

The Application of PjBL Model With The Help of Virtual Debate Method to Assess Article Writing Competence

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Abstract

Journal Study Subject was carried out virtually in team teaching system. Its culminating competence was that learners were able to write conceptual article. Project Based Learning model was combined with virtual debate method (PjBL-Virtual Debate model) was used to facilitate such competence learning. This qualitative research has two objectives: (1) to describe the characteristics of PjBL-Virtual Debate model; (2) to describe the implementation of PjBL-Virtual Debate model. The research used qualitative approach through seven activities. The research results are: (1) the characteristics of PjBL-Virtual Model is identified based on the model principles with typical syntagmatic application of PjBL guided by the assessment method through virtual debate so that the learners had the opportunities to find and self-revise the strengths and weaknesses of the article drafts they produced. (2) The implementation of PjBL-Virtual Debate model was begun with the activities of learners following pre-learning until the post-learning virtually so that they developed creative, independent, brave, and sportive characteristic values. All learners managed to perfect and publish their articles. Based on the research, it was suggested that before writing conceptual article, they had to make a conceptual research report completely, because article is a form of reproduction from the complete research report.

Keywords: PjBL model, virtual debate method, assessment, conceptual article

1. Introduction

Learning according to National Standard of Higher Education (2020:3) is a process of interaction between learners and educators and the learning sources in learning environment. Similarly, learning the subject of Journal Study in study program of PGSD Unnes. Such subject learning is expected to create effective learning interaction process and gives positive impact for the learners. Educators are expected to be able to facilitate, to guide, and to motivate the learners to be able to reach the learning objectives. Nuryatin and Panca (2020) also suggested that learning is interaction process between learners and educators, learning material, delivery methods, learning strategy, and learning resources in a learning environment so that the learners master the competence set.

Such Journal Study subject first appeared in the academic year of 2020/2021 with team teaching system. The first learning was significant to be well designed and researched. Learning needs to be planned, implemented and evaluated well so that it could take effect on increasing learners' competence and intellectual mental facing the final project subject (6 credits) in the upcoming semester.

There are five basic competences that must be mastered by learners so that they could achieve the main competence of Journal Study subject. The five basic competences are as follows: 1) the nature of the manuscript published in various type of journals, 2) the practice in analysing articles from various type of journals based on the topic of interest of each student, 3) article search in various journals, 4) drafting references on scientific articles, 5) drafting conceptual article based on the topic learners found interesting. The main competence that must be mastered in Journal Study subject is the fifth competence (drafting conceptual article) which the truth of the content and its structure must be accounted for. Draft of conceptual article by a student is significant to be specifically treated so that the output could be article that is ready to publish.

As a matter of fact, however, learning is still conducted virtually, which means that it has many limitations. One of the constraints is that the learners are not truly learning since the learning environment the educator tries to build is

less challenging to be involved in argumentation. Therefore, educators as facilitators need to find an effective learning model so that learners could achieve scientific thinking experiences which are truly tested with effective methods.

Online learning enables learners to have opportunities to work on a number of projects scheduled based on the agreement made long before the assessment. Based on the theory study and literature study, project-based learning (PjBL) model was predicted to be the best fit model to facilitate learning such article writing competence. The fifth step of PjBL model implementation is the conduction of assessment. Such step needs to be conducted by increasing the intensity of learners' involvement actively and in a fun way (Herawan 2017) so that learners could achieve optimal learning results.

Article draft assessment stage is significantly designed so that learners experienced authentic assessment in challenging situations that they could be more motivated. Therefore, debate method was chosen to create assessment stage that built learners' mentality so they were keen on delivering their arguments.

The best assessment method enables learners' article to have more quality. This is inline with the expectation behind the appearance of Journal Study subject aiming that learners gain challenging experiences as an introduction to research seminar subject in the upcoming semester. This is the reason behind the application of PjBL model supported by debate method.

1.1 Objectives

Based on such background, two research objectives are determined as follows: (1) to describe the characteristic of PjBL-Virtual Debate model, and (2) to describe the implementation of PjBL-Virtual Debate model in the learning of conceptual article writing competence as the form of scientific writing reproduction in Journal Study subject.

All research results are expected to give benefit findings as experiences in designing the Journal Study subject learning. Further, the research results could be used as the foundation to make a better either online or offline learning in the future.

2. Literature Review

Based on the theory study, it seems that PjBL model, if it was combined with virtual debate method in the assessment stage, it is predicted to have positive effect on the mental and the product of learners' articles. One by one, they would encounter cons team which is ready to debate their conceptual article draft. The presenter is obliged to provide them with arguments, facts, or evidences to defend their ideas during the debate. If some parts of their article were proven to be weak then the presenter would be given an opportunity to revise based on the input/finding so that it deserves to be published. It means that even though the learning process runs online, learners still have opportunities to show their existence firmly before critical audience.

This research is different from the previous one. The followings are some researches using PjBL model in the learning process. Qualitative research conducted by (Wajdi, 2017) found that the application of PjBL model affects the process and the learning result of drama show competence are categorized in a very good assessment. This is inline with the statement by (Citradevi et al., 2017) that the use of LKS as learning material that have been validated by the expert team combined with the learning project is able to increase the skill of scientific process and cognitive learning result of the learners.

PjBL model applied by (Balemen & Keskin, 2018) prove that PjBL is more effective (86%) in scientific education compared to traditional approach. This is inline with the pseudo experimental research conducted by (Fitri et al., 2018) who concluded that there is a significant influence of PjBL model application towards learners' high-level thinking skill. (Astuti et al., 2019) stated that PjBL model integrated with STEM could increase the learning process as well as the study result (high category) in the form of learners' concept mastery on ecosystem learning material. (Yudha, 2019) also stated that PjBL model applied on the scientific writing study might increase the learners' competence in study program of PGSD.

Eventually, to end the literature study, (Eckardt et al., 2020) stated that project-based learning could facilitate deep understanding about content knowledge. Project learning is able to develop learning community more productively to increase the academic process and learning result in gaining the best learning experience.

Project based learning is effective on the focus of creative thinking aspect, problem solving, and interaction among learners so that new knowledge application is realized. PjBL model supported with virtual debate has sufficiently

strategic syntagmatic to provide learners with direction in completing the final product of learning result. Salim argues as follows.

Debate is necessary not only in the legislature, in courtroom or on political campaign trail, but also in other area of society including in university. In practical academic context, debate provides reasoned arguments for and against a proposition between two contending individuals or group (Salim, 2015).

Active debate method is included in one of the techniques to determine whether or not a proposal or idea is good (Panjaitan et al., 2019). Debate method is a method in active learning used to stimulate class discussion. This method provides valuable experiences for the learners to increase thinking and contemplation especially when they are faced with a community with contradictory opinions. Cons team is intentionally created so that the presenter of the idea could be explored in terms of their ideas in order to identify the quality of the idea.

Active debate method in project learning includes five stages. (1) Arranging statement containing opinion/issue. (2) Dividing debate team into two, single presenter and cons team. In such virtual debate design, the presenter (single) would face all debate participants who are in cons team. (3) All members of a debate team take turn to be the presenter. (4) the presenter of conceptual idea is considered succeed if he is able to provide argumentation/evidence/fact and the likes to the cons team as the response to the questions/response/argumentation in the debate. If they failed to defend all of their conceptual idea, then they are obliged to revise their article draft by the input/critics from the cons team.

3. Methods

3.1 Research Design

This research was designed using qualitative research promoted by Miles, Huberman, and Saldana (2014) through seven activities as follows: 1) to build a conceptual framework, 2) to formulate research questions, 3) to select sample and research limitations, 4) instrumentation, 5) data collection, 6) data analysis, 7) matrix and testing the conclusion. Qualitative research places the researchers as the key instrument. Therefore, conceptual framework of PjBL-Virtual Debate model is the first important issue followed by the second issue which is the implementation of such model.

3.2 Sampling and Research Limitation

Sampling was taken using saturated sampling technique, which is a technique of sampling that makes all population members as the sample under the condition that the number of population is less than 30 people. The research is limited only on model characteristic setting and PjBL-Debar model implementation in learning how to write conceptual article in the 14th and 15th meetings on the subject of Journal Study. The time allocation was adjusted with the need that had been agreed since the arrangement of project schedule.

3.3 Population and Research Sample

According to Sutrisno (2016) population is all people meant to investigate. Population is limited to the least number of individuals who share a common characteristic. Based on such definition, population in this research is the learners taking Journal Study subject (Code 2020106569) in the odd semester of the academic year of 2020/2021. The sample size of the qualitative research ranged from one to 40.

3.4 Instrumentation

Instrumentation is related with the research instrument used in this qualitative research. There were two instruments used to produce findings in this research. (1) Determining the characteristic of PjBL-Virtual Debate model based on the learning model theory (Joyce 2009) identified based on the model aspects, such as model orientation, learning/syntagmatic structure, social system, supporting system, instructional effects, side effects. (2) the implementation of PjBL-Debar model is determined by instrument in the form of adaptation of PjBL learning model by virtual debate learning method, and observation instrument of the value of characteristics of creative, independent, brave, and sportive.

3.5 Technique of Data Collection

Data collection technique in qualitative research (Adhimah, 2020) used to identify and to describe the fact from the events being observed so that objective data could easily be collected. It means that data collection was taken in triangulation (combination) based on the field facts.

3.6 Technique of Data Analysis

Data analysis technique is inductive and the result of qualitative research emphasizes more on the meaning than generalization. Data analysis technique used in qualitative analysis using descriptive method. Qualitative data are the data stated in words, sentences, and figures. Qualitative data produce qualitative technique by reducing the data, presenting the research procedure resulting in descriptive data in the series of verbal statement both spoken and written from the behaviour of the people or an object (e.g. model) being observed.

3.7 Matrix and Testing the Conclusion

Data assessment is used as one of the steps to test the data validity so that the data obtained is the best and the most valid one. Trust towards the data resulted from the qualitative research (Sugiyono, 2015:270) among other is executed in six ways: extending the observation, increasing the persistence during the research, triangulation, peer discussion, negative case analysis and member check.

The validity of the qualitative research data could be tested using triangulation technique by checking and comparing the data obtained in the field. Triangulation is involved to test the credibility (Sugiyono 2015; Kanto et al., 2020; Umanailo, 2020), which means that the data had been checked in various ways at various times.

4. Results and Discussion

4.1 Characteristic of PjBL-Virtual Debate Model

Learning method covers the behavior of both educators and learners. The model is used to facilitate learning start from the planning that is based on the curriculum up to the instructional designing, including media programs used in the learning process. Learning model (Joyce and Weil 2009:30) is a plan or a pattern used as the guidance in planning classroom learning or tutorial and it determines the learning tools. Class in this context could be defined as factual class or virtual class.

Some of the qualities of learning model come from the aspects of validity, practicality, and effectiveness (Asyafah, 2019). The aspect of model builder including model orientation, syntagmatic, social system, reaction principle, supporting system, and effects, either instructional effects or side effects which are typical. Similarly, PjBL-Virtual Debate model used in this article writing learning. The PjBL model learning (Indayatmi, 2020) increases learners' activity, moreover, if it is applied using virtual debate method, it would have the typicality on the assessment stage.

Learners at the beginning of their learning have already been faced in real with tasks such as scheduled projects in the timeline that have been agreed. Such project requires the learners to keep enriching themselves with literation endlessly. The context of literation means the capacity to access, understand, and to use something cleverly through various activities such as: reading, watching, listening, writing, and or speaking which aim to sharpen the learners' capacity to think critically, analytically, creatively, and innovatively (Lestari & Septianingrum, 2019). The result is conceptual article that is ready to present in virtual debate activity on time.

In the assessment stage, they are faced with debate activity through zoom meeting application/virtually. When they were presenting their article drafts, a presenter would face a cons team. At that moment, learners were demanded to show the quality of their products by argumentation/facts/etc proving that their conceptual ideas deserve to be published.

The application of PjBL-virtual debate model signifies that the learners remain demanded to actively have positive characteristic and responsible for the quality of their articles. Article draft presenter uses various of theories that have been learnt to defend their conceptual article draft. If the idea is proven to be weak, they were responsible for revising their conceptual article so that it meets the APIK (*asli* (original), *penting* (significant), *ilmiah* (scientific), and *konsisten* (consistent)) requirements.

The steps of conceptual article writing learning with PjBL-Virtual debate model in Journal Study subject could be described at figure 1:

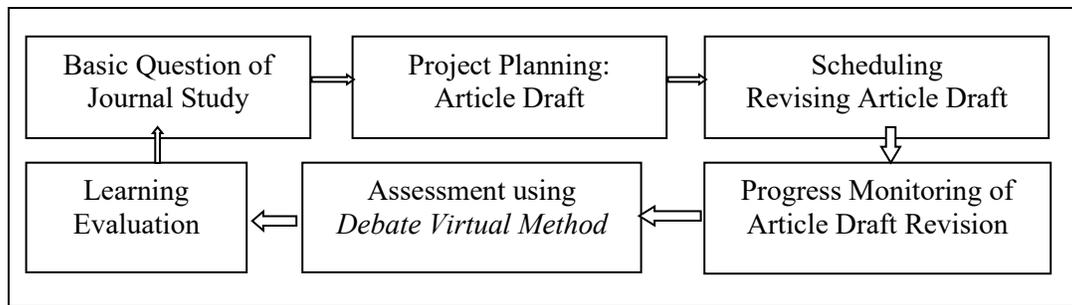


Figure 1. Learning Steps of PjBL-Virtual Debate Model

The combination between the model and the method produces dynamic learning steps that make learners more keen in facing challenges. Learning is begun with essential question related to the main competence of Journal Study Subject. Such question provides the direction for learners' activities in the form of assignments of a structured learning project, i.e. in deep investigation about the importance of scientific journal. The questions arranged of course do not need immediate/spontaneous answers, yet, they require the learners to build their knowledge and important skills to be able to respond with some efforts of manifestation. Manifestation efforts of a presenter could be in the form of the accountability of the final product of the project in the form of scientific article draft.

The final product of the project exists because the learners have passed a number of project-based learning processes. At the beginning they were demanded to be able to show the initial project in the form of summary of three article written by other people from different journal under the same topic (the topic was determined based on the learners' interest). Those three articles were used by the learners as the references. The second project was to make conceptual ideas that were inline with the topic based on the context of the current issue faced by the learners. The third project is the article draft based on the idea. The fourth project was peer's draft editing by exchanging article draft based on the editing pattern agreed. The fifth project was revising the initial article draft. The sixth project was to produce and to be responsible for the conceptual draft in the debate forum virtually. The seventh project was that all learners revised their product based on the verbal input during the virtual debate. The eighth project was that the article draft was responded by the educator, final revision could occur should be required. The ninth project, the draft was published by the learner in the journal. Based on the description of the performance globally about the innovation model of PjBL-Virtual debate, the following is the description of characteristic of PjBL-Virtual debate through the introduction of aspects building the learning model, as it presented at table 1.

Table 1. the Characteristics of PjBL-Virtual Debate Model in Article Writing Learning

No	Aspect	Description
1	Orientation	Combining project-based model of conceptual article draft writing which its test/assessment orientation applies virtual active debate method involving the competence of creative, independent, brave, and sportive from the first project stage to the ninth stage (publication in journal).
2	Syntagmatic	a) Initial question of the learning. b) Planning the article draft article writing project on the ninth meeting. c) Arranging the schedule of project completion independently. d) Project monitoring during the article draft writing process. e) Product assessment using virtual debate method using zoom meeting application. f) Project Evaluation.
3	Social System	Learners find friends who could be placed as the cons team, i.e. sportive peer discussion to provide them with critics and inputs towards article draft through the activities of editing and debate.
4	Reaction Principle	Learners creatively, independently, bravely, and sportively provide arguments on the critics, write a revision as the effort to finalize the article draft and publish their conceptual articles.
5	Supporting system	The opportunities to be tested by many assessors, to have an open mind, and put the best attempt to defend the argument as the efforts to convince public (represented by cons team).
6	Effect	Instructional: independent/team productivity, writing, editing, publication, Side: creative, independent, brave, and sportive attitude.

The typicality of PjBL-Virtual Debate model has been identified through model building aspects. The design of the learning pattern has been used to facilitate online learning on the basic competence of conceptual article writing in Journal Study subject in the odd semester of 2020. Learners have produced feasible products to be treated on the post-learning. Learning process and results need to be describe as the second research result based on the research objectives.

The following is the description of the implementation of PjBL-Virtual Debate model in article draft writing learning start from the pre-learning stage, learning stage, product assessment stage, up to post-learning stage of article writing.

4.2 Implementation of the Model Application

PjBL-Virtual debate model was performed either in classical or in smaller teams in the 14th and 15th meeting. Based on the agreement when arranging the project, the duration would be fitted as needed. Yet, as a matter of fact, the culmination point of the learning activity (virtual debate) was a part of the activity in the set of learning project. Actually, the project schedule had been arranged through a thought from the initial planning to the end. The complete series of project-based learning activity was as follows. 1) pre learning activity. 2) learning activity, and 3) post learning activity. The description of the series of learning activity could be further observed in the 2 table.

Table 2 Series of Learning Activity using PjBL Virtual Debate Model

No	Activity/ Communication	Description
1	Pre-learning (Elena, WAg, <i>Zoom Meet</i> , etc., based on the need)	The formation of debate team and the assignment of the first independent project (meeting no. 4): exploration of three articles under the same topics with different types and source of journals as reference.
		The second independent project (meeting no. 9): conceptual draft writing based on the topic of the reference.
		Article draft exchanging to be edited.
		Revising and making a PPT of conceptual article draft.
		Scheduling the sequence of conceptual article draft presenters.
2	Learning (Elena, WAg, <i>Zoom Meet</i> , etc., based on the need)	Meeting No. 14:
		Presentation of article draft through video and posting it in Elena.
		Through zoom meeting, taking turn to become presenter/sources on virtual debate activity against cons team.
		Exchanging article draft to be edited
		Continuous revision of conceptual article draft as the result of editing.
		Communicating the conceptual article draft as the revised result in the form of written text (in Elena and or Whatsapp Group)
		Revised draft received an input from the educator and if necessary, it needs to be revised based on the input.
		Meeting No. 15:
		Virtual debate about the best out of the three conceptual article writers classically.
		Summary, acknowledgement, and reflection.
Uploading the final revision of the scientific article to Elena,		
3	Post-learning	Publishing article by submitting to journal, and if necessary, making a book chapter of all conceptual article.

The followings are the description for each stage of learning activities in writing conceptual article in Journal Study subject consecutively.

4.2.1 Pre-Learning

Project of conceptual article draft writing has been designed in a planned schedule. It starts from the formation of virtual debate teams, where each team consists of four learners. The class is divided into two debate teams. To

trigger conceptual idea, on the 4th meeting, learners would have their first project which is to download and to make three articles with similar topic as references. Those articles should come from different source of journals. Based on those three articles, learners would receive their second project, i.e. writing conceptual article draft on the 9th meeting (after the Mid-semester test). The class has agreed to use WhatsApp Group (WAG), Elena, Email, or via zoom meeting. such applications are used to implement the process of project-based learning involving the peer tutor to provide treatment on the conceptual article draft produced by the learners. The sample can be seen at figure 2.



Figure 2. Article Writing Assignment in Elena on the Ninth Meeting

There are some activities involving peer tutor that have been arranged the schedule, as follows. 1) internal editing activity with peer sharing the common debate team. 2) revising the article draft based on the input from the first editor. 3) Cross editing, exchanging article draft with other debate team. 4) Correcting article draft each other, once it was uploaded to WhatsApp Group/WAG. After fixing the draft based on the input through WAG application, further the product of article draft is uploaded in elena (independent assignment in meeting no. 12). 5) Receiving input globally by the educator and the classmate tutor through WAG and Elena. 6) Communicating each other when the learner prepared the PPT for presentation in the form of interactive video. 7) Being the cons team in the assessment stage with virtual debate method, testing the conceptual idea of the article draft presenter. 8) Communicating each other for further activities in the form of article publication to journal.

Furthermore, the implementation of PjBL-virtual debate on the learning of conceptual article writing comes to the core, i.e. virtual face-to-face on the 14th and 5th meeting as explained bellow.

4.2.2 Learning

Learners' activities facilitated by educators occur on twice face-to-face at the end of the college. Online face-to-face meeting was performed using zoom meeting application. however, all preparation that would be done had been mentioned before the meeting through UNNES' gateway application (apps.unnes.ac.id), especially in *sikadu* and *elena* part. The process of product assessment of conceptual article draft of the learners had all been uploaded to *elena* either in the form of text or its presentation video. Yet all activities were begun with zoom meeting application based on the schedule. All learners took turn to become the presenter and they had opportunities to face responses/objections/questions from cons team based on the time allocation scheduled. If the first through the 13th meeting were performed based on the college time allocation (50 minutes x 2 credits), meeting no 14 and 15 specially did not use such guidance. It had been planned far before in the debate schedule recalling all learners are obliged to become presenters in such virtual debate. It can be seen at figure 3.

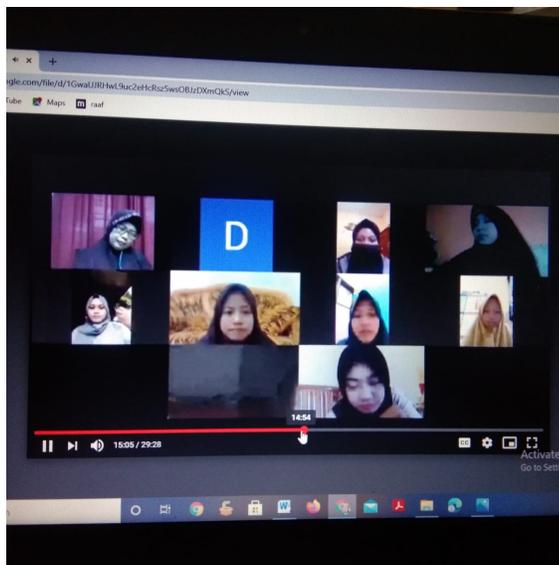


Figure 3. Assessment Process of Virtual Debate

The schedule of the order of presenter of conceptual article draft had been agreed before the 14th meeting. And in its implementation, all participants fluently performed the virtual debate. The problem was that the zoom meeting ID must be renewed since the virtual debate was performed using free mode (free only for 40 minutes for one meeting). On the 14th meeting all participants received the same time allocation when they were playing a role as a presenter (minimum of 15 minutes). Cons teams perform their obligation to criticize the presenter's article draft in depth. Educators participated to support the cons team so that the presenter's respond could be more focused. Should the time allow, other participating teams gave their critics and suggestion. Presenter at the end of the debate was given some assessment notes by the educator and the chief of the cons team.

Such activity of video conference using zoom meeting could be run continuously. Zoom is an application made by Eric Yuan released in January 2013. Zoom could be accessed via website, either for OS Mac, Windows, Linux, iOS, and Android. Such virtual debate activity uses free zoom (free for 40 minutes). If the time is up, activity could be continued by reentering the application. During the activity of product assessment using virtual debate, everything ran smoothly despite participants should reenter several times to zoom application. At the end of the 14th meeting, the assessment of process and the learning result based on the observation in overall had been achieved, yet it was only temporary. Because, this assessment still needed to be carried out by virtual communication using other application, such as elena as a part of apps.unnes.ac.id. Each learner has an obligation to finish the response/answer/objections through elena or WAG that had been used by the community (educator and learners) since the beginning of the lectures. Each presenter was obliged to make notes for further revision of their conceptual article draft uploaded on the independent assignment on 15th meeting. On the 14th meeting, top three learners in arranging and presenting their conceptual article draft were determined. The topic of those top three draft were: 1) audio visual media for elementary school learners, 2) effective strategy for elementary school class management, and 3) guidance and counseling service towards PPKN character score for elementary school students. The top three presenters had the honor to represent their article draft (that would have been revised based on the response by cons team and educator in the 14th meeting)) on the 15th meeting.

Virtual debate on the 15th meeting was expected to be one of the inner experiences for other learners. The top three learners were given appreciation, and other participants had examples of attitude and good work from those top three learners. The top three presenters had questions/response/critics from all participants and educator. The responses were not limited only of the content, but also on the article structure based on the template agreed. The three presenters also presented the journal addresses targeted as the place where their article would be published. The three presenters at least could become the role models for all other participants so that they had examples in revising their article drafts. This was the advantages of PjBL-virtual debate model, because despite their distance location, they could intensively communicate to give each other benefit. Learning process of virtual debate activities on the learners' project products was observed using observatory instrument using four indicators of character

values, i.e. creativity, independence, bravery, and sportiveness. Each character value has its own indicator. The list of the four indicators used to observe the learning process of the learners during the learning especially on the 14th and 15th meeting can be seen at table 3.

Table 3. The List of Characteristic Values and Their Indicators

No	Characteristic value	Observatory Indicator	Remark
1	Creative	1). Fluency 2). Flexibility 3). Originality	Observation is performed under the guidance of attitude scale (Sugiyono, 2015). Letter A, number 3,51- 4,00 (SB) Letter B, number 2,51 - 3,50 (B) Letter C, number 1,51 – 2,50 (C) Letter D, number 0,51 – 1, 50 (K) Letter E, number 0,00 – 0,50 (SK) Explanation: SB Very Good B Good C Fair K Bad SK Very Bad
2	Independence	1). Competitiveness 2). Able to make decisions 3). Confidence 4). Responsibility	
3	Bravery	1). Firm 2). Initiative 3). Strong	
4	Sportive	1). Respect friends/enemy 2). Embrace lost 3). Obey the rules	

14th and 15th meetings were significant to be observed either the process or the learning results. Learning process assessment with virtual debate method observed four-character attitudes of the learners. Despite the learning was performed online, character is important in education. Atmazaki et.al., (2020:175) stated that the 21st century's education demands the learners to become smart and have good behavior. Based on the observation result, the data was obtained in the table 4.

Table 4. Observation Result of Article Writing Learning Process

Data Source/Article Topic	Characteristic Value (NK)				Average
	Creative	Independent	Brave	Sportive	
1/The importance of literature for Elementary school students	3.50	3.45	3.60	3.60	3.54
2/Media Couple Card Science for Elementary school students	3.40	3.50	3.30	3.40	3.40
3/Guidance and Counseling for science for upper class of Elementary school students	3.45	3.40	3.50	3.50	3.46
4/Character Education of Elementary school students	3.30	3.40	3.40	3.55	3.41
5/Art of dance of creative value of elementary school students	3.70	3.60	3.60	3.70	3.65
6/Art of dance of character education of elementary school students	3.70	3.80	3.75	3.70	3.74
7/Art of dance of National Attitude of Elementary school students	3.60	3.70	3.75	3.75	3.70
8/Class management in elementary school	3.75	3.80	3.80	3.70	3.76
9/Audio Visual media for learning interest of elementary school students	3.85	3.75	3.80	3.80	3.80
Average	32.25/3.58	32.4/3.60	32.5/3.61	32.8/3.64	32.46/3.61

The average of the four-character scores of the learners have been above 3.0, which meant that it was in the SB (very good) category. This signified that despite online learning, learners remain motivated to become the best in working. Learning process was very conducive. The constraints perceived was only when the participants had to be kicked out of the zoom since the time was up. However, they easily re-entered by performing the procedure to all virtual forums of debate. As it presented at figure 4.

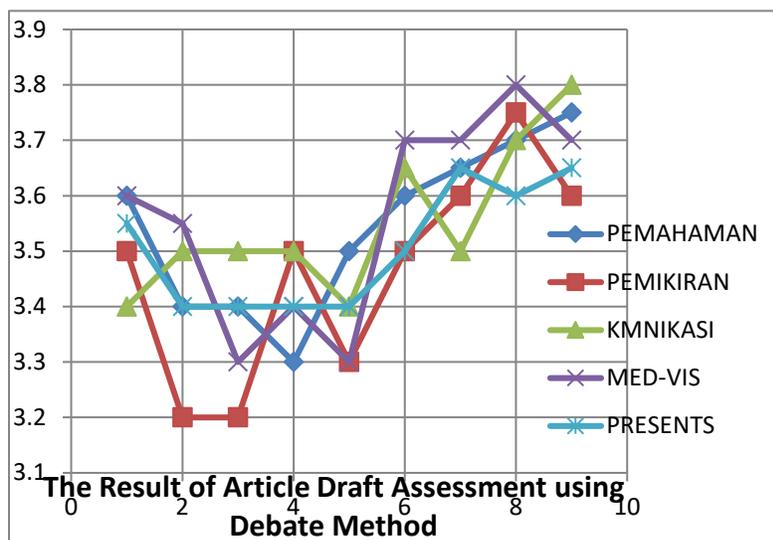


Figure 4. The Assessment Result of Presentation of Article Draft using Virtual Debate Method

The learning result when the learners become the presenters in two meetings (14th and 15th) were also observed through various applications (zoom meeting, elena, WAG). The learning result in the form of conceptual article draft must be presented to obtain assessment using virtual debate method. There were five indicators determined based on the presentation assessment aspects (Book of Kurikulum Dikti 2014) as follows: understanding, thought, communication, visual media, presenting ability. The results of assessment of conceptual article draft presentation that have been done by the learners using attitude scale (Sugiyono, 2015) were SB (very good), B (good), C (Fair), K (Bad), and SK (Very Bad). The following is the graphic of assessment of learners' skills in performing the presentation in virtual debate activity. Based on the observation result of the skill to become the presenter in virtual debate, the average result of indicator observation was obtained as follows 3.49 (understanding), 3.17 (thought), 3.55 (communication), 3.53 (visual media), and 3.51 (presenting ability). The most prominent skill of the learners was the ability to make and use the visual application. However, the result of the learners' thought needs to be increased more verbally (arranging the sentences) that should be more rational.

4.2.3 Post-Learning

Learning had ended in the 15th meeting. Learners were ready for the end semester test. However, the product in the form of conceptual article by the learners kept continued with revision and publication. All learners' articles had been published by submitting them to some journals. Furthermore, special teams appointed continued to keep the learners' articles in order so that the level of legibility was higher. Other than publication, there was one more activity that should be done in the level of post learning, i.e. book chapter publishing planning from all articles that have been produced by the learners and educator.

5. Conclusion

Based on the research result, two conclusions could be taken as follows. (1) the characteristic of PjBL-Virtual debate model is identified based on six model principles: orientation, syntagmatic, social system, reaction principles, supporting system and instructional as well as side effects. The characteristic of this model application was the learning design using project-based learning syntagmatic involving virtual debate method. Learners still the social system network intensively in learning environment with the peer tutor intensively so that the article draft products could be better. (2) Implementation of PjBL-Virtual Debate model was started from the learners' activity joining pre learning up to post learning virtually. The characteristic values of creative, independent, brave, and sportive of the learners were considered as very good. All learners succeeded to perfect and publish their conceptual article through journals. Based on the research result, it is suggested that before writing conceptual article, they should have written report on conceptual research for actually article is the form of reproduction of the whole research report. An

important suggestion as the closing of this research is the uniqueness of this learning model needs to be followed up on other virtual learning. This learning model needs to be recommended to facilitate further Jurnal Study learning.

References

- Adhimah, S. Peran orang tua dalam menghilangkan rasa canggung anak usia dini (studi kasus di desa karangbong rt. 06 rw. 02 Gedangan-Sidoarjo). *Jurnal Pendidikan Anak*, 9(1), 57–62. 2020.
- Astuti, I. D., Toto, T., & Yulisma, L. Model Project Based Learning (PjBL) Terintegrasi STEM Untuk Meningkatkan Penguasaan Konsep Dan Aktivitas Belajar Siswa. *Quagga: Jurnal Pendidikan Dan Biologi*, 11(2), 93–98. 2019.
- Atmazaki, Agustina, Vivi Indriyani, dan Abdurahman. Teachers Perception of Character Education Integration in Language Learning. *Jurnal Pendidikan Karakter*, Tahun X, Nomor 2, Oktober 2020 (175-186). 2020.
- Asyafah, A. Menimbang Model Pembelajaran (Kajian Teoretis-Kritis atas Model Pembelajaran dalam Pendidikan Islam). *TARBAWY: Indonesian Journal of Islamic Education*, 6(1), 19–32. 2019.
- Balemen, N., & Keskin, M. Ö. The effectiveness of Project-Based Learning on science education: A meta-analysis search. *International Online Journal of Education and Teaching (IOJET)*, 5(4), 849–865. 2018.
- Citradevi, C. P., Widiyatmoko, A., & Khusniati, M. The Effectiveness Of Project Based Learning (Pjbl) Worksheet To Improve Science Process Skill For Seven Graders Of Junior High School In The Topic Of Environmental Pollution. *Unnes Science Education Journal*, 6(3), 1677–1685. 2017
- Eckardt, P. N., Craig, M., & Kraemer, L. The Impact of Project-Based Learning on Student Content Knowledge in an Undergraduate, Teacher Preparation, Foundations of Education Course. *Journal for Leadership and Instruction*, 19(1), 38–42. 2020.
- Fitri, H., Dasna, I. W., & Suharjo, S. Pengaruh Model Project Based Learning (PjBL) Terhadap Kemampuan Berpikir Tingkat Tinggi Ditinjau dari Motivasi Berprestasi Siswa Kelas IV Sekolah Dasar. *Briliant: Jurnal Riset Dan Konseptual*, 3(2), 201–212. 2018.
- Herawan, Endang. Pengaruh Model Pembelajaran Aktif Tipe Active Debate terhadap Hasil Belajar Siswa pada Mata Pelajaran Ekonomi. *Jurnal.unswagati.ac.id. Edunomic Jurnal Ilmiah Pendidikan Ekonomi FKIP*. 2017.
- Indayatmi, I. Penerapan Model Project Based Learning Dengan Pendekatan Saintifik Untuk Meningkatkan Hasil Belajar Analisis Gravimetri. *Jurnal Pendidikan Sains*, 8(1), 1–9. 2020.
- Joyce, Bruce, Marsha Weil, dan Emily Calhoun. 2009. *Models of Teaching*. Yogyakarta: Pustaka Pelajar.
- Lestari, M. R. D. W., & Septianingrum, T. D. Program Gerakan Literasi Sekolah Di SD Dharma Karya. *Jurnal Ilmiah PGSD, III(2)*, 131–136. 2019.
- Kanto, S., Wisadirana, D., Chawa, A. F., & Umanailo, M. C. B. (2020). Change in community work patterns. Proceedings of the International Conference on Industrial Engineering and Operations Management, 0(March), 2496–2502.
- Miles, M. B., Huberman, A. M., dan Saldana, J. 2014. *Qualitative Data Analysis, A Methods Sourcebook*, Edition 3. USA: Sage Publications. Terjemahan Tjetjep Rohindi Rohidi, UI-Press.
- Nuryatin, Agus dan Panca Dewi Purwati. 2020. *Belajar Sastra Jenjang Pendidikan Dasar dan Menengah*. Semarang: LPPM UNNES.
- Panjaitan, A. T., Annisa, A., & Setiawan, D. S. A. Pengaruh Penggunaan Model Debat (Debate) Terhadap Kemampuan Menulis Paragraf Argumentasi Pada Siswa Kelas X SMK Swasta Sultan Iskandar Muda Tahun Pelajaran 2018/2019. *Jurnal Basataka (JBT)*, 2(1), 17–22. 2019
- Permendikbud RI No. 3 Tahun 2020 tentang Standar Nasional Pendidikan Tinggi.
- Salim, Arskal. 2015. Debate As A learning Method: A Survey of Literature. *Journal of Education in Muslim Society*.
- Sugiyono. 2015. *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: ALfabeta.
- Sutrisno, Aziz Fathoni, Maria Magdalena Minarsih. 2016. Pengaruh Motivasi dan Disiplin Kerja terhadap Kinerja Pegawai di Kantor Satuan Polisi Pamong Praja Kota Semarang. *Journal of Management*, Volume 2 Nomor 2, Maret 2016.
- Umanailo, M. C. B. (2020). Development of science and technology towards the formation of participatory spaces. Proceedings of the International Conference on Industrial Engineering and Operations Management.
- Wajdi, F. Implementasi Project Based Learning (PBL) Dan Penilaian Autentik Dalam Pembelajaran Drama Indonesia. *Jurnal Pendidikan Bahasa Dan Sastra*, 17(1), 81–97. 2017.
- Widayanti, Yuberti, Irwandani, Abdul Hamid. Pengembangan Lembar Kerja Praktikum Percobaan Melde Berbasis Project Based Learning. *Jurnal Pendidikan Sains Indonesia (Indonesian Journal of Science Education)*, Vol. 06, No. 01, hlm, 24-31, 2018.
- Yudha, C. B. Penerapan Project Based Learning dalam Mata Kuliah Penelitian Tindakan Kelas. *DWIJA CENDEKIA: Jurnal Riset Pedagogik*, 3(1), 30–42. 2019.

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