



https://journal.unnes.ac.id/sju/index.php/ujet/article/view/

Development of an Automatic Presence Online Training Model Based on IMPE (Interaction, Material, Project, Evaluation) in the Merdeka Belajar Era

Khairul Arifin⊠, Yuli Kurniawati Sugiyo Pranoto, Farid Ahmadi

Pascasarjana, Universitas Negeri Semarang, Indonesia

Article Info	Abstract	
History Articles Received: February 2023 Accepted: March 2023 Published: June 2023 Keywords: Class Administration; Independent Learning; IMPE Model; Online Training; Automatic Attendance	Efforts to improve the quality of education include various pieces of training to improve teacher competence, for example by facilitating classroom administration. Therefore, schools must pay attention to teacher performance with all the effort and capital to improve these skills. This study aims to develop an automatic presence online training model and also look a increasing teacher competency in class administration automation. Therefore, schools must pay attention to teacher performance with all the effort and capital to improve these skills. This study aims to develop an automatic presence online training model and also look a increasing teacher competency in class administration automation. Therefore, schools must pay attention automation automation attended with the ADDIE model. The object of research is participants in automatic presence training, the majority of whom are teachers, research instruments are in the form of questionnaire questionnaires, and interviews. Regression is used as a method of analysis. The study attended to the set of t	

 \square Correspondence address:

Pascasarjana, Universitas Negeri Semarang, Indonesia Jl Kelud Utara III, Semarang, Jawa Tengah, Indonesia E-mail: khairul@students.unnes.ac.id p-ISSN 2252-6404 e-ISSN 2502-4515

INTRODUCTION

Education is the right of every Indonesian citizen, this is explained in the Law of the Republic of Indonesia number 20 of 2003 concerning the National Education System or what is commonly referred to as the National Education System. So that education can be evenly distributed, one of the solutions is to package the concept of education and training online. So now there are many models of education and training being carried out online to be efficient in terms of distance, time, and cost. Not only from students (students) but teachers are also required to continue learning and developing according to technological developments (Gonzalez, 2019).

Starkey (2020) said that apart from equity, the quality of the material content also needs attention. This refers to the competence of a teacher, insight and teacher skills in training are also very important (Ramadhan, 2019). In Ellis's findings (2020) the progress of science and technology in society must be responded to well by teachers by learning through learning resources. Sometimes teachers have limitations in being able to actively participate in training because they are busy with their main task, namely teaching. Not only that but teachers are also bothered by the administration needed for teaching preparation. As the results of research from Pangrazio (2018) found that digital competence, social competence, and citizenship also contribute to lifelong learning as the core of their perceptual elements. In this case, it is in line with Compen's findings (2019) that teachers starting from the beginning to continuing to attend training with an innovative pedagogical model are needed to enable the development of teacher competence.

This all-online concept is in line with the findings from Ratu's research (2020), namely a new policy has also occurred in the world of education which has changed the mindset that schools must come to school buildings and study there, but during the Covid 19 pandemic yesterday we know that learning can also done from anywhere. It is also supported by the findings of Hoi (2021) which found that learning at home using technology will be very effective if done correctly. This discussion is also one of the guiding factors in the independent curriculum.

The independent curriculum or the 2022 curriculum emerged during the Covid 19 pandemic. One of the focuses of this curriculum is related to independent learning. In line with Castro's findings (2019) both students and teachers can learn from anywhere, anytime, and anywhere. This relates to Fagrel's (2020) discussion regarding online learning in Sweden which, if used properly, can save distance, time, and costs. Continuing with Baharuddin's research (2021) which adapted the independent curriculum at the higher education level, namely to become an independent campus, students are no longer fixated on only courses on campus. Instead, students can learn from outside as long as it is still related to the field of study being taught.

In Ahmadi's research (2018) the teaching profession is also required to be able to learn independently so that they can improve their competence in addition to their main task, namely teaching. Efforts from the government have also carried out many types of online training, but sometimes the implementation does not match what the teacher needs. Based on the opinion of Fuentes-abeledo (2020) it was found that the teacher's needs are not only about how to teach but also must complete the administration so that learning runs smoothly. This is also a problem for teachers in Indonesia.

Egert (2020) explains that teachers also need training that discusses how to make their work easier in dealing with administrative learning problems. Research conducted by Rohman (2022) regarding the application of a web-based attendance system in class has proven to be very effective in easing the teacher's work. Attendance is recorded automatically at the end of the semester, so teachers can focus more on other things. But in this condition, the teacher only made it, not taught how to make it. So that it can only be used one time, then return manually as before. With that in mind, I decided to look for partners in this research. An online training platform that is professional and suitable for running the IMPE model.

The e-Guru.id platform is a website membership-based online training program provider that provides various types of training for teachers and educators in general. As in the findings of Losing (2018) everything becomes one server and is interrelated. One of the training programs here is about creating attendance automatically for the learning process. Judging from the previous data, teachers are having trouble with administration, with this training it can ease the teacher's job in making attendance and their recaps. Teachers are taught an easy way to be able to make attendance automatically, so it only needs to be made once and can be used in 1 school year. Online training according to Kalisa (2019) is to optimize existing technology to solve the problems of the trainees.

From the concept of the title, the automatic presence is good, but for the implementation of the training, there are still some obstacles. After being implemented in batch 1, it can be seen that the material provided is incomplete. The role of the instructor in assisting is also lacking because it's only in the telegram group. According to Waskito (2015), training often does not meet the results expected by the organizers. Followed by the opinion of Maulyan (2019) such deficiencies occur due to a lack of careful planning, the training conducted must be based on the teacher's needs. So it is necessary to evaluate and develop the right model so that the training can run more optimally.

In this way, it can be seen that there is a gap between the online training conditions which should have been running smoothly, and the support of adequate facilities, but in reality, it is still not optimal. The development of a training model is an alternative solution to overcome this problem. With the support of adequate facilities and the presence of a competent training instructor, it is very possible to realize ideal learning even though it is online.

This learning concept will also be applied later to the IMPE-based online training model which emphasizes 4 aspects, namely, Interaction, Materials, Projects, and Evaluation. These four elements can complement the needs of participants in receiving the material to be delivered. Adapted to the discussion of automatic presence as an example of technical material outside the teacher's pedagogic competence. Learning beyond competence is sometimes not considered important, in fact, things like this also need to be developed to facilitate side jobs. Teacher administration has been the main problem when teachers are asked why it is not optimal in teaching.

METHODS

The method used in this research is development research by applying the ADDIE model. The flow of this model includes 1) Analysis. 2) Design, 3) Development, 4) Implementation, 5) Evaluation. In the process of compiling this research, many things must be considered. Starting from the content, appearance, language, and objectives of developing this online training model. The following is a model chart from the research "Development of an IMPE-Based Automated Presence Online Training Model in the Freedom to Learn Era" using the ADDIE model.

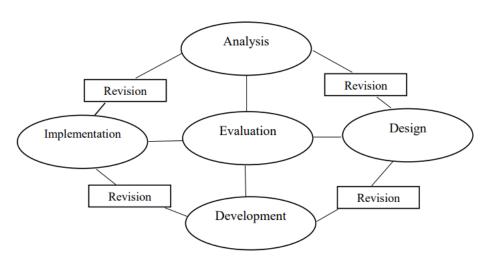


Figure 1. ADDIE Development Model (Sugiono, 2015)

The validity level of the eBook guide for implementation of IMPE-based automatic presence online training begins with validating the media which includes the IMPE Model Implementation Guidelines and Automated Attendance Training Teaching Modules. Validation activities were carried out by experts and practitioners from the university. The accumulated results of the validator's assessment obtained a score of 90 for the guidebook and 82 for the teaching module which was included in the very good category. This shows that this media is feasible to use in research. Even so, there are parts that need to be perfected by taking into account the suggestions and input from the validators. After the revision process and the media get better, it is ready to be used in the implementation stage.

Furthermore, the validity test was also carried out with SPSS software. Tests were carried out on each item of the questionnaire evaluating reactions to online training and participants' interest in participating in online training. That's the basis for decision-making if sig. (1-tailed) the count is smaller than the significance level of 0.05, the instrument is said to be valid (Pramesti, 2016). Based on the calculation results, it was found that all the question items in the evaluation of the reaction questionnaire and student learning interest were categorized as valid.

Test the validity of using the Pearson correlation by looking for a correlation between the answers of participants in automatic attendance online training. Obtained data from 43 participants who filled out, all valid with sig. (I-tailed) < 0.05. Followed by a reliability test using Cronbach Alpha of the 43 items that have been tested, the test results obtained were 0.930. This result is greater than R Table 43 of 0.248. So, alpha 0.930 > R Table 0.248 = reliable (can be trusted).

RESULTS AND DISCUSSION

Conditions of Online Training in Indonesia

Based on the data obtained from interviews with sources from e-Guru.id, especially in the Research section, it can be illustrated that the condition of online training in Indonesia is currently developing very rapidly. This is in line with the findings of Chen (2019) in China during the pandemic and all learning had to be online, teachers were also required to continue learning. This was the beginning of the trend of online training starting to rise. Supported by the results of Assunção Flores' research (2020) in Portugal, this condition is also experienced by all teachers with the pandemic which is getting worse day by day, on the other hand, teachers must also keep learning so that online training is one of the best solutions at this time.

Then what online training suits the needs of the participants, especially the majority who work as teachers? According to Spiteri (2020), there are several constraining factors including implementation time, internet connection, teacher competency, and the quality of the training itself. Quality here means how the organizer facilitates training by presenting competent resource persons supported by а complete system and administration. Most online training platforms use the Zoom platform to hold events. This has proven to be effective in line with the findings of Margot (2019) because resource persons and participants can interact directly even virtually so that the discussion and question and answer processes can be carried out properly. However, this has one drawback, namely that it cannot store training data such as materials, and chat history and seems less flexible.

In this interview, I also learned about the training system by utilizing the WhatsApp group. In line with Pratomo's research (2021), learning will be very effective if there is a system as a container for the material. The resource person provides material, then the participants listen and ask if there is anything they want to ask. This can also be said to be effective because all files are stored neatly in the WhatsApp group. However, another problem arose with the lack of intense interaction that occurred between the participants and the resource person, this can be seen in the frequent miss information about what the resource person conveyed and what the participants captured, so the resource person had to frequently repeat information that had previously been given.

Coupled with the support of the needs analysis form which I distributed to training participants who had previously attended a training program at e-Guru.id. These respondents consisted of training participants who work as teachers from various provisions in Indonesia. With this online training, it can solve one of the problems of conventional training, namely distance and time. Supported by research from Pressley (2021) that during the pandemic, teachers became confused because they were used to teaching offline, suddenly they were immediately asked to do all their work online. Those in remote areas are very grateful for this kind of training model. Even though internet access is not as smooth as in big cities, their intention to learn is very high. This is evidenced by the results of filling out a questionnaire from participants outside Java whose results are very significant in supporting this program to continue. In line with the findings of Wijayanti (2019) that teachers must continue to prepare all teaching materials and teaching methods to be able to improve various aspects, especially incompetence.

It is hoped that the government can support programs like this so that information can be conveyed to all corners of the country. The government itself already has a similar online training program, but the frequency is no greater than that of private platforms. This opinion is supported by the findings of Brevik (2019) that the role of government institutions is vital in improving the quality of educators in a country. This is a big opportunity from the training developer's point of view, but you also have to pay attention to quality and can guarantee that the trainees get the rights according to their needs related to promotions.

From some of the information that has been mentioned, I can conclude that the needs of each participant in participating in online training are very diverse. Supported by the opinion of Hobbs (2019) who wants to seek knowledge and learn independently and improve the ability to apply digital literacy in learning. However, some participants take part in the training just to get a certificate. In line with the opinion of Moobola (2020), from there we must provide facilities that can guarantee all participants get what they want in online training.

IMPE-Based Automatic Presence Online Training Development

Analysis

At this stage, data were obtained from a questionnaire that explained that the majority of participants who had attended online training were happy and fully supported holding other titles. This program is considered capable of being a solution for differences in distance and time in this vast country. This result is the same as the findings of Tohara (2021) who conducted a similar analysis in Turkey, both formal and non-formal learning is online and participants, both students and teachers, are getting used to it. Some respondents wanted training on media which would later make learning more enjoyable, but some others preferred theoretical training that discussed the independent curriculum.

Design

There are 2 outputs from this study, namely a training implementation guidebook with the IMPE model and an automatic attendance training material module. For a more systematic guide and explaining how and what is needed in carrying out online training. Then the automatic presence material module focuses on guiding participants to be independent in making an automatic presence. Because this is an eBook, I can add links to video tutorials that have been prepared via YouTube.

Development

I have developed these two outputs and am ready to proceed with the validator test. There are 3 areas of study that I have determined for testing the output of this research, including curriculum experts, non-formal education experts, and education experts in general. Where for the three validators are competent lecturers according to their fields from universities in Indonesia.

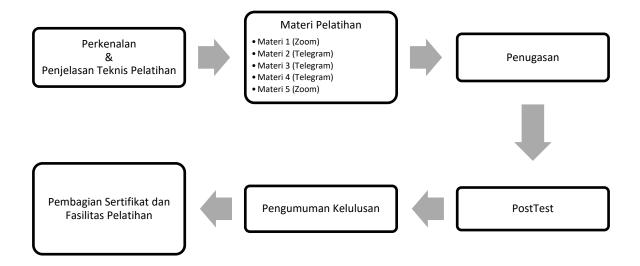


Figure 2. IMPE Model Implementation Flow (Syntax).

Implementation

Small group trials were conducted with 10 respondents consisting of a training development team and training participants who work as teachers. Starting from the presentation of the material and continuing with a discussion and question and answer session. Take advantage of the Zoom and Telegram platforms. Based on this small group trial, I received input regarding the method of delivering the material, from what was previously too formal to the future to be asked to be more relaxed and more interactive. In terms of material, it is good and easy to understand. The training flow is clear.

The next stage is to conduct trials in large groups, the concept is the same as in small groups but at this time it seems to be applied to the public. With more participants and a more lay majority than before. For these participants, I was assisted by the e-Guru.id team by opening training for free and with a 32JP certificate. Implementation for 5 meetings according to the initial concept, meetings 1 and 5 via Zoom, meetings 2, 3, and 4 via telegram. On Telegram there is a training group whose function is for discussion and material channels whose function is to accommodate the material that has been delivered. This is why I chose Telegram over WhatsApp, having a channel that can accommodate material can be a plus compared to a Telegram group where when new people join they cannot see previous chats.

The implementation of the training begins with the provision of pre-test questions before the material is given. Followed by reading the training rules via Zoom, then starting to enter material 1. The presentation is approximately 60 minutes and a 30-minute discussion session. Then I also share the presentation material on the material channel for self-study materials. Furthermore, for meetings 2, 3, and 4 the concept is the same, via telegram. Beginning with the presentation of textual material and additional video tutorials, participants were asked to listen to the material first. The discussion group was locked during the presentation of the material so that participants were more focused and there were no disturbing chats. After finishing the presentation of the material, the group was reopened and participants were welcome to ask questions. In the last material via Zoom again, the material discussed is related to the full evaluation and reflection of this training. Repeating the material from start to finish, followed by giving a post-test at the end of the session.

Regarding the assignment, it was conveyed at meeting 4, namely making attendance automatically according to what had been taught. The time lag of 1 week where there are still 5 days remaining. The difference in the passing of participants is determined by what they have achieved in this training. Attendance for each meeting is worth 10 points (maximum 50), assignments are worth 30 points and post-test if correct each question is worth 2 points (maximum 20) where if all are totaled it will be 100 points.

The graduation criteria are determined based on the score points, if it is less than 70 then it gets the "Cukup" title. 70 to 80 participants pass and will get the title "Memuaskan". 81 to 99 participants pass and will get the title "Sangat Memuaskan". And finally, if you get 100 points, the participant will graduate with the title "Perfect". Because all participants get a certificate, so with this predicate it is hoped that it will increase the participants' interest in learning and doing the assignments and the post-test given.

If all stages have been passed, the last stage is the distribution of training facilities. At this stage, I was assisted by a training admin from the e-Guru.id team where they also prepared administration regarding invitations, examples of self-development reports, and training certificates. All participants receive a certificate along with the attached JP, both those who pass and those who do not pass, the difference is in the grade transcripts and predicates obtained. After that participants were also asked to fill out a training evaluation form.

Evaluation

The evaluation phase is carried out at the end of each session of each stage, after the needs analysis I evaluate it before proceeding to design, after the design I evaluate it before proceeding to development, after development I evaluate it again before it is implemented, and after it is implemented I evaluate it again as a whole until what conclusions can be drawn from the development of this IMPE-based online training model.

IMPE Model Effectiveness

The effectiveness of IMPE-based online training can be seen from how changes in participants' knowledge in making and using applications in making automatic attendance, before and after training are measured by pretest and post-test. After the pre-test and post-test data were obtained, they were analyzed using the Wilcoxon test. Training will affect knowledge of attendance using making by supporting applications between before and after training if the significant level is less than 0.05 or a Z value of -2.107 (sign - (negative) has no effect, only shows direction) which means greater than the Z table for the sample less than 1000 of 1.96. The value of an (Asymp.Sig. (2-tailed) is 0.021 which is less than the research critical limit of 0.05 which means that there is a significant difference in the knowledge of the trainees between before and after the training.

Палко					
		N	Mean Rank	Sum of Ranks	
Post Test - Pre Test	Negative Ranks	2 ^a	11,75	23,50	
	Positive Ranks	14 ^b	8,04	112,50	
	Ties	0 ^c			
	Total	16			

Ranks

a. Post Test < Pre Test

b. Post Test > Pre Test

c. Post Test = Pre Test

Test Statistics

	Post Test - Pre Test
Z	-2,307 ^b
Asymp. Sig. (2-tailed)	,021

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Picture 3. Wilcoxon Signed Rank Test Calculation

The Wilcoxon test results obtained a calculated Z value of 2.307 (negative sign ignored, indicating direction) and a significance value of 0.021. The basis for decision-making in the Wilcoxon test is, 1) If the Asymp.Sig. (2-tailed) is less than < 0.05, then Ha is accepted. Whereas 2) If the Asymp.Sig. (2-tailed) is greater than > 0.05, then Ha is rejected.

Based on the calculation results above, Asymp. Sig is 0.021 which means <0.05. Then the results of the post-test > pre-test. So it can be said that the IMPE model has proven to be effective in increasing the competency of automatic online attendance training participants.

CONCLUSION

Based on the research that has been done, it can be concluded that the condition of online training in Indonesia is currently in great demand, especially in the field of education. Teachers need a platform to be able to develop their competence. Online training is one of the best solutions because there are no distance, time, or cost limitations in the implementation process. The development of the IMPE model in the current online training concept has proven to be very effective by utilizing additional platforms such as telegram and Zoom at the same time. The material becomes easier to understand and can be directly applied in the learning process of each participant. With the posttest and score transcripts in the IMPE model, the training participants can measure the extent of understanding gained in participating in the training.

REFERENCES

- Ahmadi, F., Widihastrini, F., & Widhanarto, G. P. (2018). Ibm guru sekolah dasar melalui pelatihan peningkatan keterampilan menulis artikel penelitian tindakan kelas. Jurnal Abdimas, 22(2), 137-142. https://doi.org/10.15294/abdimas.v22i2.17 465
- Akçakoca, B., & Orgun, F. (2021). Developing a measurement tool for evaluating the hidden curriculum in nursing education. Nurse Education Today, 97, 104688. https://doi.org/10.1016/j.nedt.2020.104688

- Baharuddin, M. R. (2021). Adaptasi kurikulum merdeka belajar kampus merdeka (Fokus: model MBKM program studi). Jurnal Studi Guru Dan Pembelajaran, 4(1), 195-205.
- Castro, M. D. B., & Tumibay, G. M. (2021). A literature review: efficacy of online learning courses for higher education institution using meta-analysis. Education and Information Technologies, 26(2), 1367-1385. https://doi.org/10.1007/s10639-019-10027z
- Chen, B. Y., Kern, D. E., Kearns, R. M., Thomas, P. A., Hughes, M. T., & Tackett, S. (2019). From modules to MOOCs: application of the six-step approach to online curriculum development for medical education. Academic Medicine, 94(5), 678-685. https://doi.org/10.1097/ACM.000000000 002580
- Compen, B., De Witte, K., & Schelfhout, W. (2019). The role of teacher professional development in financial literacy education: A systematic literature review. Educational Research Review, 26, 16-31. https://doi.org/10.1016/j.edurev.2018.12.0 01
- Egert, F., Dederer, V., & Fukkink, R. G. (2020). The impact of in-service professional development on the quality of teacher-child interactions in early education and care: A meta-analysis. Educational Research Review, 29, 100309. https://doi.org/10.1016/j.edurev.2019.1003 09
- Ellis, N. J., Alonzo, D., & Nguyen, H. T. M. (2020). Elements of a quality pre-service teacher mentor: A literature review. Teaching and Teacher Education, 92, 103072.

https://doi.org/10.1016/j.tate.2020.103072

- Fagrell, P., Fahlgren, A., & Gunnarsson, S. (2020).
 Curriculum development and quality work in higher education in Sweden: The external stakeholder perspective. Journal of Praxis in Higher Education, 2(1), 28-45. https://doi.org/10.47989/kpdc62
- Gonzalez, C. M., Deno, M. L., Kintzer, E., Marantz, P. R., Lypson, M. L., & McKee, M. D. (2019). A qualitative study of New York medical student views on implicit bias

instruction: implications for curriculum development. Journal of general internal medicine, 34(5), 692-698. https://doi.org/10.1007/s11606-019-04891-1

- Hobbs, R., & Coiro, J. (2019). Design features of a professional development program in digital literacy. Journal of Adolescent & Adult Literacy, 62(4), 401-409. https://doi.org/10.1002/jaal.907
- Hoi, S. C., Sahoo, D., Lu, J., & Zhao, P. (2021). Online learning: A comprehensive survey. Neurocomputing, 459, 249-289.
- Kalisa, P. (2019). Pelatihan Media Pembelajaran Interaktif Online Bagi Guru. 13–18.
- Losing, V., Hammer, B., & Wersing, H. (2018). Incremental on-line learning: A review and comparison of state of the art algorithms. Neurocomputing, 275, 1261-1274. https://doi.org/10.1016/j.neucom.2017.06. 084
- Margot, K. C., & Kettler, T. (2019). Teachers' perception of STEM integration and education: a systematic literature review. International Journal of STEM education, 6(1), 1-16.
- Maulyan, F. F. (2019). Peran Pelatihan Guna Meningkatkan Kualitas Sumber Daya Manusia dan Pengembangan Karir: Theoretical Review. Jurnal Sain Manajemen, 1(1), 40-50.
- Moobola, L., & Mulenga, I. M. (2020). Social Studies Curriculum at the Crossroads: Implementation of the Secondary School Social Studies Curriculum in Chingola District of Zambia. European Journal of Education Studies. http://dx.doi.org/10.46827/ejes.v0i0.2997
- Pangrazio, L., Godhe, A. L., & Ledesma, A. G. L. (2020). What is digital literacy? A comparative review of publications across three language contexts. E-learning and Digital Media, 17(6), 442-459.
- Pratomo, I. W. P., & Wahanisa, R. (2021, August). Pemanfaatan Teknologi Learning Management System (LMS) di Unnes Masa Pandemi Covid-19: Utilization of Learning Management System (LMS) Technology at

Unnes during the Covid-19 Pandemic. In Seminar Nasional Hukum Universitas Negeri Semarang (Vol. 7, No. 2, pp. 547-560).

https://doi.org/10.15294/snhunnes.v7i2.73 0

- Pressley, T. (2021). Factors contributing to teacher burnout during COVID-19. Educational Researcher, 50(5), 325-327. https://doi.org/10.3102/0013189X2110041 38
- Ramadhan, S., Sukma, E., & Indriyani, V. (2019, December). Teacher competence in utilizing digital media literacy in education. In Journal of Physics: Conference Series (Vol. 1339, No. 1, p. 012111). IOP Publishing.
- Ratu, D., Uswatun, A., & Pramudibyanto, H. (2020). Pendidikan Dalam Masa Pandemi Covid-19 Pendahuluan. 10(1), 41–48.
- Rohman, D. N., & Kusyadi, I. (2022). Perancangan Sistem Informasi Presensi Guru pada MTS Ar-Rasyidiyyah Berbasis Web. Scientia Sacra: Jurnal Sains, Teknologi dan Masyarakat, 2(1), 89-94.
- Spiteri, M., & Chang Rundgren, S. N. (2020). Literature review on the factors affecting primary teachers' use of digital technology. Technology, Knowledge and Learning, 25(1), 115-128.
- Starkey, L. (2020). A review of research exploring teacher preparation for the digital age. Cambridge Journal of Education, 50(1), 37-56.
- Tohara, A. J. T. (2021). Exploring Digital Literacy Strategies for Students with Special Educational Needs in the Digital Age. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(9), 3345-3358. https://doi.org/ 10.17762/turcomat.v12i9.5741
- Waskito, D. A. (2015). Pengembangan Model Manajemen Pelatihan Penyusunan Bahan Ajar Bagi Guru Tata Boga. 13.
- Wijayati, N., Kusuma, E., & Sumarti, S. S. (2019). Pembelajaran berbasis digital di jurusan kimia FMIPA Unnes. Jurnal Inovasi Pendidikan Kimia, 13(1). https://doi.org/10.15294/jipk.v13i1.17906