



The Effect of the Group Investigation Learning Model Assisted by Digital Mind Map (GI-DMM) on the Learning Outcomes Students in the Affective Domain

Afadia Delnanda¹, Evrialiani Rosba*, Annika Maizeli

¹Biology Education, PGRI University West Sumatra, Padang, Indonesia

*Email: evrialianirosba@upgrisba.ac.id

Received: 23 Juni 2023 Revised: 20 Agustus 2023 Accepted: 2 Oktober 2023

Abstract

The learning process carried out by teachers does not actively involve students, this is because the learning models and media applied by teachers have not been implemented optimally. Based on these problems, the right solution is needed by applying a learning model that can activate students. One of them is by applying the Group Investigation learning model assisted by Digital Mind Map (GI-DMM). The aim of the research was to find out the effect the Group Investigation model learning assisted by Digital Mind Map (GI-DMM) to the learning outcomes of students' affective domains. This research method is a true experiment with a Randomized Control Group Posttest Only Design research design. The population in this study were all of class X IPA. Sampling was carried out by purposive sampling technique by means of a lot system, experimental class and control class. The research instrument for the affective domain was in the form of observation sheets for students' attitudes during the learning process. Data analysis techniques used hypothesis testing (t-test). The results of the study in the affective domain of the experimental class obtained an average value of 93.00 and that of the control class was 88.53. Thus it can be concluded that through the application of the Digital Mind Map-assisted Group Investigation Model (GI-DMM) it can improve learning outcomes in the affective domain of students.

Keywords: affective domain; experimental research; GI-DMM learning model; learning outcomes

INTRODUCTION

The learning process is a process in which there are interactive activities between teachers and students who communicate with each other and take place in educative situations to achieve optimal learning outcomes (Rahmah, 2018; Prasetya *et al.*, 2021; Husna *et al.*, 2023). Learning outcomes are things that cannot be separated from teaching and learning activities in the learning process. Learning outcomes have an important role in the learning process because they will provide information to teachers about the progress of students in an effort to achieve learning goals through the learning process (Siregar, 2019; Wicaksono & Iswan, 2019; Afza *et al.*, 2022). A student's learning outcomes are usually expressed in numbers and can then be described. Learning success is largely determined by students' affective conditions. Students who have an interest in learning and a positive attitude towards subjects will feel

happy studying these subjects, so that students will be able to achieve optimal learning outcomes (Warti, 2018;Junaidi, 2019; Rahman, 2021).

The learning outcomes of the affective domain are judgments based on feelings (likes or dislikes),emotions, attitudes/ degrees associated with a person's tendency to act in response to something or an object (Nurhidayati & Sunarsih, 2013; Magdalena *et al.*, 2021; Yulianto, 2021). There are five ways that can be used to make an assessment in the affective domain, namely: a) Observation, is to record or pay attention to each student's behavior towards a stimulus that is in the learning process, for example books , props, pictures, events, etc.; b) Interview, namely by giving open or closed questions to students. Answers that arise from students can be analyzed further to determine the state of student affection while participating in the learning process; c) Questionnaire or questionnaire, namely a set of questions or statements that have provided a choice of answers; d) Projectile techniques, namely giving assignments that students have never known. Students are asked to discuss and provide interpretations of the task; e) Covert measurement, is an observation of the attitudes and behavior of students and students who are being observed do not know that they are being observed (Nurhidayati & Sunarsih, 2013; Kusumawati, 2015; Hasanah, 2021).

Learning outcomes are the main measure in evaluating a student's success during the learning process. Several factors that influence student learning processes and outcomes. First, there are internal factors that come from within the students, which include psychological conditions, mental skills, and internal encouragement. These factors include the level of intelligence, interest, attention, aptitude, motives, and the level of maturity of students. Furthermore, there are external factors related to the environment around students. This includes how parents educate and support students, the level of understanding of family members, and the relationships between family members that can affect student learning outcomes (Ma'rifah, 2018; Yessa & Marna, 2022; Husna *et al.*, 2023). Facts in the field show that the learning process applied has not been carried out optimally which has resulted in low student learning outcomes in the affective domain. During the discussion, most of the passive students only received results from group mates who had high learning abilities without understanding the material being studied. Therefore, it is necessary to change the learning process through the application of learning models that make students more active and creative which makes students more responsible, cooperative and disciplined during discussions. One of them is by applying the Group Investigation learning model assisted by Digital Mind Map (GI-DMM). The Group Investigation (GI) learning model that has an emphasis on student participation and activities to find out the material itself or everything regarding the subject matter to be studeied and has advantages, one of which is increasing cooperative learning and training students to be accountable for the answers given (Aryana, 2019; Pratami, Suhartono, & Salimi, 2019; Devi *et al.*, 2021; Mahesa *et al.*, 2023). Digital Mind Map (DMM) is a Mind Map designed with a computer program or smartphone application or through a website that acts as a tool to stimulate activity, creativity and collaboration between students and increase their confidence in contributing ideas in class (Pratami *et al.*, 2019;Normawati, 2020; Rosba, 2021). Group Investigation learning model obtained the result that the application of the Group Investigation (GI) cooperative learning model can improve student learning outcomes in the affective, cognitive and psychomotor domains (Dewi *et al.*, 2015; Sagita *et al.*, 2018; Widyaningsih & Puspasari, 2021).

Based on the problems that have been described, a solution is needed to improve student learning success, one solution is to use a learning model accompanied by effective, innovative, creative, and student-centered learning media. The learning model used must be in accordance with the learning objectives, materials, time, student conditions, as well as supporting facilities and infrastructure (Yusuf, 2017; Asyafah, 2019; Saepul *et al.*, 2023). Through several research results on learning models, it was found that a learning model that was suitable to be applied was the Group Investigation learning model assisted by Digital Mind Map (GI-DMM). This research aims to determine the effect of the Group Investigation learning model assisted by Digital Mind Map (GI-DMM) on student learning outcomes in the affective domain.

METHODS

This research method is a true experiment with a Randomized Control Group Posttest Only Design research design because the experimental class uses a Group Investigation learning model based on Digital Mind Map (GI-DMM) and a scientific approach control class then ends with a final test for both classes (Sugiyono, 2005; Asyafah, 2019; Rosba, 202). The population in this study was all class X IPA. In this research, a purposive sampling technique was used, namely taking sample classes based on certain considerations (Sugiyono, 2005). Students' affective domain learning outcomes are measured through affective domain instruments via observation sheets using a Likert scale. The data analysis technique used the t test. The affective assessment instruments and rubrics in the experimental class can be seen in attachment.

$$\text{Value} = \frac{\text{Gain score}}{\text{Maximun score}} \times 100\%$$

According Minister of Education and Culture 2014 the following criteria are used 86-100 as very good, 71-85 as good, 56-70 as enough, and \leq as less.

RESULTS AND DISCUSSION

Based on the research conducted, the affective assessment was obtained from three indicators, namely responsibility, collaboration and discipline. The average affective assessment of the experimental class was 93,00 and that of the control class was 88,53. Research data can be seen in Table 1.

Table 1. Average Affective Domain Indicators for the Sample Class

Indicators	Control Class	Experimental Class
Responsibility	87,76	93,49
Collaboration	89,06	94,79
Discipline	88,80	90,89
Average	88,53	93,00

Based on table 1, the average affective domain learning outcomes in the experimental class are higher than the control class. The affective mean score for the indicator of responsibility for the experimental class was 93,49, for collaboration was 94,79 and discipline was 90,89 while for the control class for indicators for responsibility was 87,76, for collaboration was 89,06 and for discipline was 88,80. The results of hypothesis testing (t-test) the application of the Group Investigation (GI) learning model can improve student learning outcomes in the affective domain of class X IPA. Affective assessment is obtained from an attitude observation assessment, where there are three assessment indicators in the affective domain, namely responsibility, cooperation and discipline. There is a responsible attitude of learning with the Group Investigation (GI) model, students are directed to understand a problem by finding as much information as possible related to the topic that has been determined, so that students are responsible for each task given. Learning prioritizes the participation of its students in discovering for themselves the subject matter studied through various available sources, so that students are responsible for each task they are working on (Primarinda *et al.*, 2012; Dewi *et al.*, 2015; Devi *et al.*, 2021).

In the indicator of working together in experimental class groups by applying the Group Investigation model assisted by Digital Mind Map (GI-DMM) students are actively involved in gathering

information from various sources when conducting investigations. Group Investigation model can train students to cultivate the ability to think independently and active student involvement can be seen starting from the first stage to the final stage of learning (Astutik *et al.*, 2017; Rahmawati, Bektiarso, & Subiki, 2020; Devi *et al.*, 2021). Furthermore, the cooperative attitude was evident when students actively participated in presentations and discussions, and worked together to check the results of group discussions. When compiling a report, all group members present the results of their respective investigations from various sources, and then these results are analyzed together to form one group report. When presenting the report, all group members seemed to coordinate well according to their respective tasks that had been planned. The Group Investigation learning model does not only require the development of individual student abilities, but also encourages them to share knowledge with their group members (Ulfa & Sugianto, 2015; Astutik *et al.*, 2017; Sagita & Kusmariyatni, 2018). Besides that, direct exploring will help students to find new experience and ease them to write it as scientific article (Saputri & Pertiwi, 2021; Fatonah *et al.*, 2023; Putri *et al.*, 2023).

The next indicator is discipline, which is seen in the experimental class by applying the Group Investigation model assisted by the Digital Mind Map (GI-DMM) is the discipline of students in attending class on time, which has been well implemented. During the process of investigating, compiling reports, and making conclusions such as the Digital Mind Map, students show discipline in adhering to the set time to complete all the assignments given. Discipline is very important for every student, because the discipline that is formed will help attitudes, behavior and an orderly way of life that make students successful when studying (Sukmanasa, 2016; Sugiarto *et al.*, 2019; Putra *et al.*, 2020). This discipline is also influenced by the high level of responsibility and cooperation within the group (Sukmanasa, 2016; Tarigan, 2018; Christiani & Martha, 2021). In the control class, even though students were present in class on time, during the learning process, it was seen that there were still students who were less orderly in the group, for example walking around to other groups so that the discussion results were not finished according to the allotted time. This was also seen when they submitted reports on discussion results that were not timely. Discipline of learning has an important role, because it aims to maintain behavior so that it does not deviate and avoid distractions in the learning process (Tarigan, 2018; Putra *et al.*, 2020; Christiani & Martha, 2021).

In the control class with a scientific approach, it can be seen that the average value of responsibility is lower than that of the experimental class. It is very important for students to have a responsible attitude at school because a sense of responsibility will raise motivation and interest in studying at school (Suprihatin, 2015; Rahman, 2021; Yulita *et al.*, 2021). However, this can be seen from the lack of involvement of students when reading textbooks, so the questions they ask are not in accordance with the material being studied. In addition, when making discussion reports, students tend to make reports individually without referring to or combining the results of discussions with other group members. This shows that students' learning motivation is lacking in the learning process, motivation is very important in the learning process (Emda, 2018; Aryana, 2019; Wicaksono & Iswan, 2019). On the other hand, in terms of collaborating, it can be seen that students from the control class were active in making questions, but there were still many questions that were not in accordance with the learning topic. When looking for answers, students tend to rely on friends who have high motivation, so that cooperation in finding answers becomes less. In searching for and processing data from various sources, only a few group members played an active role, while contributions in checking the results of group discussions were also lacking. If a group has good cohesiveness, the discussion and learning results will be better. Good cooperation can stimulate individuals to contribute more to their groups (Rohmah & Winaryati, 2019; Wahyu *et al.*, 2021; Cahyaningtyas *et al.*, 2023).

CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that the application of the Group Investigation learning model assisted by Digital Mind Map (GI-DMM) can

improve student learning outcomes in the affective domain. The average affective value of the responsibility indicator in the experimental class was 93.49, collaboration was 94.79 and discipline was 90.89, while in the control class the responsibility indicator was 87.76, collaboration was 89.06 and discipline was 88.80. So the overall average score in the experimental class is 93.00 and the control class is 88.53. These findings are useful for the nation especially teachers, because this research can be used as an alternative to vary learning models in a wider range, in order to improve other abilities.

REFERENCES

- Afza, A., Novianti, S., & Sari, L. Y. (2022). Factors Caused Difficulty In Learning IPA For Student. *Journal Of Biology Education Research (JBER)*, 3(2), 1–10.
- Aryana, I. M. P. (2019). Model Pembelajaran Kooperatif Tipe Group Investigation Untuk Meningkatkan Motivasi Belajar Dan Hasil Belajar Siswa. *Adi Widya: Jurnal Pendidikan Dasar*, 4(1), 61. <https://doi.org/10.25078/aw.v4i1.931>
- Astutik, S., Prihndono, T., & Rahayu, T. M. (2017). Model Pembelajaran Kooperatif Tipe Group Investigation Berbasis Observasi Gejala Fisis Pada Pembelajaran Ipa-Fisika Di Smp. *Jurnal Pembelajaran Fisika*, 6(1), 56–62.
- Asyafah, A. (2019). Menimbang Model Pembelajaran (Kajian Teoretis-Kritis atas Model Pembelajaran dalam Pendidikan Islam). *TARBAWY: Indonesian Journal of Islamic Education*, 6(1), 19–32. <https://doi.org/10.17509/t.v6i1.20569>
- Cahyaningtyas, D., Wardani, N. S., & Yudarasa, N. S. (2023). Upaya Peningkatan Hasil Belajar dan Sikap Kerjasama Siswa Melalui Penerapan Discovery Learning. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 13(1), 59–67. <https://doi.org/10.24246/j.js.2023.v13.i1.p59-67>
- Christiani, Y., & Martha, K. (2021). Peran Guru Kristen Menghadirkan Shalom Community Melalui Prinsip Kedisiplinan [The Role of Christian Teachers in Providing the Shalomic Community Through Discipline]. *Diligentia: Journal of Theology and Christian Education*, 3(1), 64. <https://doi.org/10.19166/dil.v3i1.2914>
- Devi, K. S. T., Wibawa, I. M. C., & Sudiandika, I. K. A. (2021). Penerapan Model Pembelajaran Group Investigation untuk Meningkatkan Hasil Belajar Matematika Siswa Kelas V. *Mimbar Ilmu*, 26(2), 233. <https://doi.org/10.23887/mi.v26i2.36079>
- Dewi, R. S., Pujiastuti, & Walyo, J. (2015). Penerapan Pembelajaran Kooperatif Model GI (Group Investigation) dengan media game puzzle untuk Meningkatkan Academic Skill dan Hasil Belajar. *Jurnal Education UNEJ*, 2(3), 1–6.
- Emda, A. (2018). Kedudukan Motivasi Belajar Siswa Dalam Pembelajaran. *Lantanida Journal*, 5(2), 172. <https://doi.org/10.22373/lj.v5i2.2838>
- Fatonah, C.N., Ningtias, R.A., Pertiwi, M.P., & Rostikawati, R.T. (2023). Species Diversity of Bivalves and Gastropods at the Tanjung Rising Coastal, Bangka Belitung Island. *Jurnal Ilmu Dasar* 24(1): 57-64. <https://doi.org/10.19184/jid.v24i1.30259>
- Hasanah, U. (2021). Sistem Pembelajaran Daring Dengan Penilaian Afektif Menggunakan Google Classroom Dalam Pembelajaran Bahasa Indonesia. *Kode: Jurnal Bahasa*, 10(4), 66–72. <https://doi.org/10.24114/kjb.v10i4.30736>
- Husna, H., Nerita, S., & Safitri, E. (2023). Analysis of Student Difficulties in Learning Biology. *Journal Of Biology Education Research (JBER)*, 1(1), 1–8. Retrieved from <https://journal.unpak.ac.id/index.php/jber>
- Junaidi, J. (2019). Peran Media Pembelajaran Dalam Proses Belajar Mengajar. *Diklat Review: Jurnal Manajemen Pendidikan Dan Pelatihan*, 3(1), 45–56. <https://doi.org/10.35446/diklatreview.v3i1.349>
- Kusumawati, T. (2015). Pengembangan Instrumen Penilaian (Development of Assessment Instrument). *Jurnal SMaRT*, 01(Mi), 111–123.
- Ma'rifah, S. S. (2018). 'HELPER' Jurnal Bimbingan dan Konseling FKIP UNIPA. *Jurnal Bimbingan Dan Konseling FKIP UNIPA*, 35(1), 31–46.
- Magdalena, I., Fatakhatus Shodikoh, A., Pebrianti, A. R., Jannah, A. W., Susilawati, I., & Tangerang, U.

- M. (2021). Pentingnya Media Pembelajaran Untuk Meningkatkan Minat Belajar Siswa Sdn Meruya Selatan 06 Pagi. *EDISI: Jurnal Edukasi Dan Sains*, 3(2), 312–325. Retrieved from <https://ejournal.stitpn.ac.id/index.php/edisi>
- Mahesa, S., Nerita, S., & Abizar. (2023). Pteridophyta in the Puncak Gaduang Area, Lubuk Basung, Agam Regency as a Learning Media for Plantae Materials. *Journal of Biology Education Research (JBER)* 4(1): 42-50
- Normawati, A. (2020). Digital Mind-Mapping to Improve Learners' Grammar Competence. *Edulink: Education and Linguistics Knowledge Journal*, 2(2), 52. <https://doi.org/10.32503/edulink.v2i2.1189>
- Nurhidayati, A., & Sunarsih, E. S. (2013). Peningkatan Hasil Belajar Ranah Afektif Melalui Pembelajaran Model Motivasional. *Jurnal Ilmiah Pendidikan Teknik Dan Kejuruan*, 6(2). <https://doi.org/10.20961/jiptek.v6i2.12614>
- Prasetya, T. A., Harjanto, C. T., & Frayudha, A. D. (2021). The Effect of Students' Learning Activities and Creativity on The Learning Outcomes in The Aerodynamics. *Jurnal Dinamika Vokasional Teknik Mesin*, 6(1), 69–76.
- Pratami, A. Z., Suhartono, S., & Salimi, M. (2019). Penerapan model pembelajaran group investigation untuk meningkatkan hasil belajar Ilmu Pengetahuan Sosial. *Harmoni Sosial: Jurnal Pendidikan IPS*, 6(2), 164–174. <https://doi.org/10.21831/hsjpi.v6i2.23535>
- Primarinda, I., Maridi, & Marjono. (2012). Pengaruh Model Pembelajaran Cooperative Learning Tipe Group Investigation (GI) Terhadap Keterampilan Proses Sains Dan Hasil Elajar Biologi Siswa Kelas X. *Pendidikan Biologi*, 4(2), 60–71.
- Putra, H. M., Setiawan, D., & Fajrie, N. (2020). Perilaku Kedisiplinan Siswa Dilihat Dari Etika Belajar Di Dalam Kelas. *Jurnal Prakarsa Paedagogia*, 3(1). <https://doi.org/10.24176/jpp.v3i1.5088>
- Putri, A.C., Pertiwi, M.P., & Awaludin, M.T. (2023). Keanekaragaman Kelas Bivalvia di Pantai Cibuyaya Ujung Genteng. *Jurnal Biosilampari* 5(2): 121-132. <https://doi.org/10.31540/biosilampari.v5i2.2097>
- Rahmah, N. (2018). Hakikat Pendidikan Matematika. *Al-Khwarizmi: Jurnal Pendidikan Matematika Dan Ilmu Pengetahuan Alam*, 1(2), 1–10. <https://doi.org/10.24256/jpmipa.v1i2.88>
- Rahman, S. (2021). Pentingnya Motivasi Belajar Dalam Meningkatkan Hasil Belajar. *Merdeka Belajar Dalam Menyambut Era Masyarakat 5.0*, (November), 289–302.
- Rahmawati, A., Bektiarso, S., & Subiki. (2020). Model Group Investigation Disertai Peta Konsep Pada Pembelajaran Fisika. *Webinar Pendidikan Fisika 2020*, 5(1), 65–69.
- Rohmah, N. U., & Winaryati, E. (2019). Analisis Kemampuan Kerja Sama Peserta Didik Pada Metode Diskusi. *Edusaintek*, 3(2002), 382–392. Retrieved from <http://prosiding.unimus.ac.id>
- Rosba. (2021). Pengaruh Model Pembelajaran Group Investigation Berbantuan Digital Mind Map (Gi-Dmm) Terhadap Keterampilan Berpikir Kritis, Kreativitas, Dan Penguasaan Konsep Pada Perkuliahan Botani Dan Taksonomi.
- Saepul, A. D., Helina, N., & Sutresna, Y. (2023). Improving Students' Learning Outcomes Through Pjbl Learning Models In Practices For Making Of Casting Tape (Manihot Utilissima) With The Assistance Of Media Quiziz. *Journal Of Biology Education Research (JBER)*, 4(1), 25–30. <https://doi.org/10.55215/jber.v4i1.7583>
- Sagita Nggebu, R. A., & Kusmariyatni, N. (2018). Penerapan Model Pembelajaran Kooperatif Tipe Group Investigation Berbantuan Media Visual Untuk Meningkatkan Hasil Belajar Ipa Siswa Kelas V Sd Banjar Jawa 3. *Jurnal Ilmiah Pendidikan Profesi Guru*, 1(3), 243–250. <https://doi.org/10.23887/jippg.v1i3.16458>
- Saputri, D.D. & Pertiwi, M.P. (2021). Identification of Secondary Metabolites and Proximate Analysis of Golden Apple Snails (*Pomacea canaliculata* L.) Meat Extract. *Jurnal Ilmu Dasar* 22(2): 101-110. <https://doi.org/10.19184/jid.v22i2.18508>
- Siregar, S. F. (2019). Meningkatkan Hasil Belajar Siswa Pada Pelajaran Ilmu Pengetahuan Alam. *Jurnal Biolokus*, 2(2), 2621–3702.
- Sugiarto, A. P., Suyati, T., & Yulianti, P. D. (2019). Faktor Kedisiplinan Belajar Pada Siswa Kelas X Smk Larenda Brebes. *Mimbar Ilmu*, 24(2), 232. <https://doi.org/10.23887/mi.v24i2.21279>
- Sugiyono. (2005). *Memahami Penelitian Kualitatif*. Bandung: CV. Alfabeta.

- Sukmanasa, E. (2016). Hubungan antara Disiplin Belajar dengan Hasil Belajar pada Mata Pelajaran Ilmu Pengetahuan Sosial. *Jurnal Kreatif*, 7(1), 11–24.
- Suprihatin. (2015). Upaya Guru dalam Meningkatkan Motivasi Belajar Siswa. *Jurnal Pendidikan Ekonomi UM Metro*, 3.
- Tarigan, E. B. (2018). Meningkatkan Kedisiplinan Siswa Dalam Proses Belajar Mengajar Melalui Layanan Konseling Kelompok Pada Siswa Kelas Vii-3 Smp Negeri 1 Gebang Tahun 2017-2018. *Jurnal Tabularasa PPS Unimed*, 15(3), 272–282. Retrieved from <http://jurnal.unimed.ac.id/2012/index.php/tabularasa>
- Ulfa, S., & Sugianto. (2015). Penerapan Model Pembelajaran Group Investigation Melalui Strategi Problem Based Learning Terhadap Kemampuan. *Unnes Physics Education Journal*, 4(1), 62–66.
- Wahyu Riyaningrum, Nur Isnaeni, Elsy Maria Rosa. (2021). Pentingnya Team Based Learning (Tbl) Pada Mahasiswa Keperawatan Untuk Meningkatkan Kerjasama Tim: a Literature Review. *Nursing Science Journal (NSJ)*, 2(1), 17–26. <https://doi.org/10.53510/nsj.v2i1.51>
- Warti, E. (2018). Pengaruh Motivasi Belajar Siswa terhadap Hasil Belajar Matematika Siswa di SD Angkasa 10 Halim Perdana Kusuma Jakarta Timur. *Mosharafa: Jurnal Pendidikan Matematika*, 5(2), 177–185. <https://doi.org/10.31980/mosharafa.v5i2.273>
- Wicaksono, D., & Iswan. (2019). Upaya Meningkatkan Hasil Belajar Peserta Didik Melalui Penerapan Model Pembelajaran Berbasis Masalah Di Kelas Iv Sekolah Dasar Muhammadiyah 12 Pamulang, Banten. *Jurnal Holistika*, 3(2), 111–126. Retrieved from <https://jurnal.umj.ac.id/index.php/holistika/article/view/5362%0Ahttps://jurnal.umj.ac.id/index.php/holistika/article/download/5362/3584>
- Widyaningsih, O., & Puspasari, D. (2021). Analisis Penggunaan Model Pembelajaran Group Investigation (Investigasi Kelompok). *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, 9(1), 77–84. Retrieved from <https://journal.unesa.ac.id/index.php/jpap>
- Yessa, F., & Marna, ean E. (2022). Analisis Faktor Kesulitan Belajar Siswa Kelas XI SMA Negeri 11 Padang dalam Mata Pelajaran Ekonomi. *Salingka Nagari*, 1(2), 330–342.
- Yulianto, A. (2021). Penerapan Model Kooperatif Tipe Tps (Think Pair Share) Untuk Meningkatkan Hasil Belajar Siswa Di Kelas Vi Sdn 42 Kota Bima. *Jurnal Pendidikan Sekolah Dasar*, 1(2), 6–11. Retrieved from <https://jurnal.habi.ac.id/index.php/Pendidikas>
- Yulita, A., Sukmawati, E., & Kamaruzzaman. (2021). Upaya Meningkatkan Sikap Tanggung Jawab Belajar Melalui Konseling Kelompok Pada Siswa Sekolah Menengah Pertama Negeri 1 Subah. *BIKONS: Jurnal Bimbingan Konseling*, 1(2), 2–3. Retrieved from <https://jurnal.fipps.ikipgripta.ac.id/index.php/BK/article/view/74>
- Yusuf, B. B. (2017). Konsep Dan Indikator Pembelajaran Efektif. *Jurnal Kajian Pembelajaran Dan Keilmuan*.