



Character Formation of Fifth Grade Elementary School Students in Science Learning Through the Reflective Pedagogy Paradigm (RPP) Learning Model

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Received: August 15, 2023

Revised: September 25, 2023

Accepted: October 25, 2023

Published: October 31, 2023

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DOI: [10.29303/jppipa.v9i10.5460](https://doi.org/10.29303/jppipa.v9i10.5460)

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Abstract: This research aims to analyze the results of implementing the Reflective Pedagogy Paradigm (RPP) learning model in shaping student character at SDIT Al Kaffah Bekasi. This research is a case study. The research results show that the RPP learning model can facilitate the formation of student character. The problem in this research is formulated as follows. What are the results of the implementation of the Reflective Pedagogical Paradigm (RPP) learning model in facilitating student character formation at SDIT Al Kaffah Bekasi. This research aims to analyze the results of implementing the Reflective Pedagogy Paradigm (RPP) learning model in facilitating student character formation at SDIT Al Kaffah Bekasi. This research uses a qualitative aRPPoach with a case study method. A case study is research that emphasizes a deeper understanding of certain phenomena for individuals. Case studies are also useful in exploring problems that are unknown or little is known about a particular phenomenon

Keywords: Learning model; Reflective pedagogical paradigm; Students character

Introduction

The development of the times is always accompanied by changes in the elements within it, including changes in the social system. One of the keys to social change is education. Budiman in Subagya (2010) states that education is no longer directed only at creating technocrats with high skills, but at creating people who take sides in fighting for justice in the world. Through the educational process, it is hoped that educated people can be created so that they can help in realizing social change towards a better society and world. Competent person this is very much needed in development quality nation (Baharudin, 2017). This education serves to develop abilities, improve personal qualities and the character and civilization of the nation dignity (Ros, 2016).

Based on this, education must be successful in developing the personality and character of students, so that in the future they are ready to become strong actors of social change. Education is also a manifestation of

human culture which is always dynamic and full of development, this was stated by Trianto (2013) Meanwhile, according to Lee, important for educators in all countries to help students in develop positive characters such as responsibility, perseverance, caring towards others than yourself, discipline, honesty, courage, fairness, respect, integrity and patriotism (Goings et al., 2018; Manning et al., 2013; Margot et al., 2019).

The current government's attention to the formation and development of student character has begun to appear, for example in the form of a legislative system. In Law Number 20 of 2003 concerning the National Education System, Article 3 states that national education functions to develop abilities and shape the character and civilization of a dignified nation in order to make the nation's life more intelligent. Education aims to develop the potential of students to become human beings who believe in and are devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic

How to Cite:

Rukajat, A., & Krisnayansyah. (2023). Character Formation of Fifth Grade Elementary School Students in Science Learning Through the Reflective Pedagogy Paradigm (RPP) Learning Model. *Jurnal Penelitian Pendidikan IPA*, 9(10), 8759–8763. <https://doi.org/10.29303/jppipa.v9i10.5460>

and responsible citizens (Asmaroini, 2016; Kholis, 2014). Based on the explanation above, it is very clear that education plays a very important role in creating quality individuals. Effective character development and in its entirety must include three institutions namely family, school and community (Bailey et al., 2009; Bosio, 2021; Wahyu, 2013).

The Reflective Pedagogy Paradigm (RPP) is one of the methods chosen by SDIT Al Kaffah Bekasi to help color the dynamics of education to develop students' personalities within SDIT Al Kaffah Bekasi based on Islamic values. RPP is a mindset/paradigm in developing students' personalities into individuals who have human values. The paradigm used is in forming a person, students are given an experience of a human value, then students are facilitated with questions to reflect on this experience, and then they are facilitated with action questions so that students make intentions or act in accordance with these values. Pardiyono (2007) adds that through the dynamics of this mindset, students experience it themselves (not just get information because they are told).

Natural Sciences (Science) is a type of learning that is full of character. The product aspect in science is contained in the concepts and learning materials taught to students and further develops students' cognitive domain. Meanwhile, process and attitude aspects in science, which is also carried out during learning, further develops students' personal character, namely developing the psychomotor and affective domains. Teacher creativity is very necessary in designing character-based science learning. Character education is very important because character is strength needed to deal with pressure economic and social change in the 21st century. So character education must be, (1) develop morals and character performance, (2) forming conscience, (3) educate for conscience and competition, (4) ensure acceptable character and taught, and (5) character assessment is necessary measured in learning (Davidson, 2014). This research is important to carry out because the use of the RPP model is considered to be a solution to increasing character values in students.

The Reflective Pedagogy Paradigm (RPP) learning model has been introduced and implemented by SDIT Al Kaffah Bekasi since the 2022/2023 academic year, however how its implementation in developing student character has never been studied further, so the author is interested in analyzing the implementation of the Reflective Pedagogy Paradigm learning model (RPP) in Elementary Schools, especially in character building for Class V students at SDIT Al Kaffah Bekasi.

Method

The research conducted in this study aims to analyze the results of implementing the Reflective Pedagogical Paradigm (RPP) learning model in facilitating student character formation at SDIT Al Kaffah Bekasi. Whose address is Jalan Harapan Indah. The research subjects in this study were 28 class V students of SDIT Al -Kaffah, Bekasi City.

This research uses a qualitative approach with a case study method. A case study is research that emphasizes a deeper understanding of certain phenomena for individuals. Case studies are also useful in exploring problems that are unknown or little is known about a particular phenomenon.

In mid-March 2023, researchers applied for permits to SDIT Al Kaffah. The implementation of this case study research lasted for three months from April - June 2023. The outline of the research implementation can be explained as follows.

Observations were carried out in the VA class over four meetings by observing and recording the learning process that took place from start to finish during the science lesson without interfering in any form.

Table 1. RPP-Based Science Learning Observation Schedule in Class

Date	Time Allocation	Material
Thursday, April 25 2023	3 x 35 minutes	Weathering
Tuesday, April 30 2023	3 x 35 minutes	Water Cycle Natural Events
Tuesday, May 14 2023	3 x 35 minutes	Happened in Indonesia
Saturday, 18 May 2023	2 x 35 minutes	Natural resources

At the end of each lesson, the researcher measured the students' abilities in the elements of conscience and compassion by distributing questionnaires to the students. Interviews were conducted with students to collect data regarding mastery of the elements of conscience and compassion.

There were three instruments used in this research, namely observation sheets, interview sheets, questionnaires assessing the elements of conscience and compassion. The following are details of the data, indicators, data sources and data collection techniques in this research. The data analysis model used refers to the model created by Miles and Huberman, including data reduction, data display, as well as conclusions and data verification.

Result and Discussion

The increase in academic achievement can be seen in students' mastery of science concepts as stated in the

even semester report cards for the 2020/2021, 2021/2022 and 2022/2023 academic years (see Table 2).

Table 2. Achievement of the Average Grade V Score for Science Subjects

Year 1 (2020/2021)	Year 2 (2021/2022)	Year 3 (2022/2023)	Note
69.03	77.75	85.89	Increase

Source: Documentation and Research Results

Based on the table above, it appears that the average grade V science score in the 2020/2021 academic year is 69.03, while in the 2021/2022 academic year it is 77.75 (an increase of 8.72), whereas at the time the research was carried out, that was the academic year. 2022/2023 reached 84.89 (an increase of 15.89 from the beginning of the implementation of RPP in schools). This difference in achievement is caused by several factors, including: are differences in student input, differences in teachers, differences in learning methods used by teachers, and several other factors.

The results of the research during four meetings showed satisfactory results that all students who took part in the learning process were able to develop the three desired character aspects in each meeting. The character developed in the conscience aspect is religious, honest and diligent.

Based on the table above, it can be seen that all students who took part in the learning process in each meeting were able to develop the three characters that were developed in learning. The three aspects of compassion that were to be developed in this research showed satisfactory results where all students who took part in the learning process were able to develop the three aspects desired in the research. Characters who developed in the aspects of compassion, namely respecting friends, cooperation, and caring for the environment. More clearly, the research results can be presented in the following Table 3.

Table 3. Research Result Based on Characters Value

Meeting	Respecting friends	Cooperating in Group	Caring the environment
1	Applied	Applied	Applied
2	Applied	Applied	Applied
3	Applied	Applied	Applied
4	Applied	Applied	Applied

During research, in the learning process teachers often use the surrounding environment as a learning resource, namely by taking students outside the classroom to make observations so that it will be easier for children to understand material so that children's cognitive outcomes will improve. This is reinforced by the results of research conducted by Handoyo et al.

(2011) which states that learning methods that utilize the surrounding environment as a learning resource greatly influence the level of students' understanding of the concepts/material provided. Cooperative learning enables students develop skills critical thinking, communication skills, organizational skills and others (Neo et al., 2009).

If it is related to science learning carried out by teachers in the classroom, the activities designed always include science process skills in it and develop students' scientific attitudes, this is in line with the characteristics of the RPP learning model which is also expected to develop student character. Setyaningrum (2011) stated the same thing that character education is character plus education which involves aspects of knowledge, feelings and actions. Science learning which includes process skills has several advantages related to character education, namely (1) it allows students to be actively involved intellectually, manually and socially; and (2) can develop scientific attitudes in students.

The application of the RPP learning model is expected to grow students who have characters characterized by competence, conscience and compassion, which are usually abbreviated as 3C. These three domains are expected to be student outcomes obtained through experiences that are processed and reflected in the educational process at school. The results of the implementation of the RPP learning model show that students can always develop conscience and compassion skills through learning carried out by teachers in the classroom in initial, core and final activities which are combined through five stages of RPP, namely context, experience, reflection, action and evaluation.

If detailed, the characters that can be formed through this RPP learning model are intelligent (representing aspects of concept mastery); religious, honest, and diligent (representing aspects of listening to one's conscience); respecting friends, cooperation, and caring for the environment (representing the aspect of compassion).

The results of the research during four meetings showed satisfactory results that 100% of all students who took part in the learning process were able to develop the three aspects desired in the research. However, if you investigate further and use valid instruments, the actual value achieved may not reach applied 100%. The results show a score of 100% due to the tendency of students to choose the "Good" answer even though in reality they are not honest. Based on this experience, it would be better if an instrument was developed that could measure element achievements *conscience* and student compassion, so that the resulting achievements truly represent the true abilities of each student observed.

The spearhead for the success of the RPP learning model lies in the hands of the teacher. Teachers should always enrich their knowledge and seek inspiration so they can accompany students to experience growth that leads to the 3Cs, namely competence, conscience and compassion. Referring to what Sumarah (2008) wrote, teachers should be able to encourage and help students to see and develop their talents, abilities and life opportunities (competence). After recognizing their own talents and abilities, students are then helped to develop their lives in such a way that they have the ability and resources to do something useful for the good of others (conscience). In other words.

Conclusion

The results of this research can be concluded that the RPP learning model at SDIT Al Kaffah Bekasi can facilitate the formation of the character of Class V elementary school students which includes intelligent character (representing aspects of concept mastery/competence); religious, honest, and diligent (representing aspects of listening to one's conscience); respecting friends, cooperation, and caring for the environment (representing the aspect of compassion). Several recommendations were put forward for consideration or input for program organizers, educators and future researchers, namely as follows. Program organizers need to design assessment instruments to measure students' mastery of the elements of conscience and compassion. For educators, they should measure the elements of conscience and compassion students while learning takes place. For future researchers, it is hoped that they can design an instrument that can be used to measure students' conscience and compassion elements in more detail.

Author Contributions

A.Rukajat, design the research, collect data, write article. Krisnayansyah, make instruments

Fundings

Thank you for Singaperbangsa University Karawang for support this research.

Conflict of Interest

There is no conflict interest in this research.

References

- Asmaroini, A. P. (2016). Implementasi Nilai-Nilai Pancasila Bagi Siswa di Era Globalisasi. *Citizenship Jurnal Pancasila Dan Kewarganegaraan*, 4(2), 440. <https://doi.org/10.25273/citizenship.v4i2.1077>
- Baharudin, H. (2017). Peningkatan Kompetensi Guru Melalui Sistem kepemimpinan Kepala Madrasah. *Jurnal Ilmu Tarbiyah At-Tajdid*, 6(1), 1-26. Retrieved from <https://ejournal.isimupacitan.ac.id/index.php/tajdid/article/view/38>
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., & Sandford, R. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, 24(1), 1-27. <https://doi.org/10.1080/02671520701809817>
- Bosio, E. (2021). Global citizenship education as a metacritical: Pedagogy: Concluding reflections. In *Conversations on Global Citizenship Education: Perspectives on Research, Teaching, and Learning in Higher Education* (pp. 185-189). <https://doi.org/10.4324/9780429346897-13>
- Davidson, M. (2014). a Character Education Research Perspective for the 21 St Century. *Journal of Character Education*, 10(1), 77-83. Retrieved from <https://www.proquest.com/openview/eb5107ad7284b71d09b18c3985f1af44/1?pq-origsite=gscholar&cbl=27598>
- Goings, R. B., & Ford, D. Y. (2018). Investigating the Intersection of Poverty and Race in Gifted Education Journals: A 15-Year Analysis. *Gifted Child Quarterly*, 62(1), 25-36. <https://doi.org/10.1177/0016986217737618>
- Handoyo, L. D., & Asy'ari, M. (2011). Using the Surrounding Environment as a Science Learning Laboratory in PGSD Student Multi-intelligence Development". *Widya Dharma Education Journal*, 22(4), 58-71.
- Kholis, N. (2014). Paradigma Pendidikan Islam Dalam Undang-Undang Sisdiknas 2003. *Jurnal Kependidikan*, 2(1), 71-85. <https://doi.org/10.24090/jk.v2i1.542>
- Manning, M. L., & Bucher, K. T. (2013). *Classroom management: Models, applications, and cases*. Pearson.
- 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. <https://doi.org/10.1186/s40594-018-0151-2>
- Neo, T.-K., Neo, M., & Kwok, J. W. (2009). Engaging students in a multimedia cooperative-learning environment: A Malaysian experience. *Proceedings Ascilite Auckland*, 674-682. Retrieved from <https://rb.gy/rn2j0>
- Pardiyono. (2007). *Pasti Bisa Teaching Genre Based Writing*. Yogyakarta: Andi Offset.
- Ros, M. (2016). *Importance Character Education as a Base Mental Revolution*. Retrieved from <http://news.metrotvnews.com/peristiwa/8Ky9VQrK-importance-of-character->

education-as-the-base-of-mental-revolution

- Setyaningrum, & Husamah. (2011). Optimalisasi penerapan pendidikan karakter di sekolah menengah berbasis keterampilan proses: Sebuah perspektif guru IPA-biologi. *Jurnal Penelitian Dan Pemikiran Pendidikan*, 1, 69–81. Retrieved from <https://training.unmuhkupang.ac.id/index.php/jip/article/view/58>
- Subagya, Y. (2010). *Reflective Pedagogy Paradigm: Accompanying Students to Become Smart and Characteristic*. Kanisius.
- Sumarah, I. E. (2008). A Review of Ignatian Pedagogy on the Story of the Conversion of the Samaritan Woman. *Widya Dharma Education Journal*, 19(5), 77–87.
- Trianto. (2013). *Model Pembelajaran Terpadu*. Jakarta: Bumi Aksara.
- Wahyu. (2013). Masalah dan Usaha Membangun Karakter Bangsa. *KOMUNITAS: International Journal of Indonesian Society and Culture*, 3(2), 138–149.
<https://doi.org/10.15294/komunitas.v3i2.2310>