



## Embedding Religious Character Values in Science Learning at SDS Muhammadiyah 4 Jakarta

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### Abstrak

Penanaman nilai karakter religius dalam proses pembelajaran IPA merupakan suatu keharusan bagi guru. Riset ini bermaksud guna mengetahui penanaman nilai karakter religius dalam pembelajaran IPA di SDS Muhammadiyah 4 Jakarta. Prosedur yang dipakai merupakan cara deskriptif kualitatif dengan menggunakan instrumen observasi, wawancara, dan angket tentang karakter religius siswa. Subjek riset ini yaitu seluruh kelas IV berjumlah 16 siswa, 3 guru IPA, dan wali kelas. Penelitian dilakukan pada bulan Desember 2022 – Januari 2023. Analisis data yang digunakan menggunakan Miles Huberman. Bersumber pada hasil riset dapat disimpulkan jika keterampilan guru pada melakukan kegiatan belajar mengajar IPA berbasis karakter religius di SDS Muhammadiyah 4 Jakarta sangat baik. Dimana seluruh guru yang diampu telah sanggup menghasilkan nilai-nilai kepribadian religius. Ada pula anjuran pada pihak terikat baik kepala sekolah ataupun kemendikbud agar sanggup membagikan training untuk guru guna dapat meningkatkan kegiatan belajar mengajar yang mengarah dalam penanaman nilai-nilai karakter siswa alhasil guru dapat dengan mudah mengimplementasikannya di dalam kelas.

**Kata Kunci:** Ilmu Pengetahuan Alam, Pembelajaran IPA, Nilai Karakter Religius

### Abstract

Instilling religious character values in the science learning process is a must for teachers. This research intends to find out the cultivation of religious character values in science learning at SDS Muhammadiyah 4 Jakarta. The procedure used is a qualitative descriptive method using observation, interviews, and questionnaires about the religious character of students. The subjects of this research were all 16 students in class IV, 3 science teachers, and the homeroom teacher. The research was conducted in December 2022 - January 2023. Data analysis used Miles Huberman. Based on the research results, it can be concluded that the teacher's skills in carrying out science teaching and learning activities based on religious characters at SDS Muhammadiyah 4 Jakarta are very good. Where all the taught teachers have been able to produce religious personality values. There are also suggestions for related parties, both school principals and the Ministry of Education and Culture to be able to distribute training for teachers in order to improve teaching and learning activities that lead to instilling student character values so that teachers can easily implement them in class.

**Keywords:** Natural Sciences, Science Learning, Religious Character Values

## Introduction

Instilling character values in schools, in all sections (management of needs) must participate, including elements in education itself, namely curriculum content, methods of teaching and learning activities and evaluation, quality of relationships, enforcement or management of school management subjects, application of activities, empowerment of infrastructure, financing, and the ethos of activities throughout the country's community and school area (Endrawati & Siswantari, 2021). The character building itself must include and occur at every level of education (Dewina & Meilana, 2022). As a teacher or instructor, the teacher is one of the determinant aspects for the success of any educational endeavor. Therefore, a teacher is required to be able to recognize and master the principles of teaching and learning activities and understand various guiding skills so that teaching and learning activities can be tried properly (Anisha et al., 2021).

Character education that will be instilled in every student. There are 18 characters, including 1) Religious, 2) Honest, 3) Obedient, 4) Hard Work, 5) Responsibility, 6) Openness, 7) Innovative, 8) Independent, 9) Democrat, 10) Curiosity, 11) National Spirit, 12) Love for Motherland, 13) Performance Calculation 14) Friendly or Communicative, 15) Love for Peace, 16) Enjoy Reading, 17) Maintain Area, and 18) Take Care of Social. Among the eighteen personality items, there is one interesting personality to analyze, namely religious/religious personality (Wati & Arif, 2017). Science learning directs important personality values to students. This is because in the way of learning science students are trained in using objective methods and objective actions (Rahmawati et al., 2020).

Science subjects in science subjects are points that contain a combination of analytical principles, their implementation is usually limited to natural events, born and raised in an objective way such as observation and research and requires objective actions such as curiosity, continuity, honesty, and the like (Surawan et al., 2022). Science learning is the process of providing direct experience to improve competence and create insights through an objective search of realities, designs or principles that must be identified in natural areas (Huri & Marwanto, 2019). One of the

subjects contained in the curriculum is science which emphasizes the transmission of values, because science is a way of knowing systematically about the natural environment to understand insights, facts, designs, principles, ways of finding, and having objective actions (Susilaningrum & Puspitarini, 2021). Through science learning activities can improve the personality of students in speaking. Collaboration also wants to foster a sense of caring for others (Kurniawan & Alimah, 2019).

Values that must be considered in embedding religious personality in science subjects are associating these values in an accurate manner in lesson programming, implementation of teaching and learning activities and evaluation of teaching and learning activities that are matched to the character of the science subject (Pearl, 2021). If the teacher wants the performance of personality values well in class, the teacher must be able to design the performance of personality values well in lesson plans (Firdhaus, 2021).

So far, science teaching and learning activities have only been informed in the learning modules, they have not been integrated into religious content, as a result the modules that have been informed are only in the main module (Ali & Sukmawati, 2022). It is this kind of situation that results in the teaching of science having no quality and few strong qualities, very few lessons are obtained from spiritual values, as a result ordinary knowledge unknowingly has destructive consequences if it is not based on the belief of the doers. Meanwhile, religious knowledge, especially the values of monotheism, are very compatible with the lesson modules, not only religious studies, as the inculcation of belief.

This research was attempted at SDS Muhammadiyah 4 Jakarta where the school has already practiced science teaching and learning activities based on the Integration of Noble Moral Values platform. SDS Muhammadiyah 4 Jakarta is a school that was developed by providing teaching and learning activities that are oriented in Islamic law, with the aim of being able to produce generations who are ready to become kholifatullah fil ard who are IMTAQ and IMTEK insightful. In applying science teaching and learning activities based on the Integration of Noble Moral Values platform as expected in the mission of science teaching and learning activities, so this research

intends to identify the inculcation of religious character values in science learning at SDS Muhammadiyah 4 Jakarta.

## Method

This research uses a descriptive qualitative approach. This approach describes the data with the current situation. This research begins with analyzing the teacher's ability in learning, begins with compiling research instruments and planning, continues with conducting research and continues with analyzing the information obtained. Information, instruments, and data collection methods are combined in the form of notes, words, and illustrations. This research was conducted at SDS Muhammadiyah 4 Jakarta. The time for the research started in December 2022 – January 2023. The research subjects were all class IV students, totaling 16 students (7 male students and 9 female students), 3 science teachers, and homeroom teacher for class IV at SDS Muhammadiyah 4 Jakarta.

Data analysis in this research was tried using methods in the field. Data analysis used in this research refers to Miles Huberman in (Andriani et al., 2022) is the analysis of quality information that is tested in an interactive way and goes on and on until it's finished, as a result the data becomes saturated, so that certainty will be obtained.

The data collection methods used in this research included: (1) important methods in the form of: (a) question and answer to identify the steps of teaching and learning activities that were tried by the teacher in the application of teaching and learning activities based on religious personality platforms, (b) questionnaires to determine student personality through evaluating student personality actions. in science teaching and learning activities, (c) monitoring to identify teacher teaching and learning activities and teaching methods. (2) documentation to obtain information on teacher titles, teacher number, and pictures.

Test the validity of the data in this research using the triangulation method. The triangulation method was used to check the results of debriefing with science teachers and students through monitoring, selection, and

student questionnaires to identify interview evidence.

## Results and Discussion

### Results

The teacher's ability to apply religious character values to science teaching and learning activities in elementary schools is known by analyzing the teacher's learning implementation plan document, namely by analyzing the emergence of learning activities in the learning implementation plan that leads to the development of students' religious character values. Based on the results of data analysis from the Learning Implementation Plan document, this proves that the percentage of teachers' ability to practice religious personality values in the learning implementation plan is very good with a percentage of 100%. It is understandable that, some of the teachers who researched already have the ability to design lesson plans with good character. However,

In addition, this problem occurs because not all teachers have the potential to design lesson concepts well. It is understandable that, based on the results of debriefing with teachers, it was revealed that some teachers considered the learning implementation plans that they made only as a complement to administration and they did not use the lesson concept in teaching and learning activities that were carried out in class. As a result, some teachers do not design their own lesson concepts. Not only that, some teachers also find it difficult to design the concept of the application of teaching and learning activities based on the 2013 curriculum, especially those who want the emergence of personality values.

The results of the analysis also show that some teachers design their own lesson plans to be used in teaching and learning activities which appear more detailed and are able to generate religious character values well and are more operational so that they can be easily implemented in class teaching and learning activities. The occurrence of religious characters is worth raising by the teacher by writing and applying greetings and prayers at the beginning of learning and reading greetings at the end of the lesson.

The teacher's ability to practice the values of the religious character of students in the

implementation of natural science teaching and learning activities in lower schools is known by analyzing the results of observations of teacher teaching and learning activities in the classroom by creating the emergence of positive learning activities in the core, core and closing activities which are activities that, which are activities that close lead to strengthening the five values of religious character. Based on the results of the observational analysis of teaching and learning activities in Class IV elementary schools that were tried by the teacher, the following findings were found:

**Table 1. Percentage of religious character values in science learning**

Category	The number of students	Percentage (%)
Not enough	2	12.50
Enough	5	31.25
Good	7	43.75
Very good	2	12.50

It is known that students who have shown the value of religious character in the less category are 2 students with a percentage of 12.50%. Students who show the value of religious character in the sufficient category are 5 people with a percentage of 31.25%. In addition, students who showed religious character values in a good category were 7 students with a percentage of 43.75%, and students who showed religious character in a very good category were 2 students with a percentage of 12.50%. The emergence of good religious values is possible because of the habit of teachers and students who are used to greeting before and after learning activities occur.

## Discussion

One way to achieve character is by combining character education in each teaching and learning activity. Important character values that must be fulfilled in the actions and attitudes of students as a result of character education methods are honest, clever (ideas), strong, and caring. Combining character education in teaching and learning activities can be tried by including character values in all subjects taught at school as well as in the implementation of teaching and learning activities (Sutarna & Anwar, 2020). For this reason, teachers

must prepare character education from programming, implementation, and assessment. School character education needs to be assisted by teachers and parents and students' customs (Akman et al., 2021).

Teachers at SDS Muhammadiyah 4 Jakarta provide encouragement to students who face difficulties in internalizing religion-related learning, teachers also give students the opportunity to be directly involved. The teacher associates natural or scientific events with one of the verses of the Qur'an as an effort made by the teacher in developing the process of applying the learning given to students by linking the inculcation of students' religious character values.

Social emotional development programs and characters must be considered by schools that seek to prevent various harmful adolescent behaviors (Mawardi et al., 2021). In addition, schools that aim to address specific health behaviors may see a greater impact by implementing programs that incorporate social-emotional skills development (Hairul Huda et al., 2022). Implementation of religious character education provided such as reading prayers when starting lessons, people who are sick, making friends with anyone, greeting teachers, and many more (Isroani & Huda, 2022).

The purpose of science teaching and learning activities that is integrated with noble moral values is so that students are able to increase their faith in Allah SWT and students are able to practice moral values in everyday life (Amal et al., 2022). So that one of the strategies implemented by the teacher is that all the modules taught are related to moral and religious values (Susilawati, 2022). For example, adapted cactus plants do not have broad leaves for cooking because they run out of water a lot. In contrast, cacti use their thick, green and fresh stems as leaves to store water and convert sunlight into food. Roses are more beautiful than cactus plants. But it turns out that the cactus plant has the advantage of being able to live in a dry desert (Endrawati & Siswantari, 2021). Teachers can learn from the snippets above, which can then be taught to students (Endrawati & Siswantari, 2021).

It can be understood that the religious values of students are very large and tend to produce religious character values both in thoughts, words and activities in everyday life or in class, so in essence, the development of religious character

values must be tested globally by the teacher. In the teaching and learning activities that were tried, starting from the initial core activities and closing activities. Not only that, upholding religious values in early activities can be tried through adaptation by saying greetings, wishes, then being grateful for health assistance and the opportunity to come and participate in learning that can be done after attending students in class.

### Conclusion

The teacher's ability to implement religious character-based science learning at SDS Muhammadiyah 4 Jakarta is very good, where all teachers in applying learning have been able to bring out the values of religious character. As for suggestions to related parties, both school principals and the Ministry of Education to distribute training to teachers in order to be able to improve teaching and learning activities that lead to cultivating students' character values so that teachers can easily apply them in class.

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