The Role of Religion and Culture on Student Attitudes in Science Learning

Previous studies only discussed the influence and role of culture and religion in education but did not specifically discuss the influence or role of religion and culture on student attitudes in science learning. Thus, the purpose of this research is novelty which discusses the influence or role of religion and culture on students' attitudes in learning science. Because knowing the influence or role of religion and culture on student attitudes in science learning can help teachers in an effort to understand certain methods or techniques in the learning process related to student attitudes in science learning. The mix method used in this study is a sequential explanatory approach. The sample in this study used a purposive sampling technique of 6474 students from Muaro Jambi, Batanghari, Jambi City. The instrument in this study used a type of instrument, namely attitude questionnaires and in-depth interviews for culture and religion. Data analysis was carried out in the form of descriptive statistical analysis. Descriptive statistics are descriptions or presentations in large numbers in this case in the form of summary frequencies, including mean, median and mode as well as qualitative data using Miles & Huberman, namely data reduction, data presentation, and drawing conclusions. Based on the results of interviews and data collection that has been carried out and the discussion described above, it can be concluded that students' attitudes towards science have relevance to cultural aspects that exist in their daily life environment and students' attitudes towards science also have a close relationship with religious aspects that was adopted by students. The better the student's attitude towards science, the better the cultural behavior and religious character possessed by the student.

Keywords: *Attitude; Culture; Religious; Students*

Introduction

In the modern digital era, the rapid development of science and technology demands a change from the world of education. The need for services and opportunities to improve learning for students encourages the emergence of educational reform (Astutik et al., 2020; Chatmaneerungcharoen, 2019; Hayu et al., 2020). Education is an activity that plays an important role in humans because human education can change behavior and knowledge for the better (Arquitectura et al., 2015; Satria & Widodo, 2020; Son & Ditasona, 2020). One component that is the source of a nation or civilization is education (Krumphals et al., 2019; Minarni et al., 2018; Rahayu et al., 2021). The quality of education, as one of the pillars of meaningful human resource development, is very important for national development (Diwangkoro & Soenarto, 2020; Tapilouw et al., 2018; Umamah et al., 2020). It can even be said that the future of the nation depends on the existence of quality education that takes place in the present and the professionalism of teachers/educators in providing learning.

Attitudes are thoughts and feelings that help us behave when we like or dislike something. Attitude is the tendency of a person's behavior both positive and negative towards an object that comes from a person. From the attitude shown, students are able to help teachers identify students who like or don't like learning. Attitude is the first thing that students see whether they like the lesson or not (Mahfud et al., 2020; Nur Rahmy et al., 2019; Yuliani et al., 2021). Attitude is the first thing students see whether they like physics or not. A positive attitude will make students behave well and finish their academics well. Attitudes in the learning process can be realized through feelings of pleasure or displeasure, likes or dislikes, agrees or disagrees. Meanwhile, one of the efforts to improve student attitudes can be done through inquiry-based learning and problem solving (Lyesmaya et al., 2020; Rusmono et al., 2018; Wintarti et al., 2019). One of the lessons in junior high school that requires the involvement of attitudes during the learning process. Based on previous studies, the researcher only discussed attitudes in general and did not specifically discuss students' attitudes towards science learning (Astalini et al., 2018; Purnomo, 2017; Putra et al., 2019).

Science learning is an activity carried out by teachers and students to study forms and events related to the universe. Science learning is an interaction between learning components such as educators, students, learning tools or media in the form of teaching and learning activities to achieve predetermined goals and competencies (Irwanto et al., 2018; Marini et al., 2019; Purnomo, 2017). Science subjects are included in difficult subjects. So there are still many students who do not like science lessons and show negative attitudes during the science learning process. Science learning outcomes are closely related to responses or attitudes from within students so students need to have a positive attitude in order to achieve good results. In science learning, students are expected to have a positive attitude to support a good learning process (Haenilah et al., 2021; Haeruddin et al., 2020; Riantoni et al., 2017). Students who have a positive attitude towards science lessons will show high curiosity and enthusiasm during the science learning process. In addition, students who have a negative attitude when learning science will tend to be indifferent, lazy and do not pay attention to the teacher when studying science (Aryulina & Riyanto, 2016; Hobri et al., 2020; Rao, 2021). To build a positive attitude in learning, it is necessary to involve inculcating religious and cultural values in students in the learning process.

Understanding of religious teachings can be assessed as a stimulus that has an impact on one's religious behavior. Religious behavior as an activity based on believed religious values is influenced by the intensity of individual activity, the level of understanding of religious teachings, and the intensity in carrying out activities related to religious teachings (Putu, et al., 2014; Baharun & Zulfaizah, 2018; Djaelani STIAKIN, 2013). The emergence of religious behavior is the result of religious stimuli received by individuals, both knowledge, attitudes and skills in carrying out activities both religious and social. Religion has a very important role in human life because religion is a motivation for life and life and is a tool for self-development and control

(Abdul Razak et al., 2019; Fay, 2018; Rohendi, 2020). Therefore, religion needs to be known, understood and practiced by Indonesian people so that it can be the basis of personality so that they can become a complete human being. Religion also regulates human relations, human relations with harmony, balance and harmony in human life, both as individuals and as members of society in achieving outward progress, and spiritual happiness (Hu et al., 2017; Syamaun, 2019; Widjaja, 2019). The results of an interview with one of the religious leaders in Ngestirahayu Village, that "Efforts to provide religious understanding to teenagers have been carried out, both through religious activities, commemorating religious holidays, and religious lectures such as recitations, etc. good things based on religion. Based on previous studies, the researcher only discussed religion on character in general, but did not specifically discuss the influence of religion on students' attitudes towards science learning.

Culture is defined in two views, namely: first, the result of human activities and creation of the mind (mind) such as belief, art and customs. Culture is a place to increase one's belief in something they believe in, just as someone believes that worshiping a big tree will bring good luck (Irwanto et al., 2018; Marsono, 2019; Muali, 2017). The culture is carried out continuously from generations. Culture is all of the knowledge, attitudes and behavior patterns that are habits owned and inherited by members of a particular society (Muhammad Sulhan, 2018; Setiawan & Sulistiani, 2019; Syahputra, 2020). Culture is something that lives, develops, moves towards a certain point. Another opinion states that culture is the creation of value development which includes everything in the physical, personal and social realms, which is perfected for the realization of human power and society. Culture is the whole idea, action, and work in the context of people's lives by learning (Aryulina & Riyanto, 2016; Marini et al., 2019; Syahputra, 2020). Culture is a pattern of values, principles, habits, traditions, and habits that are formed in the environment where you live, then used as a guide to act and behave. The culture applied in the community aims to instill values that refer to changes in the attitude of youth or students in the school environment. Based on previous studies, the researcher only discussed culture on character in general, but did not specifically discuss the influence of culture on student attitudes in science learning.

Based on the background that has been about attitude, culture and religion research. Where in previous studies only discussed the influence and role of culture and religion in education but did not specifically discuss the influence or role of religion and culture on student attitudes in science learning. Thus, the purpose of this research is novelty which discusses the influence or role of religion and culture on students' attitudes in learning science. Because knowing the influence or role of religion and culture on student attitudes in science learning can help teachers in an effort to understand certain methods or techniques in the learning process related to student attitudes in science learning.

Method

The mix method approach used in this study is an explanatory approach. Explanatory mixed methods design, which is a combination research method that combines quantitative and qualitative research methods sequentially (Maison et al., 2018). The type of research and design used is a mix method research using an explanatory design. The explanatory design is a research design in mixed research which is characterized by the collection and analysis of quantitative data in the first phase, followed by the collection and analysis of quantitative data in the second phase, which builds on the initial quantitative results (Sim & Wright, 2002; Srivastava & Rego, 2011; Sanjaya, 2013, Creswell, 2014). In this study, the population was schools located in Muaro Jambi, Batanghari, Jambi City.

Table 1. Research population

No	Sector	Total Student
1.	Muaro Jambi	2045
2.	Batanghari	1132
3.	Kota Jambi	3297
	Total	6474

The sample in this study used purposive sampling technique. Purposive sampling is a type of sampling in which a research more a less handpicks case (Stommel & Wills, 2004; Schnei et al., 2016; Bell, Bryman & Harley, 2019). The reason for using purposive sampling technique is because not all samples have criteria that match the phenomenon under study. Therefore, the authors chose a purposive sampling technique which stipulates certain considerations or criteria that must be met by the samples used in this study. The total number of samples that will be used in this study is Muaro Jambi, Batanghari, Jambi City with a total of 6474 students.

The instrument in this study used the type of instrument, namely a questionnaire. Where the questionnaire used consists of three questionnaires, namely the student attitude questionnaire in science subjects, the learning creativity questionnaire and the hard work questionnaire. Questionnaire of students' attitudes towards science subjects adopted by researchers from Astalini and Kurniawan's research (2019). The statements contained in this questionnaire consist of 56 statements, covering 7 indicators, namely: social implications of science, normality of scientists, attitudes towards science investigations, adoption of scientific attitudes, pleasure in learning science, interest in increasing science learning time, and interest in a career in science. This instrument is included in a closed questionnaire which already provides answers using a Likert scale. The Likert scale used consists of 5 choices, namely Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The following is a grid of research instruments on student attitudes in science subjects:

Table 2. Grid of Student Attitude Questionnaire Instruments in Science Subjects

Indicator	**No. Item**	
	(+)	**(-)**
Social Implications of Science	1, 14, 27, 39	7, 20, 32, 45, 53
Attitude Towards Science Investigation	2, 41	9, 22, 34, 47, 55
Adopt Scientific Attitude	3, 26, 28	10, 23, 35, 48
Fun in Learning Science	4, 17, 29	11, 24, 36, 42, 49, 56
Interest in increasing the time to study science	5, 18, 30	12, 25, 37, 43, 50
Interest in a Career in Science	13, 19, 26, 38, 51	6, 31, 44, 52

The category of student attitudes in science subjects is shown in Table 4 with 7 indicators, namely the implications of social attitudes, scientific normality, adoption of scientific attitudes, pleasure in learning science, interest in a career in science and interest in increasing science learning time.

Table 3. Category of student attitudes Science

Category	Interval Indicator		
	Implications of social attitudes from science, pleasure in learning science, and interest in a career in science	Attitude towards inquiry in science and Adoption of scientific attitude	Interest in increasing the time to study science
Very Not Good	9.0 – 16.2	7.0 – 12.6	8.0 – 14.4
Not Good	16.3 – 23.4	12.7 – 18.2	14.5 – 20.8
Enough	23.5 – 30.6	18.3 – 23.8	20.9 – 27.2
Good	30.7 – 37.8	23.9 – 29.4	27.3 – 33.6
Very Good	37.9 – 45.0	29.5 – 35.0	33.7 – 40.0

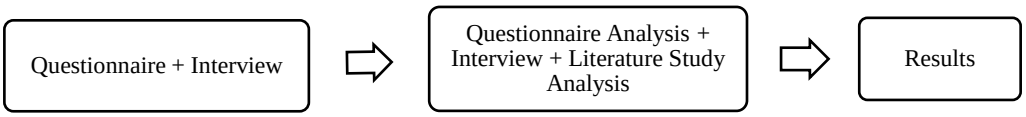
The category of student attitudes in science subjects is shown by 3 indicators, namely the implications of social attitudes, interest in a career in science and interest in increasing science learning time.

In this student attitude variable, data analysis was carried out in the form of descriptive statistical analysis. Descriptive statistics are descriptions or presentations of large numbers in this case in the form of summary frequencies, for example mean, median and mode (Cohen, Manion & Morison. 2007). Furthermore, interview data were used as reinforcement from the results of the descriptive statistical analysis that had been carried out. In collecting data, the first activity that must be done is to select students based on the categories given by the researcher, then provide a questionnaire on student attitudes in science subjects, then conduct interviews and structured literature studies to ensure the quantitative results that have been carried out. Then the questionnaire data was processed using the SPSS application to view descriptive statistics, in the form of mean, median, mode, percentage, and category of students, while for qualitative data using Miles & Huberman,

namely data reduction, data presentation, and drawing conclusions (Miles & Huberman, 1994).

The data needed in research can be collected or obtained from various data sources. The procedures for collecting data in this study are in accordance with the following figure:

Figure 1. Research Procedure



The research procedure in this study is firstly distributing questionnaires, interviews and literature studies, then analysis of interview questionnaires and literature studies is carried out after that the results of the research are obtained.

Results and Disucssion

The results of this descriptive statistical analysis were used to determine the mean, median and mode values as well as to determine the attitudes of junior high school students in Muaro Jambi, Batanghari and Jambi City districts. There are seven indicators studied in this study, namely the indicator of the social implications of science, the indicator of interest in increasing science learning time, the indicator of interest in a career in science, the indicator of the adoption of scientific attitudes, the indicator of the pleasure of learning science, the indicator of the investigation of science; and indicators of scientific instinct. The following are the results of descriptive statistics contained in the following table;

1. Descriptive Statistics of Attitudes indicators of Social Implications of Science

Table 4. Descriptive Statistics of Attitudes Indicators of Social Implications of Natural Science in Muaro Jambi District

	Interval	Total	%	Mean	Median	Modus	Category
Muaro Jambi	9.0 – 16.2	48	2.34	20.67	20	20	Very Not Good
	16.3 – 23.4	243	11.88				Not Good
	23.5 – 30.6	634	31.00				Enough
	30.7 – 37.8	829	40.53				Good
	37.9 – 45.0	291	14.22				Very Good
Batanghari	9.0 – 16.2	48	2.34	20.67	20	20	Very Not Good

	16.3 – 23.4	243	11.88				Not Good
	23.5 – 30.6	634	31.00				Enough
	30.7 – 37.8	829	40.53				Good
	37.9 – 45.0	291	14.22				Very Good
Kota Jambi	9.0 – 16.2	0	0.0	23.35	23	23	Very Not Good
	16.3 – 23.4	73	2.21				Not Good
	23.5 – 30.6	676	20.5				Enough
	30.7 – 37.8	1743	52.86				Good
	37.9 – 45.0	805	24.41				Very Good

Based on the results of the table above, it can be seen that the results of the descriptive analysis of the attitude indicators of the Social Implications of Science in Muaro Jambi Regency from 2,045 students have a mean value of 20.67; the median is 20 and the mode is 20 and shows the dominant category is good with 829 students (40.53%). Analysis of the attitude indicators of the Social Implications of Science in Batanghari Regency from 1,132 students have a mean value of 24.54; the median is 24 and the mode is 24 and shows the dominant category is good with 601 students (53.09%). Analysis of the attitude indicators of the Social Implications of Science in Jambi City from 3,297 students have a mean value of 23.35; the median is 23 and the mode is 23 and shows the dominant category is good with 1743 students (52.86%).

2. Descriptive Statistics Attitude indicator Interest Increase the time to study science

Table 5. Descriptive Statistics Attitude indicator Interest Increasing science learning time in Muaro Jambi Regency

	Interval	Total	%	Mean	Median	Modus	Category
Muaro Jambi	8.0 – 14.4	67	3.27	19.78	19	19	Very Not Good
	14.5 – 20.8	361	17.65				Not Good
	20.9 – 27.2	884	43.22				Enough
	27.3 – 33.6	583	28.50				Good
	33.8 – 40.0	114	5.57				Very Good
Batanghari	8.0 – 14.4	6	0.53	26.75	26	26	Very Not

							Good
	14.5 – 20.8	105	9.27				Not Good
	20.9 – 27.2	375	33.12				Enough
	27.3 – 33.6	509	44.96				Good
	33.9 – 40.0	137	12.1				Very Good
Kota Jambi	8.0 – 14.4	8	0.2	24.75	24	24	Very Not Good
	14.5 – 20.8	112	3.7				Not Good
	20.9 – 27.2	1010	30.63				Enough
	27.3 – 33.6	1597	48.43				Good
	33.7 – 40.0	560	16.9				Very Good

Based on the results of the table above, it can be seen that the results of the descriptive analysis of the attitude indicator Interest in increasing science learning time in Muaro Jambi Regency from 2,045 students have a mean value of 19.78; the median is 19 and the mode is 19 and shows the dominant category is sufficient with 884 students (43.22%). Analysis of the attitude indicator Interest in increasing science learning time in Batanghari Regency from 1,132 students have a mean value of 26.75; the median is 26 and the mode is 26 and shows the dominant category is good with 509 students (44.96%). Analysis of the attitude indicator Interest in increasing science learning time in Jambi City from 3,297 students have a mean value of 24.75; the median is 24 and the mode is 24 and shows the dominant category is good with 1597 students (48.43%).

3. Descriptive Statistics Attitude indicator of interest in a career in science

Table 6. Descriptive Statistics Attitude indicator Interest in a Career in Science in Muaro Jambi Regency

	Interval	Total	%	Mean	Median	Modus	Category
Muaro Jambi	9.0 – 16.2	53	2.59	17.36	17	17	Very Not Good
	16.3 – 23.4	333	16.28				Not Good
	23.5 – 30.6	830	40.58				Enough
	30.7 – 37.8	630	30.80				Good
	37.9 – 45.0	199	9.73				Very Good

Batanghari	9.0 – 16.2	11	0.9	20.56	20	20	Very Not Good
	16.3 – 23.4	84	7.42				Not Good
	23.5 – 30.6	478	42.22				Enough
	30.7 – 37.8	492	43.46				Good
	37.9 – 45.0	127	11.21				Very Good
Kota Jambi	9.0 – 16.2	10	0.3	20.64	20	20	Very Not Good
	16.3 – 23.4	176	5.33				Not Good
	23.5 – 30.6	1401	42.49				Enough
	30.7 – 37.8	1356	41.12				Good
	37.9 – 45.0	354	10.73				Very Good

Based on the results of the table above, it can be seen that the results of the descriptive analysis of the attitude indicators of Career Interest in the Science field in Muaro Jambi Regency of 2,045 students have a mean value of 17.36; the median is 17 and the mode is 17 and shows the dominant category is sufficient with 830 students (40.58%). Analysis of the attitude indicators of Career Interest in the Science field in Batanghari Regency from 1,132 students have a mean value of 20.56; the median is 20 and the mode is 20 and shows the dominant category is good with 492 students (43.46%). Analysis of the attitude indicators of Career Interest in the Science field in Jambi City from 3,297 students have a mean value of 20.64; the median is 20 and the mode is 20 and shows the dominant category is sufficient with 1401 students (42.49%).

4. Descriptive Statistics Attitude indicator Adoption of science scientific attitude

Table 7. Descriptive Statistics Attitude indicators Adoption of scientific attitudes in the field of science in Muaro Jambi Regency

	Interval	Total	%	Mean	Median	Modus	Category
Muaro Jambi	7.0 – 12.6	0	0,0	24.84	25	25	Very Not Good
	12.7 – 18.2	90	3,19				Not Good
	18.3 – 23.8	1080	38,36				Enough
	23.9 – 29.4	1386	49,23				Good
	29.5 –	256	9,09				Very

	35.0						Good
Batanghari	7.0 – 12.6	0	0.0	26.54	27	27	Very Not Good
	12.7 – 18.2	12	4.47				Not Good
	18.3 – 23.8	51	19.02				Enough
	23.9 – 29.4	154	57.46				Good
	29.5 – 35.0	51	19.02				Very Good
Kota Jambi	7.0 – 12.6	0	0.0	31.01	31	31	Very Not Good
	12.7 – 18.2	6	1.24				Not Good
	18.3 – 23.8	180	37.34				Enough
	23.9 – 29.4	238	49.37				Good
	29.5 – 35.0	58	12.03				Very Good

Based on the results of the table above, it can be seen that the results of the descriptive analysis of attitude indicators for the adoption of scientific attitudes in science in Muaro Jambi from 2,815 students had a mean value of 24.84; the median is 25 and the mode is 25 and shows the dominant category is good with 1386 students (49.23%). Analysis of attitude indicators The adoption of scientific attitudes in science in Batanghari from 268 students has a mean value of 26.54; the median is 27 and the mode is 27 and shows the dominant category is good with 154 students (57.46%). Analysis of the attitude indicators of the adoption of scientific attitudes in science in Jambi City from 482 students had a mean value of 31.01; the median is 30 and the mode is 30 and shows the dominant category is good with 238 students (49.37%).

5. Descriptive Statistics Attitude indicator of pleasure in learning science

Table 8. Descriptive Statistics Attitude indicators of pleasure in learning science in Muaro Jambi Regency

	Interval	Total	%	Mean	Median	Modus	Category
Muaro Jambi	9.0 – 16.2	8	0.2	25,67	26	26	Very Not Good
	16.3 – 23.4	106	3.7				Not Good
	23.5 – 30.6	835	29.66				Enough
	30.7 – 37.8	1354	48.09				Good
	37.9 –	512	18.18				Very

	45.0						Good
Batanghari	9.0 – 16.2	6	0.2	23.87	24	24	Very Not Good
	16.3 – 23.4	29	10.82				Not Good
	23.5 – 30.6	116	43.2				Enough
	30.7 – 37.8	81	30.22				Good
	37.9 – 45.0	36	13.43				Very Good
Kota Jambi	9.0 – 16.2	0	0.0	27.85	28	28	Very Not Good
	16.3 – 23.4	16	3.3				Not Good
	23.5 – 30.6	175	36.3				Enough
	30.7 – 37.8	248	51.4				Good
	37.9 – 45.0	48	9.95				Very Good

Based on the results of the table above, it can be seen that the results of the descriptive analysis of the attitude indicators of the Enjoyment of Learning Science in Muaro Jambi from 2,815 students have a mean value of 25.67; the median is 26 and the mode is 26 and shows the dominant category is good with 1354 students (48.09%). Analysis of the attitude indicators of the Enjoyment of Learning Science in Batanghari of 268 students have a mean value of 23.87; the median is 24 and the mode is 24 and shows the dominant category is sufficient with 116 students (43.2%). Analysis of the attitude indicators of the Enjoyment of Learning Science in Jambi City from 482 students have a mean value of 27.85; the median is 28 and the mode is 28 and shows the dominant category is good with 248 students (51.4%).

6. Descriptive Statistics The attitude of the investigation indicator towards science

Table 9. Descriptive Statistics Attitudes of indicators of investigation of IPA in Muaro Jambi Regency

	Interval	Total	%	Mean	Median	Modus	Category
Muaro Jambi	7.0 – 12.6	11	0.3	22,73	23	23	Very Not Good
	12.7 – 18.2	236	8.41				Not Good
	18.3 – 23.8	1409	50.05				Enough
	23.9 – 29.4	998	35.45				Good

	29.5 – 35.0	161	5.7				Very Good
	Interval	Total	%	Mean	Median	Modus	Category
Batanghari	7.0 – 12.6	0	0.0	21.67	22	22	Very Not Good
	12.7 – 18.2	14	5.22				Not Good
	18.3 – 23.8	137	51.11				Enough
	23.9 – 29.4	101	37.68				Good
	29.5 – 35.0	16	5.97				Very Good
	Interval	Total	%	Mean	Median	Modus	Category
Kota Jambi	7.0 – 12.6	0	0.0	32.45	33	32	Very Not Good
	12.7 – 18.2	29	6.01				Not Good
	18.3 – 23.8	36	7.46				Enough
	23.9 – 29.4	192	39.83				Good
	29.5 – 35.0	225	46.68				Very Good

Based on the results of the table above, it can be seen that the results of the descriptive analysis of the attitude of the investigation indicators towards science in Muaro Jambi from 2,815 students have a mean value of 22.73; the median is 23 and the mode is 23 and shows the dominant category is sufficient with 1409 students (50.05%) were categorized as moderate. Analysis of the attitude of the investigation indicators towards science in Batanghari from 268 students have a mean value of 21.67; the median is 22 and the mode is 22 and shows the dominant category is sufficient with 137 students (51.11%). Analysis of the attitude indicators of the investigation of science in Jambi City from 482 students have a mean value of 3.45; the median is 33 and the mode is 32 and shows the dominant category is very good with 225 students (46.68%).

Interviews were conducted as a reinforcement of the results of the descriptive statistical analysis that had been carried out. The following are the results of interviews that have been conducted;

1. In the 2013 curriculum and the revised 2013 curriculum, which includes independent learning, actually wants to humanize humans, but if you look at the reality until now, it still cannot be implemented properly in schools, besides that environmental conditions are good in schools, communities and other parties. parties used by students to become role models, can indirectly provide prevention efforts in the occurrence of moral degradation, character and behavioral attitudes. What do you think of Pak Kyai's point of view, in terms of the religious context, as well as the weaknesses and strengths of all education in the province?

Answer: with the effort in the form of a clash of religious values with the law if too disciplined in upholding religious values can conflict with the rights of the school environment. So the discipline does not dare to be applied to children or students. In addition, the curriculum is very minimal, where the K13 curriculum emphasizes more on character, but when viewed in its implementation which only has 2 hours of lessons per week so that it can cause the character of students, especially in Jambi to be negative, it can be caused by the inability of an institution to support this and the essence of religious education which is only a formality of the curriculum. Actually, science is a positive thing, but when it is conveyed to the brain, this knowledge can be a positive thing or a negative thing depending on the disturbing factor, so in this case a good character or attitude is needed in seeking knowledge. Therefore, if there are children or students who have negative attitudes or morals, it is necessary to handle religious education.

2. Through such conditions, it means whether we really have to overhaul the curriculum or add a workshop for teachers or allow for other solutions that are actually more effective, solutions that are not only instantaneous but directly have an impact that can be short-term or long-term. long term, what is the solution.

Answer: Boarding systems or pesantren can be a solution to build future generations. Education in terms of religion generally can accommodate children who are able, moderate and less. Underprivileged children are subsidized by capable children so that they can jointly guarantee future educational solutions, so that the religious values of Karimah are embedded. Without it there will be a lost generation. Lost his religion, moral spirituality, and aesthetic morals. Muslim families must also make strategies to create conditions that lead to religion. For example, by going to tahfidz lodges in Jambi or integrated Islamic schools. Currently religion is considered a subject no longer sitting on religious values. We often encounter children with low abilities but with good character succeed in the end rather than the other way around.

3. How is the process of assimilation between community behavior patterns to teach children to behave both at school and in the community?

Answer: The value of religion itself cannot be applied 100% in society due to several factors such as ethnic, cultural, and religious differences. This can be tied through the existence of adat which can reach all elements of society. However, what is now a problem is that there are many customs that exist but are not built in the smallest community institutions such as RT etc. It should be when each appointed a customary institution, there must be a person who understands adat. Where this custom itself will later function as a court, if there is something that can be resolved by custom then there is no need for another court. But in reality, nowadays there are often misleading functions of adat, where this is inversely proportional to the fact that adat is taught until higher education. Customary law itself can be said to be clear because many religious values are included in customs, for example, the integration of Islamic law in the form of hadith or the Koran in local regulations. This shows that there are no customary values that conflict with religious values and any religion teaches

about goodness. However, when viewed from the implementation, state law is often enforced differently from customary law which is more familial. What is used in customary values is religious values, so if someone is not civilized, it can be said that the person is not religious.

4. How is science viewed from the standpoint of monotheism?

Answer: In a work by Imam Arazi which explains about the earth and all the planets rotating on their axis according to their respective orbits. The connection between this thing and monotheism is when if Allah mentions that when the orbit is crossed, there will be chaos throughout the planet. That is the relationship with monotheism. Therefore there is a general rule of thinking about God's creation, not thinking about His God. Another example is when you see an object in front of you, is it red, or any other color, how do you see it? To answer this question, there are 3 elements that help the answer. The first is a light, the second is an element of air, and the third is wind. When the three elements become one we can see objects in front of us in physics. Meanwhile, from the side of tassawuf there are two forms, namely more to morals and ethics. people who are aware of physics, are aware of their God so that when we deepen them, we have ethics that will later have something to do with tassawuf. In science there are religious ethics that are included in his life in relation to being aware that we have a responsibility to humans and a responsibility to science and a responsibility to God. until the three responsibilities are combined into us, this is what is called the Sufism framework.

From the results of the analysis above, the researcher then uses the results of interviews that have been conducted with several experts as a supporter of the results of the descriptive analysis of students' attitudes towards science learning. The K13 curriculum emphasizes more on the character of students, but when seen in reality, K13 only has minimal lesson hours each week, causing the character of students, especially in Jambi, to be negative (Ainiyah, 2013; Sumarno, 2016; Purnanto et al, 2020; Mithen et al, 2021). Character education must be the initial foundation in the nation's character education to create a generation that has good character (Cheung et al., 2018; Omer, 2015; Singh, 2019; Mukhliso, 2020). High knowledge without being accompanied by good morals can cause a person to only focus on worldly life. A good school is not based on how much it costs but how much moral value is instilled in students. Therefore, if there are children who have negative attitudes or morals, it is necessary to emphasize religious education.

The first question regarding the initial concept of the interview was conducted on Prof. Hermanto where for the first question which reads "What is the relationship between attitude and religion, namely the law of fiqh". According to Prof. Hermanto's view, natural sciences, especially in student attitudes, study material on religion, in Contemporary Fiqh. Contemporary Fiqh is a contemporary Islamic study that tends to be based on world problems that often occur and in the hereafter (Hasan & Alhabsi, 2011; Elihami, 2020; Nazarudin et al, 2021). Contemporary Fiqh is viewed from the attitude that can be seen from the behavior of students and the sense of responsibility of

students for what they do, for example, there are recommendations for maintaining cleanliness. In fiqh, one of the attitudes that students must take to obey these rules is not to litter. When this is done, students not only have a good attitude but also carry out religious law.

The next question regarding children's attitudes in terms of the culture and religion of the community which reads "How is the assimilation of the assimilation process between community behavior patterns in order to teach children to behave well at school and in the community". According to Prof. Muchtar's view, religious values cannot be applied 100% in society due to ethnic, cultural, and religious differences. This can be maximized by the existence of customs that can reach all elements of society. Some experts argue that the maximum application of religious values does not only complement religious values, but also binds diverse elements of society (Mulyadi, 2016; Wulandari, 2019; Mofidi, 2019; Lu & Wu, 2020). With the existence of these customary values, it can be used to build norms in accordance with religious values in an area. . Where this custom itself will later function as a court, if there is something that can be resolved by custom then there is no need for another court. But in reality, nowadays there are often misleading functions of adat, where this is inversely proportional to the fact that adat is taught until higher education. Customary law itself can be said to be clear because many religious values are included in adat, for example, the integration between Islamic law in the form of hadith or the Koran in regional regulations in certain areas. This shows that there are no customary values that conflict with religious values and any religion teaches about goodness.

The next question reads "How is the social behavior of children with peers and in their environment based on religion which in its application only examines theoretically, not contextually?. According to Prof. Maisa's view, education today is not the same as education in the past. This is in accordance with one hadith which reads "Educate your child because he will not live like your era" (HR Ali Bin Abi Talib). Based on this, an education that discusses children's behavior is very much needed or what is commonly called character education (Hasibuan et al, 2018; Chowdhury, 2018; Youn-Kyoung, 2019). Character education itself has been instilled from an early age in the family environment which is a strong reason for parents to be able to provide strong religious education (Alutu & Adubale, 2020; Melia, 2021; Jhon et al, 2021). In addition to this, another factor that significantly influences the curriculum is the applied curriculum. The curriculum in Indonesia in its application only focuses on theoretical studies and does not maximize its practice (Meganti, 2015; Power et al, 2018; Ilhan, 2021). According to Prof. Maisa's view, ideally the curriculum contains 60% theoretical and the remaining 40% is practical. If this can be carried out optimally, it can produce a young generation who is smart and also has a strong character. This is in accordance with the command in the Qur'an letter An-Nisa verse 9 which reads "Do not leave your child behind you in a weak state".

In this study there is a relationship between attitudes and culture in society. "Culture" comes from Sanskrit, which is the plural form of buddhi which

means "mind" or "reason". The word "culture" is a plural development of "cultivation" which means "power of the mind". Culture contains a very broad understanding, which includes understanding the feelings of a nation that is complex, based on knowledge, belief, art, morals, law, customs (habits), and other traits obtained from community members. Culture is all of the knowledge, attitudes and behavior patterns that are habits owned and inherited by members of a particular society. According to the Big Indonesian Dictionary, the KBBI is defined in two views, namely: first, the results of activities and the creation of the human mind (mind) such as beliefs, arts and customs. Culture is a place to increase one's belief in something they believe in, just as someone believes that worshiping a big tree will bring good luck. The culture is carried out continuously from generations.

The influence of a positive external environment culture on student attitudes in the school environment, one of which is that students have polite behavior towards teachers, friends, and have a good personality. The habit of good attitudes will become a character of students over time. Character can be interpreted as a basic value that builds a person's personality and one of the influencing factors is the environment. A person's character is manifested in the attitude of everyday life. Attitude is a way of thinking for each individual to live and work together, both in the family, community, nation and state environment (Samani and Hariyanto, 2012: 41). A person with good character is an individual who can be responsible for what he does in his daily life. Personal attitude that is not good is that the individual is not responsible for what he does through actions or words. Philips in Mu'in (2012: 160) attitude character is a collection of values leading to a system, which underlies the thoughts and behaviors displayed. In line with this, Abdullah Munir in Astuti (2015: 12) states that the character of an attitude is a pattern, be it thoughts, attitudes, or actions, attached to a person that is very strong and difficult to remove. Attitude is considered as a characteristic, characteristic, style, or characteristic of a person that comes from formations received from the environment, for example, family in childhood, innate from birth (Mu'in, 2012: 160). Phlips in Mu'in (2012: 160) character is a collection of values leading to a system, which underlies the thoughts, attitudes, and behaviors displayed. In line with this, Abdullah Munir in Astuti (2015: 12) states that the character of an attitude is a pattern, both thoughts and actions, attached to a person that is very strong and difficult to remove. Attitude character is considered as a characteristic, characteristic, style, or characteristic of a person originating from formations received from the environment, for example, family in childhood, innate from birth (Mu'in, 2012: 160).

In addition to being viewed from the cultural aspect, this study also includes elements of religion. Religion is an inseparable part of the national education system, its existence is very urgent in the context of realizing national education, especially to form human beings who believe and fear God Almighty. In Law Number 20 of 2003 concerning the National Education System, it is explained that the purpose of national education is to develop the potential of students to become human beings who believe and fear God

Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent and become citizens. democratic, and responsible (Marsigit et al., 2019; Okagbue et al., 2021; Sinaga et al., 2020). In general, religion aims to increase the faith, understanding, appreciation and experience of students about religion, so that they become human beings who believe and fear Allah SWT and have noble character in personal, social, national and state life (Diani et al., 2021; Kristanto et al. al., 2019; Riantoni et al., 2017). Religion is physical and spiritual guidance based on religious laws leading to the formation of the main personality according to religious standards. In another sense, it is often said that the main personality is the term religious personality, namely a personality who has religious values, chooses and decides and acts based on religious values, and is responsible in accordance with the religious values adopted (Buyung & Nirawati, 2010). 2018; Okagbue et al., 2021; Sugianto, 2017). Religion is expected to be able to fortify students from various negative environmental influences, as well as to become social agents (social agents) towards a more civilized society (civil society). However, recently people have begun to question the effectiveness of the implications of applying religious values in the context of forming student attitudes.

The phenomenon in society shows that in general the results of inculcating religious values that affect student attitudes in schools today have not satisfied many parties, and are even considered to have failed. Religion is considered to still seem oriented towards religious teaching that is cognitive and rote in nature, less oriented to aspects of practicing religious teachings (Astalini et al., 2018; Purnomo, 2017; Putra et al., 2019). Among the indicators that are often put forward, that in people's lives, there are still many cases of community actions that are contrary to religious teachings. The existence of violence and violence carried out among youth, students and students is still widely reported in the mass media (Irwanto et al., 2018; Marini et al., 2019; Purnomo, 2017). Likewise immoral behavior, cases of pregnancy out of wedlock and the number of youths involved in drug use which greatly affects students' attitudes while in the school environment, this shows that there is an inadequate appreciation of the values of religious teachings in people's lives. In connection with the above phenomenon, there are several student behaviors that are not in accordance with religious teachings that the researchers found in several literature studies. This is based on the results of a systematic review of the views and influences of religion, especially Islamic religion on students' attitudes that students show behaviors such as often coming to school late (Haenilah et al., 2021; Haeruddin et al., 2020; Riantoni et al. , 2017).

One of the failures and weaknesses of Religion is because in its educational practice, it only pays attention to the cognitive aspect and ignores the affective and conative-volative aspects, namely the willingness and determination to practice the values of religious teachings. As a result, there is a gap between knowledge and practice in everyday life, so that they are unable to form moral individuals, even though the core of religious education is moral education. From here, it is necessary to have a role for religion, especially Islam, which not only emphasizes the knowledge (cognitive) aspect, but more

importantly, Islam is able to provide intensive guidance that affects the psychomotor and affective aspects of students. These three aspects must go hand in hand. In the cognitive aspect, the values of religious teachings are expected to encourage students to develop their intellectual abilities optimally. While the affective aspect, it is hoped that the values of religious teachings can strengthen religious attitudes and behavior. Likewise, the psychomotor aspect is expected to be able to instill religious attachment and skills.

The novelty of this research is that this study examines student attitudes with 6 indicators, namely indicators of social implications of science, indicators of interest in increasing science learning time, indicators of interest in a career in science, indicators of adoption of scientific attitudes, indicators of learning pleasure in science and indicators of investigation into science. This research was conducted in three districts in Jambi Province, namely Muaro Jambi Regency, Batanghari Regency and Jambi City. And this study relates the results of the description of students' attitudes to culture and religion about science lessons. With research on the discussion of science attitudes in terms of cultural and religious aspects, it will improve students' attitudes in monotheism by applying tassawuf to be applied to students, which is expected later that students can have a responsible attitude and increase their responsible attitude towards what they do. This research can also be a reference for science teachers to incorporate cultural and religious aspects into their daily lives in the science learning process.

Conslusion

Based on the results of interviews and data collection that has been carried out and the discussion described above, it can be concluded that students' attitudes towards science have relevance to cultural aspects that exist in their daily life environment and students' attitudes towards science also have a close relationship with religious aspects that adopted by students. The better the student's attitude towards science, the better the cultural behavior and religious character possessed by the student.

References

Abdul Razak, A., Jannah, F., & Saleh, K. (2019). Pengaruh Pembelajaran Pendidikan Agama Islam Terhadap Perilaku Siswa di SMK Kesehatan Samarinda. *El-Buhuth: Borneo Journal of Islamic Studies*, *1*(2), 95–102. https://doi.org/10.21093/el-buhuth.v1i2.1582

Ainiyah, N. (2013). Pembentukan Karakter Melalui Pendidikan Agama Islam. *Jurnal Al-Ulum*, *13*(1), 25–38.

Aryulina, D., & Riyanto, R. (2016). a Problem-Based Learning Model in Biology Education Courses To Develop Inquiry Teaching Competency of Preservice Teachers. *Jurnal Cakrawala Pendidikan*, *1*(1), 47–57. https://doi.org/10.21831/cp.v1i1.8364

Astalini, A., Kurniawan, D. A., & Sumaryanti, S. (2018). Sikap Siswa Terhadap Pelajaran Fisika di SMAN Kabupaten Batanghari. *JIPF (Jurnal Ilmu Pendidikan Fisika)*, *3*(2), 59. https://doi.org/10.26737/jipf.v3i2.694

Astutik, S., Mahardika, I. K., Supeno, Indrawati, & Sugianto, F. (2020). Development of reqol (real quest outdoor learning) learning model to improve critical thinking skills (criticall thinking skill) in physics education. *IOP Conference Series: Earth and Environmental Science*, *485*(1). https://doi.org/10.1088/1755-1315/485/1/012111

Baharun, H., & Zulfaizah. (2018). Revitalisasi pendidikan agama dalam pembentukan karakter peserta didik di madrasah. *Elementary*, *6*(1), 43–62.

Buyung, B., & Nirawati, R. (2018). Pengaruh Karakter Kerja Keras Terhadap Kemampuan Literasi Matematis Siswa Melalui Model Discovery Learning. *JPMI (Jurnal Pendidikan Matematika Indonesia)*, *3*(1), 21. https://doi.org/10.26737/jpmi.v3i1.519

Chatmaneerungcharoen, S. (2019). Improving Thai Science Teachers' TPACK through an Innovative Continuing Professional Development Program. *Journal of Physics: Conference Series*, *1340*(1). https://doi.org/10.1088/1742-6596/1340/1/012017

Cheung, C. H. W., Kennedy, K. J., Leung, C. H., & Hue, M. T. (2018). Religious engagement and attitudes to the role of religion in society: their effect on civic and social values in an Asian context. *British Journal of Religious Education*, *40*(2), 158–168. https://doi.org/10.1080/01416200.2016.1256269

Diani, R., Susanti, A., Lestari, N., Yuberti, Saputri, M., Fujiani, D., & Diani, R. (2021). The influence of connecting, organizing, reflecting, and extending (CORE) learning model toward metacognitive abilities viewed from students' information literacy in physics learning. *IOP Conference Series: Earth and Environmental Science*, *1796*(1). https://doi.org/10.1088/1742-6596/1796/1/012073

Diwangkoro, E., & Soenarto, S. (2020). Development of teaching factory learning models in vocational schools. *Journal of Physics: Conference Series*, *1456*(1). https://doi.org/10.1088/1742-6596/1456/1/012046

Djaelani STIAKIN, Hm. (2013). Peran Pendidikan Agama Islam Dalam Keluarga Dan Masyarakat. *Jurnal Ilmiah WIDYA*, *100*.

González, A., Gallego-sánchez, I., Gavilán-izquierdo, J. M., & Puertas, M. L. (2021). Characterizing Levels of Reasoning in Graph Theory. *EURASIA Journal of Mathematics, Science and Technology Education*, *17*(8), 1–16.

Haenilah, E. Y., Yanzi, H., & Drupadi, R. (2021). The Effect of the Scientific Approach-Based Learning on Problem Solving Skills in Early Childhood: Preliminary Study. *International Journal of Instruction*, *14*(2), 289–304. https://doi.org/10.29333/iji.2021.14217a

Haeruddin, Prasetyo, Z. K., & Supahar. (2020). The development of a metacognition instrument for college students to solve physics problems. *International Journal of Instruction*, *13*(1), 767–782. https://doi.org/10.29333/iji.2020.13149a

Hayu, W. W. R., Permanasari, A., Sumarna, O., & Hendayana, S. (2020). Revitalization of Science Teacher Community to Accelerate Competency Achievement of Science Teacher in Urban Area. *Journal of Physics: Conference Series*, *1521*(4). https://doi.org/10.1088/1742-6596/1521/4/042124

Hobri, Ummah, I. K., Yuliati, N., & Dafik. (2020). The effect of jumping task based on creative problem solving on students' problem solving ability. *International Journal of Instruction*, *13*(1), 387–406. https://doi.org/10.29333/iji.2020.13126a

Hu, Y., Wu, B., & Gu, X. (2017). Learning analysis of K-12 students' online problem solving: a three-stage assessment approach. *Interactive Learning Environments*, *25*(2), 262–279. https://doi.org/10.1080/10494820.2016.1276080

Irwanto, Saputro, A. D., Rohaeti, E., & Prodjosantoso, A. K. (2018). Promoting critical thinking and Problem Solving Skills of Preservice Elementary Teachers through Process-Oriented Guided-Inquiry Learning (POGIL). *International Journal of Instruction*, *11*(4), 777–794. https://doi.org/10.12973/iji.2018.11449a

Kristanto, A., . S., & . G. (2019). Promoting Local Wisdom in International Primary Curriculum Aims to Develop Learners' Problem Solving Skills. *International Journal of Educational Research Review*, 439–447. https://doi.org/10.24331/ijere.573947

Krumphals, I., Hopf, M., & Haagen-Schützenhöfer, C. (2019). Teacher students' beliefs about teaching physics and their teacher education. *Journal of Physics: Conference Series*, *1287*(1). https://doi.org/10.1088/1742-6596/1287/1/012039

Lyesmaya, D., Musthafa, B., & Sunendar, D. (2020). Local wisdom value's-based literacy education learning model in elementary school. *Journal of Physics: Conference Series*, *1470*(1). https://doi.org/10.1088/1742-6596/1470/1/012030

Mahfud, Hermawan, C., Pradana, D. A., & Susanti, H. D. (2020). Developing a Problem-Based Learning Model through E-Learning for Historical Subjects to Enhance Students Learning Outcomes at SMA Negeri 1 Rogojampi. *IOP Conference Series: Earth and Environmental Science*, *485*(1). https://doi.org/10.1088/1755-1315/485/1/012014

Marini, A., Maksum, A., Edwita, E., Satibi, O., & Kaban, S. (2019). School management on the basis of character building in teaching learning process. *Journal of Physics: Conference Series*, *1402*(2), 1–7. https://doi.org/10.1088/1742-6596/1402/2/022067

Marsigit, Retnawati, H., Sugiman, & Ningrum, R. K. (2019). Teachers' Readiness in Implementing Lesson Study. *Journal of Physics: Conference Series*, *1320*(1). https://doi.org/10.1088/1742-6596/1320/1/012079

Marsono. (2019). Pendidikan Karakter Berbasis Nilai Budaya Di Era Milenial. *Institut Hindu Dharma Negeri*, 51–58.

Minarni, B. W., Retnawati, H., & Nugraheni, T. V. T. (2018). Mathematics Teachers' Beliefs and Its Contribution toward Teaching Practice and Student Achievement. *Journal of Physics: Conference Series*, *1097*(1). https://doi.org/10.1088/1742-6596/1097/1/012143

Muali, C. (2017). Rasionalitas Konsepsi Budaya Nusantara Dalam Menggagas Pendidikan Karakter Bangsa Multikultural. *Jurnal Islam Nusantara*, *1*(1), 105. https://doi.org/10.33852/jurnalin.v1i1.64

Muhammad Sulhan. (2018). Pendidikan Karakter Berbasis Budaya Dalam Menghadapi Tantangan Globalisasi. *Visipena Journal*, *9*(1), 159–172. https://doi.org/10.46244/visipena.v9i1.450

Mulyadi. (2016). Agama Dan Pengaruhnya Dalam Kehidupan. *Jurnal Penelitian Dan Pengkajian Ilmu Pendidikan: E-Saintika*, *2*(1), 1. https://ejournal.uinib.ac.id/jurnal/index.php/alawlad/article/view/424

Musengimana, J., Kampire, E., & Ntawiha, P. (2021). Factors Affecting Secondary Schools Students' Attitudes toward Learning Chemistry: A Review of Literature. *Eurasia Journal of Mathematics, Science and Technology Education*, *17*(1), 1–12. https://doi.org/10.29333/ejmste/9379

Nur Rahmy, S., Usodo, B., & Slamet, I. (2019). Students' mathematics learning achievement in junior high school using 7E learning cycle. *Journal of Physics: Conference Series*, *1265*(1). https://doi.org/10.1088/1742-6596/1265/1/012014

Okagbue, H. I., Odetunmibi, O. A., Ezenkwe, A. M., Anene, G. N., Boluwajoko, A. E., Offiah, I. B., & Akinsola, B. E. (2021). Factors affecting the study time of first and final year students of a world class university. *Journal of Physics: Conference Series*, *1734*(1), 0–10. https://doi.org/10.1088/1742-6596/1734/1/012008

Omer, N. (2015). Pentingnya Pendidikan Karakter Dalam Dunia Pendidikan. *Manajer Pendidikan*, *9*(3), 464–468.

Purnomo, Y. (2017). Pengaruh Sikap Siswa pada Pelajaran Matematika dan Kemandirian Belajar Siswa terhadap Prestasi Belajar Matematika. *JKPM (Jurnal Kajian Pendidikan Matematika)*, *2*(1), 93. https://doi.org/10.30998/jkpm.v2i1.1897

Putra, D. S., Lumbantoruan, A., & Samosir, S. C. (2019). Deskripsi Sikap Siswa: Adopsi Sikap Ilmiah, Ketertarikan Memperbanyak Waktu Belajar Fisika dan Ketertarikan Berkarir di Bidang Fisika. *Tarbiyah : Jurnal Ilmiah Kependidikan*, *8*(2), 91. https://doi.org/10.18592/tarbiyah.v8i2.3339

Rahayu, S., Mertha, I. G., Hadi, K. A., Gunawan, G., & Hikmawati, H. (2021). VCD Development of Innovative Character-Based Learning Models as Learning Media in Learning Strategy Courses. *Journal of Physics: Conference Series*, *1779*(1). https://doi.org/10.1088/1742-6596/1779/1/012053

Rao, L. (2021). Reflections on college english translation teaching mode based on network technology. *Journal of Physics: Conference Series*, *1915*(2). https://doi.org/10.1088/1742-6596/1915/2/022076

Rasik, S. (2017). Nilai Akhlak Berbasis Kearifan Lokal. *Al-Bahtsu: Jurnal Penelitian Pendidikan Islam*, *2*(1), 155–170. https://ejournal.iainbengkulu.ac.id/index.php/albahtsu/article/view/318

Riantoni, C., Yuliati, L., Mufti, N., & Nehru, N. (2017). Problem solving approach in electrical energy and power on students as physics teacher candidates. *Jurnal Pendidikan IPA Indonesia*, *6*(1), 55–62. https://doi.org/10.15294/jpii.v6i1.8293

Rohendi, E. (2009). Ajaran Agama dan Pembentukan Kepribadian. *EduHumaniora | Jurnal Pendidikan Dasar Kampus Cibiru*, *1*(1). https://doi.org/10.17509/eh.v1i1.2713

Rukiyati, R., & Purwastuti, L. A. (2016). Model Pendidikan Karakter Berbasis Kearifan Lokal Pada Sekolah Dasar Di Bantul Yogyakarta. *Jurnal Pendidikan Karakter*, *1*, 130–142. https://doi.org/10.21831/jpk.v0i1.10743

Rusmono, R., Sulardi, S., & Suyitno, S. (2018). Influence of learning model and learning motivation to learning outcome of micro hydro power plant. *IOP Conference Series: Materials Science and Engineering*, *434*(1). https://doi.org/10.1088/1757-899X/434/1/012028

Saefi, M., Fauzi, A., Kristiana, E., Adi, W. C., Muchson, M., Setiawan, M. E., Islami, N. N., Fitria Ningrum, D. E. A., Ikhsan, M. A., & Ramadhani, M. (2020). Validating of Knowledge, Attitudes, and Practices Questionnaire for Prevention of COVID-19 infections among Undergraduate Students: A RASCH and Factor Analysis. *Eurasia Journal of Mathematics, Science and Technology Education*, *16*(12), 1–14. https://doi.org/10.29333/ejmste/9352

Saepudin, J. (2019). Pendidikan Agama Islam Pada Sekolah Berbasis Pesantren: Studi Kasus Pada SMP Al Muttaqin Kota Tasikmalaya. *EDUKASI: Jurnal Penelitian Pendidikan Agama Dan Keagamaan*, *17*(2), 172–187. https://doi.org/10.32729/edukasi.v17i2.559

Satria, E., & Widodo, A. (2020). View of teachers and students understanding' of the nature of science at elementary schools in Padang city Indonesia. *Journal of Physics: Conference Series*, *1567*(3). https://doi.org/10.1088/1742-6596/1567/3/032066

Setiawan, A., & Sulistiani, I. R. (2019). Pendidikan Nilai, Budaya Dan Karakter Dalam Pembelajaran Matematika Dasar Pada Sd/Mi. *Elementeris: Jurnal Ilmiah Pendidikan Dasar Islam*, *1*(1), 41. https://doi.org/10.33474/elementeris.v1i1.2767

Sinaga, Z. V. B., Abdul Hamid, K., & Sugiharto. (2020). The influence of learning models and cognitive styles on geography learning outcomes in sma n 2 percut sei tuan.

Journal of Physics: Conference Series, *1485*(1). https://doi.org/10.1088/1742-6596/1485/1/012058

Son, A. L., & Ditasona, C. (2020). CORE RME learning model on improving students' mathematical problem-solving ability. *Journal of Physics: Conference Series*, *1657*(1). https://doi.org/10.1088/1742-6596/1657/1/012060

Sugianto, A. (2017). Teknik permainan balogo dalam layanan bimbingan kelompok untuk meningkatkan karakter kerja keras pada siswa SMP. *Bimbingan Dan Konseling*, 20–28.

Sumarno. (2016). Peranan Guru Pendidikan Agama Islam Dalam Membangun Karakter Peserta Didik. *Jurnal Al Lubab*, *1*(1), 121–147.

Syahputra, M. C. (2020). Pendidikan Multikultural dalam Budaya Nemui Nyimah. *EL-HIKMAH: Jurnal Kajian Dan Penelitian Pendidikan Islam*, *14*(1), 81–97. https://doi.org/10.20414/elhikmah.v14i1.1989

Syamaun, S. (2019). Pengaruh Budaya Terhadap Sikap Dan Perilaku Keberagamaan. *At-Taujih: Bimbingan Dan Konseling Islam*, *2*(2), 81. https://doi.org/10.22373/taujih.v2i2.6490

Tapilouw, M. C., Firman, H., Redjeki, S., & Chandra, D. T. (2018). Science teacher's idea about environmental concepts in science learning as the first step of science teacher training. *Journal of Physics: Conference Series*, *1013*(1). https://doi.org/10.1088/1742-6596/1013/1/012077

Umamah, N., Sumardi, Marjono, & Hartono, F. P. (2020). Teacher Perspective: Innovative, Adaptive, and Responsive Instructional Design Aimed at Life Skills. *IOP Conference Series: Earth and Environmental Science*, *485*(1). https://doi.org/10.1088/1755-1315/485/1/012083

Widjaja, F. I. (2019). Pluralitas Dan Tantangan Misi: Kerangka Konseptual Untuk Pendidikan Agama. *Regula Fidei: Jurnal Pendidikan Agama Kristen*, *4*(1), 1–13.

Wintarti, A., Masriyah, Ekawati, R., & Fiangga, S. (2019). Blended Learning as a Learning Strategy in the Disruptive Era. *Journal of Physics: Conference Series*, *1387*(1). https://doi.org/10.1088/1742-6596/1387/1/012127

Yuliani, H., Ulfah, R. Y., Agustina, E., Al-Huda, A. M., & Qamariah, Z. (2021). Application of generative learning in physics learning. *Journal of Physics: Conference Series*, *1760*(1). https://doi.org/10.1088/1742-6596/1760/1/012018

Zhang, R., Liu, X., Yang, Y., Tripp, J., & Shao, B. Y. (2018). Preservice science teachers' instructional design competence: Characteristics and correlations. *Eurasia Journal of Mathematics, Science and Technology Education*, *14*(3), 1075–1096. https://doi.org/10.12973/ejmste/81553