



Use of Islamic and Local Wisdom Textbook to Train the Religious Character of Prospective Physics Teachers

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Abstract

The research aims to describe the religious character and cognitive competence of physics prospective teachers when they used textbook containing Quranic verses. The Quranic verses were relevant to heat and temperature concept then also relevant to local wisdom of South Kalimantan. The research used to research and development, with the development model of ADDIE. The subjects of this research were 18 students of the 2019/2020 academic year who learned heat and temperature topic in Fundamental of Physics 1 course. The data were obtained through a self-evaluation inventory sheet, observation sheet, and test. The data were analysed quantitatively and qualitatively. The result of the research showed that the religious characters of physics prospective teachers from A1 to A5 domain have average score 4.69 which are in very good category and their cognitive competence of C2 to C6 domain improve quite effectively with average normalised gain 0.68. The conclusion of this research is the textbook can be used to train prospective physics teachers to do religious behaviour.

Keywords: textbook; nuances of Islam; local wisdom; religious character

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INTRODUCTION

Education is not only a conscious effort to foster students to become intelligent gold generations but also an effort to shape them into perfect human beings who have noble character (RI, 2012). The development of noble character, especially religious character needs to be done to maintain the unity of the nation because one of the characteristics of a strong human

resource is to have a religious character (Syahbudin, 2018). So, the lecture is ideally a means of transferring knowledge and values to produce multiple quality graduates, namely professional and moral.

One of the educational value and national character that must be instilled in the student of teacher candidates is a religious value. Hasan, Wahab, Hamka, Kurniawan, Anas, & Nurlaili (2010)

describe religious value as attitude and behaviour that is obedient in carrying out religious teachings they believe. This value must be held tight because Indonesia is a country who believe in God the Almighty.

Lecturers as the heart of higher education are obliged to develop student competencies in both cognitive and effective domains, hard skills and soft skills so that they become competent and dignified human beings. Asyanti (2012) stated that universities must participate in carrying out character education to complete the incomplete character puzzles from the previous education level and to rebuild and reshape the characters. One of the lecturer's efforts in making it happen is by integrating religious value into lectures.

The integration of religious value into lectures should be based on Islamic teachings. Islam, as a perfect religion, holds on to the Qur'an as the basis of character education. The Qur'an is the primary source of reference for character education for every Muslim (Fitri, 2018). Therefore, the religious value taught by lecturers to Muslim students should not contradict with the Qur'an.

The integration of religious value into lectures is not only an effort to carry out character education but also as one of the efforts to unite religious and physical sciences which has been disintegrated so far. Islam has never dictated science into general science (including physics) and religious science because all science comes from Allah SWT. (Anwar & Elfiah, 2019). It comes down to the concept of *tauhid*, that is the *syahadat Lailahailallah* (there is no God but Allah) that has implications for the integration of the two sciences must be rooted in this concept so the two can not be separated (Anwar & Elfiah, 2019). Abidin (2017) emphasised that the two sciences are integral. Furthermore, the integration of the two sciences is the

association of the physics concepts with the relevant verses of the Qur'an and the inclusion of daily prayers that can be practised by students (Pertiwi, 2016; Abidin, 2017).

Physics itself learns about the universe. Allah SWT created the universe. Therefore, the purpose of learning physics is not only to equip students with knowledge but also to invite students to glorify His greatness. (Pertiwi, 2016). Thus, harmony is created between the knowledge dimension and the *ukhrawi* dimension (Latifah & Ratnasari, 2016).

Based on observations made on the Physics Education Department at one of the Islamic universities in South Kalimantan it was known that the textbook of heat and temperature in Fundamental of Physics 1 course lecture still had no religious value. Also, the cognitive abilities of students on this topic were still low. Therefore, innovation in learning is needed to instil religious value while enhancing students' cognitive abilities.

One method that is considered effective in integrating character values, including religious values into physics lectures is by describing these values in textbooks. Winarti (2013) stated textbooks are learning component that is very influential on the learning process. Therefore, lecturers need to innovate in preparing textbooks, so the contents and activities of learning activities in textbooks can develop students' religious character (Winarti, 2013; Purwaningrum, 2015). The lecturer must do this as a form of his involvement in character education, namely as an inspirator, motivator and dynamist so that students can learn the material while learning religious values (Fitri, 2018).

Based on various studies, the integration of religious knowledge into learning gave a positive effect on students. Ihwanudin, Astuti, & Yulianto (2018) stated that textbook that was

equipped with verses of the Qur'an could make learning fun, improved religious character, produced curiosity, and encouraged learning motivation. In addition, integration could enhance critical thinking skills (Purwanto, 2014).

Religious value can also be associated with local wisdom. Uge & Neolaka (2019) stated that the values contained in local knowledge could be used as a guide for students in behaving so that they have good morals. Integrating the character values contained in local wisdom can be done by integrating verses of the Qur'an which are relevant to these characters (Mastuang, Misbah, Yahya, & Mahtari, 2019). Thus, students not only internalise religious values but recognise and appreciate their cultural values. This also has a positive effect on cognitive abilities. Mastuang, Misbah, Yahya, & Mahtari (2019) proved that integration could improve learning outcomes.

There was quite a lot of research and development on making teaching materials containing local wisdom, especially modules. Hartini, Prahesti, Dewantara, & Annur (2019) showed that module containing local wisdom was effective to improve student's knowledge. Misbah, Hirani, Annur, Sulaeman, & Ibrahim (2020) and Wati, Rizka, Misbah, Hartini, & Mahtari (2020) were also showed the same results. But there was still little research and development of teaching materials that combined local wisdom and religious values. So far, there has been little research and development of teaching materials in the form of the textbook for students in university containing local wisdom and religious values. Based on this description, research and development of Islamic and local wisdom textbook on the topic of heat and temperature that can be used by students of prospective physics teacher at the university level must be done.

In previous studies, Fitriah (2013), Fitriah (2018), Fitriah (2019), dan (Fitriah, 2020) has conducted research on the integration of physics and religious sciences in physics learning. However, the four studies have not measured the religious character of students and did not associate local wisdom with the religious values listed in the Qur'an. In this latest research, the textbook is arranged in such a way as to contain the relevance of physics and local wisdom to the verses of the Qur'an and to measure the religious character of students of prospective physics teacher when using this textbook. The aim of this research is to describe the religious character and cognitive competence of physics prospective teachers when they used textbook containing Quranic verses.

METHOD

This research was a research and development with the ADDIE model (Dick, Carey, & Carey, 2001). This model consisted of five stages which can be seen in Table 1 (Welty, 2007; Pribadi, 2016). As for the products being developed were Islamic and local wisdom textbooks. This article only examined the effect of the textbooks used on religious character and students cognitive abilities.

The research was conducted in June 2019 until February 2020. The subjects of this test were 18 students of prospective physics teacher for physics education department at one of the Islamic universities in South Kalimantan that were discussing the topic of heat and temperature in Fundamental of Physics 1 course courses. Data collection techniques in this study were questionnaires, observations, and tests. The research instruments used were in the form of integrated science validation sheets, self-evaluation inventory sheets,

observation sheets, and achievement test (Winarti, 2013).

The self-evaluation inventory sheet and the religious character observation sheet were arranged from the A1 to A5 domain based on Bloom's taxonomy (Anderson & Krathwohl, 2001) and adapted from (Direktorat Pembinaan SMA, 2010). The self-evaluation inventory sheet was used to measure A1 to A4 domain while the observation sheet to A5 domain. Both sheets have been validated by two experts and had a very good level of validity (Widoyoko, 2019). The achievement test consisted of 10 essay questions covering the C2 domain through C6 domain based on the revised Bloom taxonomy (Anderson & Krathwohl, 2001). The ten questions have been validated by two experts and declared valid with minor revisions

based on criteria (Widoyoko, 2019). After being revised according to the suggestions from validators, the questions were used in this research.

The data were analysed quantitatively and qualitatively. The validity of science integration was determined from the average value of assessment of 2 expert validators, which were then categorised based on (Widoyoko, 2019). As for the achievement of students' religious character based on the inventory results of self-evaluation and the observation, results were then categorised based on (Widoyoko, 2019). Furthermore, the improvement of students' cognitive abilities was determined by analysing average normalised gain in each question based on formula and criteria (Hake, 1998).

Table 1 The steps of research and development of the ADDIE model

Step	Activities	Outputs
Analyse	Needs analysis of Physics Education Department, solution proposal based on questionnaire and observation results, and setting goals	Profile of students, choosing an alternative solution that was developing a textbook containing Islamic nuances and local wisdom, and items that would be learnt were about heat and temperature topic
Design	Determination of course learning outcomes, determination of lecture indicators, and selection of learning strategies	Course learning outcomes, lecture indicators, I-CLORE learning model, and assessment instruments that used were integrated science validation sheets, self-evaluation inventory sheets, observation sheets, and achievement test
Development	Development of teaching materials and assessment instruments, expert validation	Textbook prototype and assessment instruments
Implementation	Use of textbook in Fundamental of Physics 1 course lecture	Data from students: observation and questionnaire result
Evaluation	Posttest and textbook revision	Textbook and research report

RESULT AND DISCUSSION

Textbook

The product produced was heat and temperature textbook nuanced in Islam and local wisdom. This book generally consisted of front and back covers, table of contents, chapter

contents, bibliography, and appendices. The chapter contents were divided into five chapters, namely Introduction, Learning 1: Temperature and Expansion, Learning 2: Relationship of Heat with Change in Temperature and Object Form, Learning 3: Black

Principle, and Learning 4: Heat Transfer. The nuances of Islam were reflected in the presence of daily prayers listed in the Introduction, exactly in the Guidelines for Using the Book. The Prayers should be read by lecturers and students before, during and after the lecture. Other Islamic nuances in this book were presented in the column of *Menggali Cakrawala Hikmah Ilmu*

Fisika which explained the verses from the Qur'an that related to heat and temperature concepts so that students will understand the connectedness of physics to religious values (Purwanto, 2014; Winarti, 2015; Pertiwi, 2016; Hamzah, Jumini, & Maulida, 2016). The following was the cover image of the textbook developed.

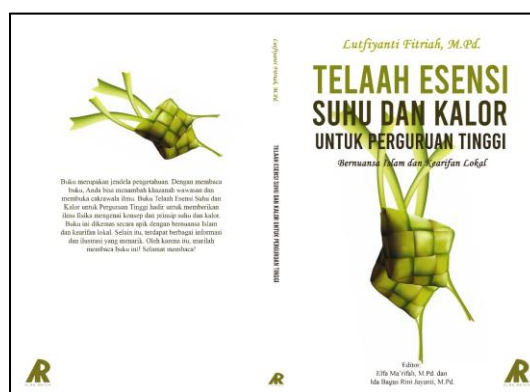


Figure 1 The front and back covers of a textbook

As for the local wisdom contained in this book was the value of the *rakat mufakat* character which is the motto of the Hulu Sungai Selatan district in South Kalimantan which means close unity accompanied by deliberation (Bappeda, 2016). Based on this matter, indicators of the motto were the character values of peace-loving, the spirit of togetherness, democratic, and cooperative (Hasan et al., 2010; Samani & Hariyanto, 2011; Putry, 2018). These four values were following Islamic teachings and were

listed in the Qur'an (Nizhan, 2015; Fidzi, 2016; Jannah, 2017). The relationship between the character of *rakat mufakat* with the verses of the Qur'an was presented in the column of *Menggali Cakrawala Hikmah Rakat Mufakat*. The following Table 2 showed the verses of the Qur'an relating to the concept of heat and temperature and the character of *rakat mufakat*. As for Image 2 showed the parts of the book that nuanced Islam and local wisdom.

Table 2 Verses of the Qur'an that are relevant to the concepts of temperature, heat, and *rakat mufakat* character

Concept	Related verses of the Qur'an
Temperature	Q.S. An-Nahl: 81 dan Q.S. Fatir: 21
Heat	Q.S. Al-Kahfi: 96
Black Principle	Q.S. Asy-Syura: 38
Heat transfer by radiation	Q.S. Al-Qashash: 29
Heat transfer by convection	Q.S. Yunus: 22
Peace-loving	Q.S. Al-Hujurat: 10
Spirit of togetherness	Q.S. Al-Maaidah: 2
Democratic	Q.S. Asy-Syura: 38 dan Q.S. Ali Imran: 159
Cooperative	Q.S. Lukman: 18, Q.S. Al-Hujurat: 13, dan Q.S. Al-Baqarah: 159

Kerjakan soal kuis yang diberikan oleh dosen secara mandiri dan apabila lupa terhadap pelajaran, maka bacalah doa-doa berikut ini: 1) Doa ketika lupa سُبْحَانَ مَنْ لَا يَنَامُ وَلَا يَسْهُوُ Artinya: "Maha Suci Zat yang tidak lupa dan tidak tidur" 2) Doa mohon diberi kecerdasan berpikir اَللّٰهُمَّ اَمِّئْشِيْ رُشْدِيْ وَفِيْ شَرِّ نَفْسِيْ Artinya: "Ya Allah, ilhamkanlah kepadaku kecerdasan dan lindungilah aku dari kejahatan nafsuku." Akhir kegiatan perkuliahan dengan membaca doa sesudah belajar sebagaimana berikut ini: اَللّٰهُمَّ اِنِّ اَسْتَوْدِعُكَ عِلْمًا اَعْلَمْتَنِيْهِ فَاَرْدُدْهُ اِلَيَّ عِنْدَ حَاجَتِيْ اِلَيْهِ وَلَا تُنْسِيْنِيْهِ يَا رَبَّ الْعَالَمِيْنَ Artinya: "Ya Allah, sesungguhnya aku menitipkan kepada Engkau ilmu-ilmu yang telah Engkau ajarkan kepadaku, dan kembalikanlah kepadaku sewaktu aku membutuhkannya kembali dan janganlah Engkau lupakan aku kepada ilmu itu, wahai Tuhan seru sekalian alam."	MENGGALI CAKRAWALA HIKMAH ILMU FISIKA Tahukah Anda bahwa konsep suhu telah dinyatakan Allah swt. di Al-Qur'an? Al-Qur'an telah memberikan gambaran mengenai konsep suhu di dalam beberapa ayat Al-Qur'an yang selanjutnya dari ayat-ayat ini sesungguhnya Allah swt. mengajak manusia untuk berpikir dan bersyukur. Berikut ayat-ayat yang berhubungan dengan konsep suhu. وَاللّٰهُ جَعَلَ لَكُم مِّنْ خَلْقٍ ظَلَلًا وَمَجَلًا لَّكُم مِّنَ الْجِبَالِ اُكْحُلًا وَيَجْعَلُ لَكُم سُرَبًا يَّحْتَثِ الْوُحْيَ وَيَسْرِيْلُ تَقِيْلُكُمْ بِأَسْكُم ۚ كَذٰلِكَ يُمِ يَعْمَتُهُ عَلٰیكُمْ لَعَلَّكُمْ تُسْلِمُوْنَ Arti: "Dan Allah menjadikan bagimu tempat bernaung dari apa yang telah Dia ciptakan, dan Dia jadikan bagimu tempat-tempat tinggal di gunung-gunung, dan Dia jadikan bagimu pakaian yang memelihara kamu dari panas dan pakaian (baju besi) yang memelihara kamu dalam peperangan. Demikianlah Allah menyempurnakan nikmat-Nya atasmu agar kamu berserah diri (kepada-Nya)." (Q.S. An-Nahl: 81) وَلَا الظَّالِمُ وَلَا الْظَّالِمَةُ
MENGGALI CAKRAWALA HIKMAH RAKAT MUFAKAT Pada Pembelajaran 1 dan Pembelajaran 2 Anda telah mengetahui bahwa karakter rakat mufakat memiliki beberapa subkarakter. Subkarakter rakat adalah cinta damai dan semangat kebersamaan. Adapun subkarakter dari mufakat adalah demokratis dan kooperatif. Cakrawala hikmah kali ini menyajikan informasi mengenai karakter demokratis. Selamat membaca! Seseorang dikatakan bersikap demokratis bila: - Mendengar pendapat orang lain. - Memberi kesempatan kepada orang lain untuk berpendapat/bekerja. - Tidak mencela pendapat orang lain. - Menerima nasihat/kritik/saran orang lain. - Mengambil keputusan secara bersama melalui musyawarah. - Bersedia menerima keputusan bersama.	menerintahkan manusia untuk bermusyawarah dalam memutuskan suatu perkara dan berdiskusi dengan cara yang bijaksana dan lemah lembut. Berikut ayat-ayat Al-Qur'an tersebut. وَالَّذِيْنَ اسْتَجَابُوا لِرَبِّهِمْ وَأَقَامُوا الصَّلٰوةَ وَأَمْرُهُمْ شُورَى بَيْنَهُمْ وَمِمَّا رَزَقْنَاهُمْ يُنفِقُوْنَ Arti: "Dan (bagi) orang-orang yang menerima (mematuhi) seruan Tuhannya dan mendirikan shalat, sedang urusan mereka (diputuskan) dengan musyawarah antara mereka; dan mereka menafkahkan sebagian dari rezeki yang Kami berikan kepada mereka." (Q.S. Asy-Syura: 38) فِيْمَا رَحِمْنَا مِنَ الْاٰثَمِ لَنْتَ لَهْم ۖ وَلَوْ كُنْتُمْ قَطًا غٰلِيْظَ الْقَلْبِ لَا تَقْضٰوْا مِنْ حَوْلِكَ فَاَعْتَفْ عَنْهُمْ وَاسْتَغْفِرْ لَهُمْ وَخَاوِزْهُمْ فِيْ الْعَمْرِ فَاِذَا عَزَمْتَ فَتَوَكَّلْ عَلٰى اللّٰهِ اِنَّ اللّٰهَ يُحِبُّ الْمُتَوَكِّلِيْنَ Arti: "Maka berkat rahmat Allah-lah engkau (Muhammad) berlaku lemah lembut terhadap mereka. Sekiranya engkau bersikap keras lagi berhati kasar, tentulah mereka akan menjauhkan diri dari sekitarmu. Karena itu, maafkanlah mereka dan mohonkanlah ampunan untuk mereka, dan bermusyawarahlah dengan mereka dalam urusan itu. Kemudian, apabila engkau telah membulatkan tekad, maka bertawakallah kepada Allah. Sesungguhnya Allah mencintai orang-orang yang bertawakal." (Q.S. Ali Imran: 159)

Figure 2 Introduction which contains daily prayers, *Menggali Cakrawala Hikmah Ilmu Fisika*, and *Menggali Cakrawala Hikmah dan Rakat Mufakat*

There was also a summary of religious value and *rakat mufakat* value shown in Figure 3. Therefore, students knew the essence of the character value that they learnt. Besides, students were

also trained to analyse the relationship between the physics concepts and rakat mufakat character with the verses of Qur'an by doing assignment in the Arena Latih.

ESENSI NILAI PENDIDIKAN BUDAYA DAN KARAKTER BANGSA Cinta Damai: Menciptakan dan memelihara perdamaian dengan menyelesaikan masalah dan konflik, menyukai adanya harmoni dan bebas dari konflik dan gangguan, dan suka akan ketenangan Religius: bersyukur atas segala nikmat, ketenteraman, dan keindahan ciptaan-Nya.	ARENA LATIH Pada kegiatan ini Anda diminta untuk membuat peta konsep hubungan kalor dengan perubahan suhu dan perubahan wujud benda secara berpasangan. Peta konsep tersebut memuat definisi, peristiwa fisika pada proses pembuatan katuput Kandangan, rumus fisika pada proses tersebut, ayat Al-Qur'an, serta nilai pendidikan dan karakter budaya bangsa.
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Figure 3 Summary of character values and *Arena Latih* containing students assignments

The Validation of Religious Character and Physics Integration

Two expert validators obtained the result validations of the integrated physics and *rakat mufakat* character of the verses Qur'an and the daily prayers listed in the textbook. Furthermore, the assessment was averaged and categorised based on a criterion (Widoyoko, 2019). The reliability of the evaluation was determined based on the equation (Trianto, 2010). The results can be seen in Table 3.

Based on Table 3, it was known that the average score of integration validity of physics, *rakat mufakat*, and

religious characters was 3.71 (valid category). It meant that the integration has been appropriated and corrected so that it would be suitable for use in learning (Nurhafizah, Zainuddin, & An'nur, 2015; Ali, Sunarno, & Sukarmin, 2015; Diani & Hartati, 2018). Besides, It was indicated that the textbooks developed were suitable for learning resources on the materials of temperature and the heat (Cahyati & Suseno, 2015; Latifah, 2015). Hence, the textbook developed was a very good quality of science integration so that it can be used in the learning process (Winarti, 2015).

Table 3 The results of integration validity

Indicator	Average
The integration of <i>rakat mufakat</i> characters with the Qur'anic verses	3.50
Integrating physics with Qur'anic verses	3.50
Ability to integrate physics-Qur'anic verses in embedding religious character	3.50
Ability to integrate <i>rakat mufakat</i> characters from the Qur'anic verses in embedding religious character	3.50
The ability of prayers to instil religious character	4.00
Conformity of Qur'anic verses with mutual <i>rakat mufakat</i> character	3.50
Conformity of Qur'anic verses with physical material	3.50
Accuracy of the writing of Qur'anic verses	3.00
Accuracy of the translation of Qur'anic verses	4.00
Suitability of prayers with learning activities	4.00
The accuracy of the writing of prayers	3.50
Accuracy of the translation of prayers	4.50
Easy integration of physics and <i>rakat mufakat</i> character of the Qur'anic verses to understand	4.00
Average	3.71
Reliability (%)	95.83

The Achievement of Religious Character

Achievement of the religious character of prospective physics teachers in 4-

course face meetings can be seen in Table 4.

Table 4 The average achievement of religious characters students

Bloom Taxonomy	Statement	Average
A1. Receiving	A desire to increase knowledge about the integrated physics and the character of <i>rakat mufakat</i> with the verses of the Qur'an	4.67
A2. Responding	Approving the character of the <i>rakat mufakat</i> applied in lectures. Feel happy to read <i>Menggali Hikmah Cakrawala Ilmu Fisika and Rakat Mufakat</i> .	4.24
A3. Valuing	Believing all sciences comes from God Allah SWT.	4.92

	Recognising all physical events and everything in this world is the creation of Allah SWT. Realising all the events of physics occurs in the power and will of Allah SWT.	
A4. Organising	Grateful for all the knowledge that Allah has given. Grateful for all the delights given by Allah SWT. Contemplating the meaning of the Qur'anic verses relating to the physics and <i>rakat mufakat</i> in life.	4.74
A5. Characterising	Answering the lecturer's greeting at the first meeting in the class. Praying before studying Working on quiz independently Praying after studying Answering lecturer's greetings at the end of the class	4.88
	Average	4.69
	Category	Very good

Based on the analysis of the result, it was known that the average of the religious character student was very good with a score of 4.69. This indicated that the textbook developed could train students to have a religious character (Winarti, 2015). The research by Wahyuni, Astuti, & Yulianti (2017) was also proved that the teaching materials equipped with the religious value could improve religious character. The insertion of religious values in the textbook could make students appreciated and believed that everything was a creature by God (Pertiwi, 2016). Thus, the integration of Islamic-physics in the textbook gave a religious attitude of the learning (Khoiri, Agussuryani, & Hartini, 2017).

The verses of the Qur'an were inserted into the material of temperature, heat and local wisdom could be proved that the Qur'an always one step ahead of science, which means the explanations of the Qur'an always a step ahead of modern discoveries (Purwaningrum, 2015). This proved that the Qur'an was indeed the word of Allah SWT. so that students increasingly believe in and fear Him (Diani & Hartati, 2018). Furthermore, the linking of Al-Qur'an verses with the material discussed successfully invited students to know,

understand, and admire His creation (Wahyuni et al., 2017);

Nursulistiyo, Kusumaningtyas, & Puspitasari, 2018).

The integrated science listed in the textbook was one of the efforts to eliminate the dichotomy. After the students learned by using a textbook, they believed that all the sciences, whether physics or religion came from God Allah. Both sciences were not separate or even contradictory parts. Purwaningrum (2015) stated that science which not based on religious knowledge it became wild and destructive. Thus, science and religion should always be side by side. Diani & Hartati (2018) stated that Islam was a religion that is concerned with science (science-friendly). Islam contains multidisciplinary science, complete, integral, and universal (Abidin, 2017).

In the textbook, there was a relation of local wisdom in the form of *rakat mufakat* with Qur'anic verses. Based on the analysis, the character was under Islamic teachings. The integration of consensus and Quranic verses also positively influenced the character of the student. This evidenced by the excellent religious character of students. The research by Mastuang et al. (2019) was also proved that the values of local

wisdom of South Kalimantan following Islamic teachings and both integrations could improve the religious character.

The textbook integrated local wisdom with Islamic teachings. Yusuf (2014) stated that local wisdom needed to be appreciated by Islamic teachings to integrate the universal values of religion and the noble cultural values to produce a characteristic society. Thus, cultural values aligned with religious values and support each other. Religion and culture, in principle both, gave guidance in living life under the will of God Allah (Jamalie, 2014). Yunus (2015) stated that local wisdom following religious values, and it can be used as a way of life.

Enhancement of Cognitive Abilities

Based on the test results are known cognitive enhancement skills of prospective teachers and students for each question as listed in Table 5.

Table 5 showed that students increased cognitive abilities in each cognitive level after learning by using a developed textbook. These results were similar Mardiansyah, Asrizal, & Yulkifli, (2013), Rahmaniati & Supramono (2015), dan Husna, Hasan, Mustafa, Syukri, & Yusrizal (2020) that the teaching materials of Islamic theme effectively improved cognitive ability. This enhancement of cognitive abilities caused by several things

Table 5 The increased cognitive ability of students

No.	Cognitive Level	Indicator	Pretest Average	Posttest Average	N-Gain
1	C2	Describing an object's temperature doesn't depend on the volume of objects	30.57	80.16	0.71
2	C2	Describing the state of the objects experiencing the expansion	6.90	72.03	0.70
3	C3	Using the principle of expansion in solving the problem	35.83	84.44	0.76
4	C6	Create a temperature and time relation graph	3.70	56.30	0.55
5	C2	Conclude the temperature of the object when the object form is changed	10.00	73.52	0.71
6	C4	Analysing the process of changing the form of objects in everyday life	11.44	72.22	0.69
7	C5	Arguing against a heat exchange event	2.41	79.54	0.79
8	C3	Using the Black principle to solve everyday problems	7.04	75.37	0.74
9	C4	Identifying the heat transfer to solve the problem of insulators and conductors	8.44	50.56	0.46
10	C4	Study the rate comparison of the heat transfer by conduction between two objects	3.15	75.19	0.74
Average			11.95	71.93	0.68
Category of Effectivity			Medium		

Firstly, the Islamic textbook could stimulate students to learn actively to understand the material integrally, especially physics and religious sciences (Winarti, 2015). Secondly, the integration of physics and Islamic in the textbook brought about the students'

curiosity so that they had a good regard for learning (Husna et al., 2020). Thirdly, the integration of physics and Islam increased the student's attention because it displayed verses of the Qur'an related to the material discussed so that they motivated to understand and carried

out the learning stages as well (Latifah & Ratnasari, 2016). The greater motivation for learning, the better the achievement of it (Khumaidah & Misbah, 2020). Fourth, students who had a good character could do positive things during their learning process (diligent, eager, and not easy to give up) then the achievement would be increased (Sari & Budhi, 2017). Fifth, the textbook that integrated the verses of the Qur'an attracted interest and help students to study independently and in groups (Umajjah, 2018). Sixth, the textbook that integrated with local wisdom had contextual learning so that students can easily understand the material (Hartini et al., 2018; Mastuang et al., 2019).

CONCLUSION

The textbook that contains Islamic nuances and local wisdom can train students' religious character. Verses of the Qur'an in *Menggali Cakrawala Hikmah Ilmu Fisika* and *Menggali Cakrawala Hikmah Rakat Mufakat*, a summary of character values, and *Arena Latih* can develop religious character. The difficulty of textbook implementation needed much time allocation to make students adapt easily to the textbook. For further research, we can develop other textbooks based on Islam and local wisdom. In addition, it is necessary to conduct a study on the relationship between religious character and cognitive abilities that have not been studied in this study.

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