

Asian Journal of Education and Social Studies

Volume 50, Issue 11, Page 438-448, 2024; Article no.AJESS.113260 ISSN: 2581-6268

Effectiveness and Practicality of Islamic-oriented Cooperative Learning Model in Private and State Islamic Higher Education in South and West Sulawesi, Indonesia

Usman a*, Nurhilallataiyah b, Rafikah Al-Munawwarah a, Munawir a and Ananda Fathur Rahman a

^a UIN Alauddin Makassar, South Sulawesi, Indonesia. ^b Universitas Negeri Makassar, South Sulawesi, Indonesia.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: https://doi.org/10.9734/ajess/2024/v50i111668

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here:

https://www.sdiarticle5.com/review-history/113260

Original Research Article

Received: 28/12/2023 Accepted: 01/03/2024 Published: 30/11/2024

ABSTRACT

Aims: The Islamic-oriented Cooperative Learning Model for Improving Islamic Education Learning Outcomes is based on a number of problems in the praxis of learning Islamic education at the Faculty of Tarbiyah and Teacher Training UIN Alauddin Makassar and STAI DDI Majene, namely student learning outcomes that are not optimal, learning motivation being, learning has not described active, creative and fun learning.

*Corresponding author: Email: anandafathurrahman123@gmail.com;

Cite as: Usman, Nurhilallataiyah, Rafikah Al-Munawwarah, Munawir, and Ananda Fathur Rahman. 2024. "Effectiveness and Practicality of Islamic-Oriented Cooperative Learning Model in Private and State Islamic Higher Education in South and West Sulawesi, Indonesia". Asian Journal of Education and Social Studies 50 (11):438-48. https://doi.org/10.9734/ajess/2024/v50i111668.

Testing the effectiveness and practicality of this model through research activities aims to describe and analyze: (1) the level of effectiveness of applying the Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene; (2) the level of practicality of applying the Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene; and (3) the reality of implementing the Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene.

Methodology: This research is a type of development research that examines the results of developing Islamic-oriented cooperative learning models, which are expected to improve student learning outcomes in Islamic education courses. This research was conducted at the Tarbiyah and Teacher Training Faculties of UIN Alauddin Makassar and STAI DDI Majene. The subjects of this study were 32 Class C English Education Study Program students and 35 Class A Madrasah Ibtidaiyyah Teacher Education Study Program, and 16 STAI DDI students. Data collection methods vii namely: observation, questionnaires and learning achievement tests. Data analysis technique using Percentage of Agreements and Normalized N Gain.

Results: The results of the study show: (1) an analysis of the effectiveness of applying the Islamic-oriented cooperative learning model through the course of Islamic Education at UIN Alauddin and STAI DDI Majene, based on the results of the N Normalized Gain analysis is in the medium category, so that it can be seen as fulfilling the effective requirements in its application through learning Islamic education science; (2) practical analysis of the application of the Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene, based on the results of the Normalized N Gain analysis in the very good category, so that it can be seen as fulfilling practical requirements in its application through learning Islamic education; and (3) the reality of implementing the Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene, is in the very good category.

Conclusion: The implications of this research show: (1) there is an increase in student learning outcomes through Islamic Education courses at UIN Alauddin and STAI DDI Majene; (2) there was a positive response from lecturers and students as the main actors of Islamic-oriented cooperative learning through Islamic Education courses at UIN Alauddin and STAI DDI Majene; and (3) the application of an Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene, which can be used in tertiary institutions, is easy and practical to use. Thus, this model can be used as an alternative choice in learning activities, especially if lecturers or students want to build activeness and success in their learning.

Keywords: Effectiveness; practicality; reality; islamic-oriented cooperative learning; islamic education; Islamic Higher Education.

1. INTRODUCTION

The learning model is a picture of a learning environment that includes a person's behaviour as a lecturer when the model is applied. This model has many uses spanning all areas of and curriculum education, from planning materials to instructional design materials, including multimedia programs (Joyce, Weil and Calhoun (2011: 30). Viewed as a system, learning consists of a number of organized components, including learning objectives, learning materials, learning strategies methods, learning media, class organization, learning evaluation, and learning follow-up. Learning is a process, so learning is a series of lecturer efforts or activities to make students learn. This process is illustrated in the form of preparation, carrying out learning activities, and following up on the learning it manages (Komalasari, 2011, p. 3).

Learning requires basic input (raw input), which is material for the learning experience in the learning-teaching process, with the hope of turning it into output with certain competencies. In addition, the learning process is influenced by environmental factors, which are environmental inputs and instrumental factors as supporting factors (Komalasari, 2011, p. 4).

According to Degeng (2000: 1), learning is seen as an effort to teach students. In this case, implicit learning is an activity of selecting, establishing, and developing methods to achieve the desired learning outcomes. Selection, determination, and development of methods

based on existing learning conditions. This activity is the core of lesson planning.

One of the learning models that has received great attention from educators is the cooperative learning model. This model is not new for teachers and lecturers. Teachers and lecturers have used it for years in laboratory groups, group assignments, discussion groups, etc. However, recent research in the United States and several other countries has created a systematic and practical method of cooperative learning intended to be used as a key element in classroom setting patterns. The effect of applying this method has now been documented and applied to the wider teaching curriculum (Slavin, 2005, p. 9). This model has now been used intensively in every subject of education, from kindergarten to university, with its characteristics.

Islamic Education, as a subject, must be given to all students of the Tarbivah and Teacher Training Faculties of UIN Alauddin and STAI DDI Maiene. This course is a scientific and skills subject for Tarbiyah Faculty students at UIN Alauddin Makassar and at STAI DDI Majene. This course is discussed systemically on the Science of Islamic Education, which is based on the Al-Qur'an and Hadith, the philosophy of Islamic education, the thoughts of Islamic education experts, and the experience of Islamic education. Therefore, with the support of Islamic educational philosophy, Islamic educational thought, and the history of Islamic education in the form of classroom learning, it is hoped that strong and professional Islamic education scholars will be born (UIN Alauddin, 2007: 44).

Learning Islamic Education Sciences at the Faculty of Tarbiyah and Teacher Training UIN Alauddin Makassar feels the need to make innovative efforts to improve the learning system to improve student learning outcomes, such as cognitive, affective, and psychomotor aspects. This is based on the researcher's initial observations, which saw that several students did not meet the passing standards implementing the comprehensive examination for Islamic Education courses. In addition, at the time of the end-of-semester examinations, some students did not achieve a grade of 70 from the passing standard in the course, some even below the standard, namely a score of 20 on a scale of 0 - 100.

Another fact is that almost all lecturers implementing learning Islamic Education carry

out group discussions. In practice, in the discussion, it was found that there were types of students who dominated group discussion activities, even though the purpose of forming group discussions was not dominance but good cooperation to achieve common goals. Likewise, with the learning outcomes of Islamic Education, there has been no concrete effort on the part of students to integrate their Islamic knowledge with practising values based on Islamic values.

Under these conditions, it is necessary to take innovative steps for the learning orientation of Islamic Education by changing the group discussion learning model to an Islamic-oriented cooperative learning model to improve student learning outcomes. This is in line with the basic spirit of the cooperative model, which sees class as a social dynamic based on various races, religions, cultures, ethnicities, and genders. Besides that, classes are made into groups based on student's academic abilities, such as high, medium, and low abilities (Rusman, 2011, pp. 208-209).

The Islamic-oriented cooperative learning model refers to Plomp's development theory, and this model is used as the basis for the development of Islamic-oriented cooperative learning models. In the Plomp model (1997 in Nurdin, 2007:47), the components of the model consist of (1) investigation, (2) design, realization/construction, (4) testing, evaluation and revision, and (5) implementation. Meanwhile, the four characteristics of the developed model generally refer to Arend (2012: 27), namely (1) theoretical rationale that is arranged logically by the developer; (2) runway thoughts about the goals to be achieved in learning; (3) the form of teaching activities needed to support the effective implementation of the model; and (4) the atmosphere of the learning environment that support the achievement of learning objectives.

The syntax of the Islamic-oriented cooperative learning model is (1) motivation and delivery of goals, (2) learning information systems, (3) student organization, (4) construction knowledge, attitudes and skills, (5) evaluation and appreciation (6) stabilization/ reflection/ muhasabah and follow-up. The distinctive feature of this model is halagah activity through the abbreviated as NIAT-SI-HATAM syntax, (nawaitu, iqra', Amanah, ta'awun, salam Islami, hijrah, expert, tabayun, anfa'a, and muhasabah). It is expected that the model Islamic Education leads students to become students who have the hatam predicate (tammat). Students have knowledge, attitudes, and skills in Islamic education (Usman, 2017).

A study looking at the opportunities and positive values of group work as stated by Huda (2012: 5) states that there is a tendency for individuals to work together when they have close relationships with one another and hope to obtain shared goals that are fair. Conversely, an individual who does not cooperate will compete when he rarely communicates with others and only wants to obtain results that can be felt alone. This research shows differences in perceived behaviour for those who like working in groups compared to working individually. Group work makes it easier for people to socialize and is easily accepted by other group members. In contrast, individuals who work alone tend not to care about other people and have difficulty socializing with other people or other groups.

Abdurrahman and Bintoro (2004) suggest that what is meant by cooperative learning is learning that consciously and systematically uses one-on-one interactions, and mutual care between fellow students as an exercise in living in a real society. Based on the background of the problem and previous research above, the research team found a research gap by testing the Islamic-oriented cooperative learning model in several aspects, namely effectiveness, practicality and reality. This study aims to analyze effectiveness and practicality and describe the reality of applying an Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene.

1.1 Cooperative Learning Model

Cooperative Learning Models Cooperative learning models are not new to teachers and lecturers. Teachers and lecturers have used it for years in laboratory groups, group assignments, discussion groups, etc. However, research in the United States and several other countries has created a systematic and practical method of cooperative learning intended to be used as a key element in classroom setting patterns. The effect of applying this method has now been documented and applied to the wider teaching curriculum. This model has now been used intensively in every subject of education, from kindergarten to university, with its characteristics (Slavin, 2005, p. 9).

Cooperative learning is a learning strategy that does not only study the material, but students must learn specific skills to work together to achieve common results. Cooperative learning relies on very prominent social aspects and students are required to be responsible for the success of their group. Cooperative learning as a learning model sees class as a social (group) dynamic that should be appreciated, managed, and carried out by various innovative activities in its management.

Several types of cooperative learning are often used, including Jigsaw cooperative type, GI cooperative type (Group Investigation), structural approach type cooperative (The Structural Approach), and cooperative learning type STAD (Student Teams Achievement Division) (Trianto, 2009, p. 73). The Jigsaw type is designed to increase students' sense of responsibility for their learning as well as for the learning of others. Students not only learn the material provided but must also be prepared to provide and teach it to their group members.

1.2 Learning Theory and Learning Outcomes

Learning theories are very diverse; for example, learning theories based on behaviourists, Piaget and Vygotsky, psychology of power, responses, associations, trial and error, field, gestalt, and others. But what is discussed in this study is only the most influential learning theory in the field of cognition for many years. Cognitive development is one aspect of mental development that aims to separate actual reality from fantasy, explore reality and find its laws, choose realities that are useful in life and determine the real reality behind something that appears.

The learning process will be more successful if it is adjusted to students' cognitive development level. Piaget's learning theory emphasizes the importance of the activities of an active student in constructing knowledge. Only by being active in processing the material and asking questions actively that students master the material better.

Based on the description above, the implication of Piaget's developmental theory in cooperative development is to develop students' knowledge that can be carried out in group activities so that students can learn through discussion and exchange of ideas, ideas and experiences.

According to Sudjana (2009: 22), learning outcomes are students' abilities after learning experiences. Furthermore, Warsito (in the Ministry of National Education, 2006: 125) suggests that the results of learning activities are marked by a relatively permanent positive change in behaviour in the learner. In connection with that opinion, Wahidmurni et al. (2010: 18) explain that a person can be said to have succeeded in learning if he can show a change in himself. These changes include thinking ability, skills, or attitude towards an object.

1.3 Islamic Education

The term science of education is usually associated with two words: paedagogie and paedagogiek. The two words have different meanings; paedagogie means education, 16 while paedagogiek means education (Purwanto. 2009, p. 3). Every science, including education, is formed from several conceptual schemes which are parts or components of the content of science. Education science is a collection of knowledge or concepts that are systematically arranged and has certain scientific methods, contemplates the symptoms of educational actions or a process of assistance given by adults to immature children to reach maturity in order to prepare themselves for a meaningful life (Mudyahardjo, 2004, p. 11).

Education itself, according to Sumanto and Hendyat Soetopo, quoting Crow & Crow's opinion, explained that education is a process of experience that provides understanding, insight and adjustment for a person, which causes it to develop (Sumanto & Hendyat Soetopo, 1982, p. 11). Education is also seen as guidance or leadership consciously by the educator towards the physical and spiritual development of the educated towards the formation of the main personality (Marimba, 1989, p. 12).

Education as a form of human activity in their lives places the foundation and goals of education as fundamental in educational activities. The foundation of education includes: (1) the foundation of religion, which is the most basic foundation of education because the foundation of religion is the foundation created by Allah SWT. The basis of religion is in the form of the word of Allah SWT in the holy book al-Qur'an and al-Hadith in the form of treatises brought by Rasulullah Muhammad SAW to mankind. They contain demands or guidelines for human life to achieve happiness in this world and the

hereafter, and is a mercy for all nature; (2) the foundation of philosophy, is the foundation of education in leading the ideals of universal humanity.

Education aims to prepare the person in a balanced, harmonious, dynamic organic unity to achieve the goals of human life. Philosophy is used in studying educational problems; (3) legal basis underlies all actions of educational activities. In Indonesia, the legal basis for educational activities is as follows: UUDNRI 1945 Article 31 Paragraph 1, which reads, "Every citizen has the right to receive teaching". Paragraph 2 states that "The government seeks and organizes a national teaching system, which is regulated by law", Law Number 20 of 2003 concerning the National Education System, Government Regulation Number 19 of 2005 concerning National Education Standards; (4) socio-cultural basis, socio-cultural is the part of human life that is closest to everyday life. Every human activity is rarely separated from sociocultural elements. Furthermore, what is done, how to do it, and the desired form are elements of a culture. Social refers to the relationship between individuals, between communities, as well as individuals with society; (5) psychological basis, is the basis in terms of viewing students as educational subjects who will develop according to their level of growth and development (Kadir, et al., 2012: 94-97).

Islamic education is very concerned about individual and social arrangements that bring adherents to comprehensively applying Islam. In order for its adherents to be able to bear the mandate desired by Allah, education must be interpreted in detail. Therefore, the source of Islamic education must be the main source of Islam, namely the Koran and the sunnah of the Prophet Muhammad.

One of the advantages of the Qur'an lies in its amazing and unique method so that the educational concept contained therein can create individuals who believe. The Qur'an also provides reasoning satisfaction that is following simplicity and human nature without any element of coercion. Al-Qur'an begins his education with concrete things like rain, plants or lightning. Towards abstract things such as the existence, power and various attributes of God's perfection.

After the Qur'an, Islamic education makes Assunnah the basis and source of its curriculum. Islamic education is the development of the

mind, structuring behaviour, emotional regulation, the relationship between the role of humans and the world and how humans can take advantage of the world to achieve life goals and strive for their realization.

In order to achieve the goals of Islamic education as mentioned above, a philosophical foundation of education is needed that fully departs from the ideals of the Koran about humans. For this reason, Islamic Education must first formulate a philosophical view. From there, we create tools relevant to the philosophical view of Islamic Education and should be worked on collectively.

2. METHODOLOGY

This research is a type of development research in the research methodology; it is termed research and development. Sugiyono (2016: 30) defines the research and development method as a scientific way to research, design, produce and test the validity of the products that have been produced. In this study, the researcher intends to test the development of an Islamic-oriented cooperative learning model in improving student learning outcomes in Islamic Education courses.

This research was conducted at the Tarbiyah and Teacher Training Faculty of UIN Alauddin Makassar, on Jalan H.M. Yasin Limpo No. 36 Somba Opu District, Gowa Rompodong, Regency, South Sulawesi Province and the Tarbivah Department of STAI DDI Maiene which is located on Jalan AP. Pettarani No. 24 Majene District, West Sulawesi Province. The research subjects in this study were 32 students of English Language Education Study Program Class C and 35 students of Class A Madrasah Ibtidaiyyah Teacher Education Study Program, totalling from the Faculty of Tarbiyah and Teacher Training UIN Alauddin Makassar and 16 Tarbiyah Department students from STAI DDI Majene.

Accuracy in determining data collection techniques is one of the conditions for success in research because the quality of a research result depends on the quality of the data obtained. Data collection techniques are methods used by researchers to collect data needed to answer the formulation of problems in research (Arikunto, 1995, p. 134).

The methods used in collecting data in this study, namely observation, learning outcomes test, and

questionnaire. The data analysis technique uses descriptive analysis with the following criteria:

- 1. The effectiveness of the model is aimed at the instructional impact on learning Islamic Education with descriptive statistical analysis, namely pretest and posttest testing and an overview of individual and classical Normalized Gain frequencies; and
- 2. The practicality of the model is analyzed through (a) the implementation of learning in Islamic Education refers to the syntax of an Islamic-oriented cooperative model and the use of model-supporting learning tools using the percentage of agreements formula by Grinnell (1988 in Hobri 2009; Nurdin, 2007), and (b) the response lecturers and students towards the implementation of Islamic-oriented cooperative learning.

Through these two analyses, the research results criteria refer to the completeness formula of learning outcomes, namely ≥75 is considered complete (attaining the Minimum Completeness Criteria (KKM) and ≥ 80% complete classically. The criteria refer to the Normalized N Gain formula (Prabawanto, adaptation of Fitriani, 2013).

$$\langle g_1 \rangle = \frac{S2 - S1}{SMI - S1}$$

Description:

<g>= gain index pretest increase to test (mean test 1 and test II)

SMI = Ideal maximum score of 100

S1 = Test score I

S2 = test score II

Criteria can be seen through the description of Table 1.

Table 1. Interpretation of normalized gain scores

() > 0.7	High	
$0.3 \le () \le 0.7$	Moderate	
() < 0.3	Low	

While the practicality test by looking at the implementation of learning through the results of observer observations with the rating scale as follows:

 $3.5 \le Pr \le 4$ = Very Good $2.5 \le Pr \le 3.5$ = Good

 $1.5 \le Pr < 2.5 = Adequate$ Pr < 1.5 = Poor

Description: Pr= practical.

3. RESULTS AND DISCUSSION

Referring to the formulation of the problem, the results and discussion in this study can be described as follows:

1. The Effectiveness of Implementing an Islamic-Oriented Cooperative Learning Model through Islamic Education Courses at UIN Alauddin and STAI DDI Majene

The effectiveness of applying this model can be seen through student learning outcomes by comparing pretest and posttest scores, which are then analyzed using normalized N Gain. This is in line with the theory put forward by Prabawanto (adapted from Fitriani, 2013); by analyzing the completeness of learning outcomes, namely ≥75 is considered complete (reaching the Minimum Completeness Criteria (KKM) and ≥ 80% complete classically.

Fig. 1 proves that the Islamic-oriented cooperative learning model can improve student learning outcomes through Islamic education courses. This is due to the seriousness of the lecturers and students following the syntax of the model, such as: in the initial activities carried out giving motivation and conveying learning

objectives; this activity has activities, such as learning information, student organizing, construction of knowledge/skills, evaluation and appreciation, and at the end of the learning activities are carried out: reflection/consolidation, muhasabah and providing feedback, and a description of the class atmosphere.

In addition, this application has a social impact, in addition to an academic impact. Social impacts include students and lecturers enthusiastically participating in learning, actively asking and answering questions, training to work together, and so on.

2. The practicality of applying the Islamicoriented Cooperative Learning Model through the Islamic Education Course at UIN Alauddin and STAI DDI Majene

The practicality of applying this model can be seen through the results of observations by observers and the responses of lecturers and students to the implementation of this model. The practicality of the model is analyzed through: (a) the implementation of learning Islamic Education refers to the syntax of an Islamic-oriented cooperative model and the use of model supporting learning tools using the percentage of agreements formula by Grinnell (1988 in Hobri 2009; Nurdin, 2007), and (b) the response of lecturers and students towards implementation of Islamic-oriented cooperative learning.

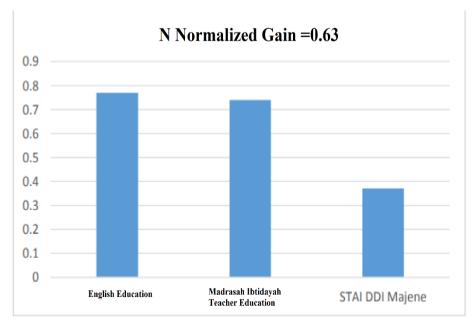


Fig. 1. Value of N normalized gain

In general, practicality can be seen in Fig. 2 below:

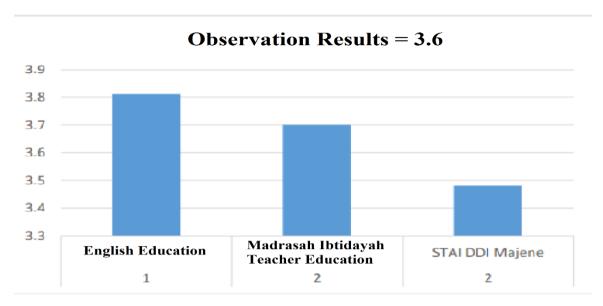


Fig. 2. Observation results by observers

These results illustrate the practicality of implementing the Islamic-oriented cooperative learning model. This is because, due to good cooperation between lecturers and students following all the learning syntax, the model's introduction is carried out first through textbooks divided between lecturers and students.

The observed activities include matters related to the stages of learning, such as the initial activities carried out, giving motivation and conveying learning objectives. This activity contains activities, such as learning information, student organizing, knowledge/skill construction, evaluation and appreciation, and on activities. At the end of the lesson, activities are carried out: reflection/consolidation, muhasabah and providing feedback, and a description of the classroom atmosphere.

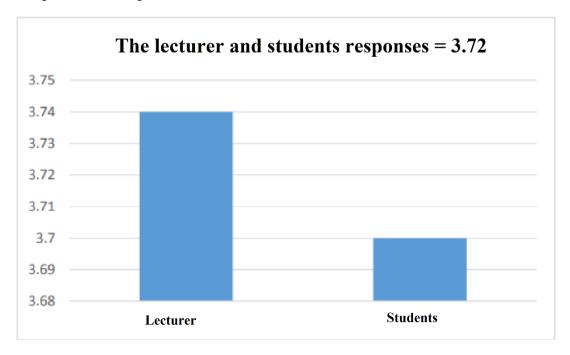


Fig. 3. The responses of the lecturer and students

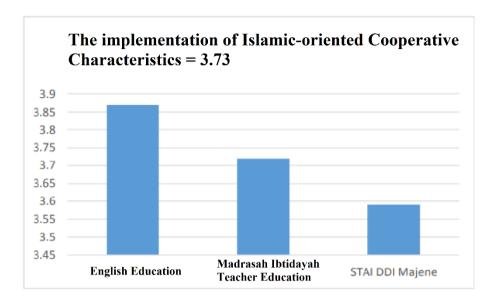


Fig. 4. The reality of Implementation of Islamic-Oriented Cooperative Learning

This picture illustrates the practicality test of applying the Islamic-oriented cooperative learning model. This is because, due to the expertise of lecturers and students participating in all stages of learning, there is cooperation between lecturers students following all learning syntax, which is carried out by introducing the model through textbooks divided between lecturers students (Kusumojanto, 2012).

The lecturer's response is related to the relevance of the material, social construction and learning outcomes, the ease of Islamic-oriented cooperative models, and Islamic cooperative values. While student responses can be seen through 40 (forty) indicators, including having a high willingness to learn, this model is interesting, not boring, easy to do, builds enthusiasm for learning through sincere intentions, and so on (Nur and Dewi, 2001).

3. The Reality of the Implementation of Islamic-Oriented Cooperative Learning Models through Islamic Education Courses at UIN Alauddin and STAI DDI Majene

The reality of implementing the Islamic-oriented cooperative learning model through Islamic education courses can be seen through the implementation of the characteristics of this model, as shown in Fig. 4 (Sugiyono, 2013).

This figure describes the reality of implementing a very good Islamic-oriented cooperative learning model, through 10 main indicators, namely: (1)

intention or commitment to cooperation: (2) reading assignment or igra'; (3) individual and group tasks as mandate and responsibility; (4) interaction in the form of ta'awun (help/cooperation); (5) Islamic greetings as opening activities; (6) movement within the group with the term hijrah; (7) forming a group of experts and concluding; (8) return to the initial group to exchange information in the form of a discussion preceded by the tabayun principle; (9) positive dependency or one's benefit to other people with the term anfa'a; (10) Reflection or muhasabah (The Republic of Indonesia, 2003).

The reality of the implementation is very good. This is supported by the readiness of lecturers and students to follow the learning stages, adequate support for learning tools and facilities, as well as the commitment of very compact teams, especially in responding to learning demands and existing instruments, such as observation sheets, lecturer responses and students, as well as tests of Islamic education learning outcomes (Trianto, 2011).

4. CONCLUSION

Analysis of the effectiveness of applying the Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene, based on the results The normalized N Gain analysis is in the moderate category. Thus it can be seen as fulfilling the effective requirements in its application through learning Islamic education. Based on the results of the Normalized N Gain

analysis, analysis of the practicality of applying the Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene, is in the very good category. Thus, it can be seen as fulfilling practical requirements in its application through learning Islamic education. The reality of applying the Islamic-oriented cooperative learning model through Islamic Education courses at UIN Alauddin and STAI DDI Majene is very good.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative Al technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Abdurrahman and Bintoro (2004) in (Kusumojanto, http://lemlit.um.ac.id/wpcontent/uploads/20 09/07/93.pdf: Accessed, 20 May 2014.
- Arend, R.I. 2012. Learning to Teach. Nine editions. McGraw Hill. Connect Learn Succeed. http://ebookbrowsee.net/ar/arends-r-i-learning-to-teachpdf#. Uti_Js7q oRw. Retrieved 18 August 2014).
- Degeng, I Nyoman Sudana. 2000. Educational Technology, Inter-University Center for the Improvement and Development of Open University Instructional Activities. Jakarta: Depdikbud RI Director General of Higher Education.
- Hobri, (2009). Development Research Methodology (Developmental Research) Applications in Mathematics Education Research. Word Editor: Office 2003.
- Huda, M. (2012). Cooperative Learning: methods, techniques, structures and models of implementation. Yogyakarta: Student Libraries
- Joyce, B., Marsha Weil, E. C. (2011). Models of Teaching: Teaching Models. Yogyakarta: Student Library.ial and Limitation. 8(1), 17–27.

- (http://www.ifets.info/journals/8_1/5.pdf. Accessed 1 March 2013).
- Kadir, Abdul, et al. 2012. Fundamentals of Education. Jakarta: Prenada.
- Komalasari, K. (2011). Contextual Learning: Concepts and Applications. Bandung: Refika Aditama.
- Kusumojanto http://lemlit.um.ac.id/wp-content/uploads/2009/07/93.pdf:
 Accessed, 4 December 2012.
- Marimba, Ahmad D., 1989. Introduction to Islamic Educational Philosophy. Bandung: al-Ma'arif.
- Mudyahardjo, R. (2004). Philosophy of Education, An Introduction. Bandung: Rosdakarya Youth.
- Nur and Dewi, (2001). fkip.uns.ac.id/index.php/bio/article/downloa d/39/27; Accessed, 4 December 2012.
- Nurdin. (2007).Mathematical Learning Models that Grow Metacognitive Ability to Master Teaching Materials. Dissertation, Surabava: State University of Surabava. Graduate program. Mathematics education Study Program
- Purwanto, M. Ngalim. (2009). Theoretical and Practical Science of Education. Bandung: Rosdakarya Youth.
- Rusman. (2011). Learning Models: Developing Teacher Professionalism. Jakarta: Rajawali Press.
- Slavin, R. E. (2005). Cooperative Learning: theory, research and practice. Bandung: NusaMedia.
- Sudjana, N. (2009). Assessment of Teaching and Learning Process Results. Bandung: Rosdakarya Youth.
- Sugiyono, (2013). Educational Research Methods: Quantitative, Qualitative, and R & D Approaches. Bandung: Alfabeta.
- Sumanto, Wasti & Hendyat Soetopo, 1982. Sociology of Education (Jakarta: Rineka Cipta).
- The Republic of Indonesia. 2003. The National Education System Act. Jakarta: Sinar Graphics. -----, 2005. Teacher and Lecturer Law. Jakarta: Sinar Graphics
- Trianto. (2011). Designing an Innovative Progressive Learning Model. Jakarta: Kencana Prenada Group.
- UIN Alauddin Makassar, 2007. 2007 Curriculum.

Usman, (2017). Development of Islamic-oriented Cooperative Learning Models in Islamic Education Courses. PPs: Makassar State University. Wahid Murni, et al., 2010. Learning Evaluation: Competence and Practice. Yogyakarta: Nuha Lettera.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of the publisher and/or the editor(s). This publisher and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

© Copyright (2024): Author(s). The licensee is the journal publisher. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle5.com/review-history/113260