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## Enhancing Teachers' Competence in the Learning of Fiqih Mawaris through the Collaboration of Conventional and Modern Media At-Tashil Digital Application at Balai Diklat Keagamaan Aceh

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### Abstract

Problems in today's learning includes the low competence of teachers in the use of media for teaching and learning. Among the weaknesses of teachers is the lack of the ability in using the media in learning fiqih mawaris. Many teachers still use conventional media such as markers, board and paper. This affects on the low level of students' ability on the subject of fiqih mawaris. This study aims to understand the competence of teachers in teaching and learning fiqih mawaris through the collaboration of conventional media and digital media (the application of At-Tashil) at the training center of Balai Diklat Keagamaan (BDK) Aceh. This study adopts qualitative approaches. Data were collected through interviews, the study of documents and observations, while collected data were analyzed through data reduction, presentation of data and the withdrawal of conclusion. The results show that teachers' competence on subjects of the fiqih mawaris was improved through the process of collaboration between conventional media and modern media of At-Tashil application.

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*Keywords:* teachers' competence in fiqh mawaris, conventional media, modern media, At-Tashil digital application

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## Introduction

### A. Background

Teachers' competence is paramount in ensuring the success of teaching and learning process. One of the many competences that should be owned by teachers is professional competence. Professional competence is the mastery of the learning substance that covers understanding the curriculum, the subjects, methodology and methods, and the media. This competence is believed can be obtained through training and education [1].

The academic qualification and teacher competency standards are governed by the Ministry of Na-

tional Education (Permendiknas) Regulation No. 16 of 2017. Competence that must be mastered and applied by professional teachers in teaching students in the class according to Sudjana as cited in Abdul Hadith and Nurhayati [2] include: mastering material or material subject, managing classroom, using media and learning resources, organizing the process, managing classroom interactions, and assessing student learning achievements. Teachers as learning managers are required to have competence in the planning, implementation, and evaluation of learning. In this case, Noeng Muhadjir as quoted by Siswoyo [3] stated that a teacher can be seen as a professional educator when they: (1) have more

knowledge, (2) catalyze the value in that knowledge and (3) and are willing to transfer their knowledge and values to their students.

The fast changing of the technology and information that have penetrated into all sectors of public life demands that a teacher has the ability to master the technology. In this modern era, where the learning process is considered as easier to do as access to the learning media is much easier than that of before. This has demanded teachers to be able to provide the best education services to students. In this case, teachers must have the ability to manage the teaching and learning process and the ability to communicate and interact well with the class. According to Siswoyo, the media as a tool in the learning process develops so rapidly according to the advancement of technology. The variety of teaching and learning is massive that can be utilized by today's teachers according to the condition, time, funds, or material to be delivered in the teaching and learning process. In this case, learning media has contributed to the improvement of the quantity and the quality of learning. The availability of the media in the learning activities in the classroom, is not only making it easier for teachers to convey their teaching materials, but also to provide added value to the learning activities [4].

In the reality, not all teachers especially those teaching Fiqh mawaris subjects have adequate competence in implementing varied and interesting strategies and learning methods, causing boredom among the learners. This might be one of the reasons why many students are not interested in learning the Fiqh Mawaris lesson, considering the material is somewhat complicated and more about the calculation of the numbers. In fact, the science of fiqh mawaris is an obligatory or fardhu kifayah. In addition, learning resources and learning media that are used by teachers in teaching the science of fiqh mawaris is minimal, namely educators still use conventional media or traditional media. Teachers are still using blackboards, textbooks, paper, markers and calculators. So that it can be said that the teacher still has limitations in utilizing media, facilities and resources. In light of this, teachers who teach the science of fiqh mawaris should be able to use other learning resources such as using modern teaching and learning media including changing the patterns, strategies, methods of teaching and learning.

More specifically, teachers need to implement when conducting the Fiqh-Mawaris learning process are teachers should implement various teaching and learning methods. It is very important in relation to the Fiqh Mawaris since this science is considered as difficult by learners to understand. Combining conventional media/manuals with modern/digital media is seen as crucial. One of the modern or digital

media in the process of teaching and learning Fiqh Mawaris is known as At-Tashil application. At-Tashil is a software to calculate inheritance based on Islamic sharia.

The combination of conventional media and modern digital At-Tashil can help learners learn complex material more easily especially for the Aliyah students (senior high school students) as they have already had the ability to think logically. In addition, the presentation of the material with the interaction of learners can also increase the motivation of students to learn the science of Mawaris. In addition, the combination of conventional media and the modern media of the At-Tashil digital application as the author has applied when carrying out the teaching of the Aliyah teachers in one training session at BDK Aceh showed the increase of teacher participants' passion in the learning of the material of Fiqh Mawaris and their knowledge and skills also improved as the training session ended. Therefore, the researcher is interested in looking at the implementation of the combination of conventional media with the modern media digital application At-Tashil in the process of teaching and learning Fiqh Mawaris during the training more seriously.

#### *B. Problem Identification*

Based on the explanation above, several problems can be identified as follows:

1. There are still many trainees who did not fully understand the issues related to inheritance.
2. Faraid science including Fiqh Mawaris is one area that is difficult to teach in classrooms because the material is complex.
3. The media used by teachers in learning the science of mawaris is still conventional or manual media.
4. Teachers lacked competence in using modern or digital media in the learning process.

#### *C. Research Questions*

The research was carried out based on the following research questions:

1. What competence should teachers master in using the media of teaching and learning the science of mawaris or Islamic jurisprudence?
2. How is the teacher's competence in collaborating conventional or manual media with the modern media of digital applications At-Tashil in the learning of Islamic jurisprudence?

#### *D. Research Objectives*

1. To know the competency of teachers in the use of media for teaching the science of Fiqh Mawaris.
2. To know the competency of teachers in collaborating the conventional media with modern media digital application At-Tashil towards the process of teaching and learning Fiqh Mawaris.

#### E. Research Benefits

Some of the benefits gained through the results of this study are:

1. Increase of learners' interest and achievement in learning the Fiqh Mawaris.
2. It serves as a means for improving teachers' competence in using learning media and being able to collaborate conventional media with modern media digital application At-Tashil to the fiqh of Mawaris.
3. Increase knowledge related to the criteria of selection and utilization of media-based on learning technology.

#### F. Scope of the Study

The scope of this study is as follows:

1. Learning interests of Fiqh Mawaris among learners is low.
2. In the process of teaching fiqh Mawaris, teachers in general still rely on conventional or manual media.
3. The competency of teachers in using At-Tashil digital media in the process of learning Fiqh Mawaris is still low.

#### G. Reviews of Previous Research

To avoid plagiarism in this study, the author cited several previous research relating to the competency of teachers using the media, as follows :

1. Research conducted by Niken Krysdianawati-2012 with the title of his research "relationship of competency of teachers and effectiveness of Media use of learning to study achievement in the field of ICT SMKN Se-Regency of Ponorogo". The results concluded that there was a significant link between the competency of the teachers and effective use of learning media [5].
2. Research by Dian Rosdiana, the impact of teacher competence and commitment to the effectiveness of the learning process and its

implications on student learning outcomes in economic subjects. The result was that: Student learning results, the effectiveness of learning process, teacher competence and the commitment to teaching high school economics teachers in Tasikmalaya city belong to the high category, and there is the influence of teachers competency and commitment towards the teaching and the results of students' learning [6].

## Methods

This research was conducted at the Balai Diklat Keagamaan Aceh (BDK Aceh) or education and training centre for religious affairs of Aceh province. The research was carried out through three phases, namely 1) the stages of research preparation that includes preliminary studies, conducting observations and interviews with several respondents; 2) Stages of the research implementation include a direct interview with the respondent related to the competence of the teacher or training participants in using the media learning when performing the task of discussion of the case of Mawaris; and 3) the stage of drawing conclusions based on the research questions and to achieve the research objectives.

The data collection techniques are documentation, observations and interviews. The respondents of this study were teachers of Fiqh Madrasah Aliyah training participants at the BDK Aceh, with a sample of 5 teachers of fiqh. The 5 respondents were interviewed and observed in relation to their competencies in using learning media in the area of Mawaris. The reason to choose these fiqh teachers trainees as the subjects in this study is that they are directly involved in learning practice of the Mawaris in the real classroom.

The method used in this research involved library research and field research with discrete-analytical research. Therefore, collected data is analyzed by the deductive-inductive method.

## Results and Discussion

The results of this research are gained from the result of analyzing all information obtained from document, observations and interviews supported by literature reviews. Based on the results of data analysis, the competency of teachers in the collaboration of conventional media manual and modern digital media At-Tashil in the study of Fiqh Mawaris at BDK Aceh can be described as follows.

*The competency of Islamic teachers in the use learning media for Fiqh Mawaris*

The science of Mawaris or Faraidz is one of the topics discussed and taught to participants in Islamic Education. Fiqh Mawaris education and training are included in the aspect of Fiqh, because what is learned is about the law of Mawaris. Based on the curriculum of the Ministry of Religion Training Center of the Republic of Indonesia under the Research and Development Agency, the standard of competency and basic competencies expected in the topic of the discussion is as follows Table 1.

Table 1: Discussion topics of mawaris.

Standard	Compe- tency	Basic Competency
Understanding Islamic law about Waris	about	Explaining the legal provisions of Waris  Explaining the implementation of inheritance law

From the standards of competence and basic competencies, the material that must be mastered by training participants include: a). Terms of inheritance division, b). Heirs, c). Matters that cancel inheritance, and d). Inheritance calculation. The development of the learning media in this study adapted to the prevailing curriculum, as expressed in the competency standards, basic competencies, as well as the material to be mastered by the teacher. And these materials were taught by the Widyaiswara or trainers at BDK Aceh.

The author himself is one of the trainers at BDK Aceh who delivered the subject called Fiqih Mawaris. He certainly monitored all learning activities during the training session. In the process of learning this material, whose duration was about 9 teaching hours, covered the theories and concepts, in which the author explained it through the method of lectures, class discussions, questions and answers and brainstorming. It also covers the materials related to using the media of both conventional media/manual and modern media. After the author had presented a theory of about 3 hours of study, the learning activities were continued with group discussion and work.

For the task of the group work and discussion, the authors gave assignments to the training participants/teachers in the form of case resolution questions. The goal of a Mawaris or Faraidz case given was that the authors was interested in understanding the extent of the teacher trainees' competence and skills in using the learning media. From the authors' observations towards the participants' activities in the discussion process were that some manual/conventional learning media were still used by the training participants when doing the task given.

They were as presented in Table 2.

Table 2: Media used by trainees/teachers in learning activities the Fiqh of Mawaris.

No	Conventional Media	Digital App
1	Pen	-
2	A4 paper	-
3	Calculator	-
4	Plano paper	-
5	Writing books and note-books	-

Table 2 shows that in the implementation of Fiqh Mawaris learning, generally the participants still used the conventional learning Media. None of the participants in training were using modern media/manual to help them complete the given tasks.

Data suggest that not all teachers were able to use the media that are suitable for teaching the Mawaris topic although they understand the importance of the use of appropriate media such as modern technology in teaching especially in improving students' motivation and achievements. It is believed that teachers need to be assisted with the use of modern media so that they can utilize the technology as the medium of instruction in teaching especially in teaching Mawaris.

The collected data provide evidence that teacher trainees did not use available media in BDK Aceh such as in-focus, internet, computers and other digital technology based media during the training. They seemed to prefer conventional media such as paper, flip chart, or whiteboard to modern media. On this matter, one of the participants said that: "The media we use are only whiteboards, books, papers, pens and markers, because we are not familiar yet with other media such as digital or technology based media. We still believe that manual calculating by writing the formula such as on the board and on note books is sufficient enough to calculate the Faraid. What the teacher trainee had said was evident during the training in which most trainees pens, simple calculators, markers, and erasers when they were assigned to complete tasks given.

Based on the description of the interview with several participants in the training and observations in the learning process, it can be concluded that the learning media used by the training participants is still in the form of traditional media, namely Student package, Teacher Handbook, Whiteboard, markers, pens and erasers, not modern digital media.

*Competency of training participants/teachers using modern facilities available as learning media of Fiqih Mawaris*

During the implementation of the learning process in the classroom, especially during the discussion of group assignments, the authors conducted interviews and observations related to the ability of training participants using modern media to solve the case of the science of Mawaris. The observations of the authors are summarized in Table 3.

Table 3: Teachers' respond in using modern (digital application) media in the Fiqh of Mawaris learning.

No	Often	Rarely	Never
1	2	3	5
2	-	-	-

Table 3 tells us that from ten respondents, five respondents whose initials were MH, ZN, AH, AB, MJ never used digital media, and three respondents; KM, MT, TB rarely used modern media, while two other respondents are SK and MH have used modern media as a media learning.

*Media suitability that teachers use with learning objectives*

It can be understood from the the interviews with 10 respondents that teachers were still unable to use modern media. One of the respondents said, "I believed that we have not used appropriate media in teaching. This is because we have limited knowledge ad skills in using the media".

Furthermore, based on the observation result in each group of respondents, it is found that 6 teachers whose initials are AH, AB, MJ, MH, ZN and KM were yet to use appropriate media with the aim of the learning as mandated in the curriculum. Three respondents MT, TB and and SK have used the media according to the purpose of learning although only sometimes and only one respondent MH who often used modern digital media.

Based on the results of observation and interviews with some respondents related to the competency of teachers using learning media in the study of Fiqh Mawaris, it is understood that teachers in general still used the manual or conventional media either when Implement the teaching process with the students in the school and during the discussions in the classroom.

*Accuracy of modern digital media used with Fiqh Mawaris learning materials*

The results of the observation in each discussion group suggest that two teachers whose initials are SK, MH, KM, MT, TB, ZN, AH, AB, and MJ have not been precise in using the media in accordance with the learning materials of the science of Mawaris. One respondent HL seemed to be able to adjust his teaching with using the media

appropriate with learning objective.

*The competency of teachers in the collaboration of conventional media/manual and modern media/digital software At-Tashil to the management of Fiqh Mawaris.*

The ability of teachers to collaborate various media in learning is crucial. In practice the implementation of the inheritance of intangible assets often encountered cases of excess or shortage of property, when settled according to the provisions of Furud al-Muqaddarah. Excess occurs when the beneficiary's heir is ' Asabah. While lack of property, because of the many heirs that accept the part. This can certainly lead to problems in its completion. For that required medium or precise calculation tools. One of the most important things for teachers in using learning media is the need for teachers to collaborate between manual conventional media and modern digital media.

To find the answer on how the education of Fiqh Mawaris in terms of the collaboration between conventional and modern media learning media, the author has conducted interviews with several teachers. One of the teachers who was interviewed said that "Basically we have not been able to use modern media in the Fiqh learning. We are very impressed and this training surely improves our insights and knowledge in using digital media in teaching and learning the scince of Mawaris and Tashil".

Then the authors also observed directly at the research site during the study in group B that when the principles of jurisprudence is held in the classroom occupied with a LCD projectors, some participants have used a Mawaris application tool. However, there are also some participants who still used books, pens and simple calculators.

From the interviews and observations, it can be concluded that in the training participants of Fiqh Mawaris have shown good progress in applying the collaboration of manual learning media with modern application media At-Tashil application. It means that they start using modern media as a tool in learning to share the inheritance of the At-Tashil application. They used laptop, HP Android as well as conventional media in the form of books, whiteboards, pens, paper markers, and erasers in learning in class. In this case, At-Tas-Hil is an application of an inheritance counter based on Islamic sharia. This application is made to help Muslims in calculating the inheritance based on Al-Quran and As-Sunnah. The software developed by Kaisan Soft with Python language is made to facilitate the Muslims to apply one of the Islamic laws, namely the division of the inheritance according to the sharia that has been much abandoned at this time. In the implementation of Guru Madrasah Aliyah training at BDK Aceh on the Fiqh Mawaris material, the

author directed the training participants to use a very simple modern media, At-Tashil application. The calculation of the inheritance with At Tashil can now be done anywhere online. This at-Tashil counter software is a software created by a team of programmers who are committed to uphold Islam, namely the team of Kaisan Soft.

Here is the application of the software, as you can note in Figure 1. First, enter the details of the number of the heirs on the available boxes.

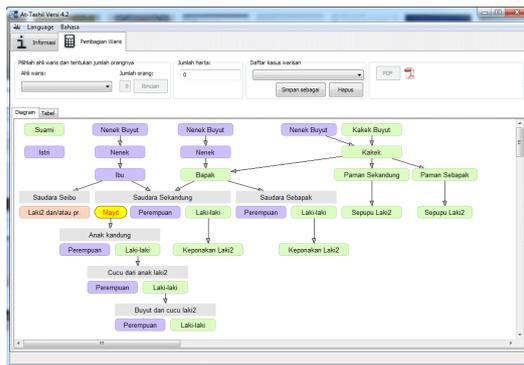


Figure 1: At-Tashil heritage calculate software application.

After entering all these parameters, move to the tab with the title "table". There will automatically show the calculation of the rights of each party's inheritance as described in Shari'ah Islam, as shown in Figure 2.

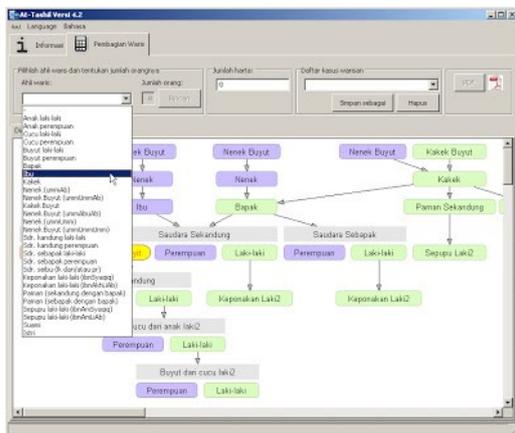


Figure 2: Additional applications of At-Tashil heritage calculate software.

Muqoddimah Menu. Introduction Menu contains the introduction given by the developer along with a brief explanation of the features contained in this application At Tashil. In addition, this menu also includes information about the features that will be developed in the next version along with other technical aspects.

Inheritance Menu. Inheritance menu is the main menu in this application At-Tashil. In this menu

users can do the calculation of the number of heirs that Insha Allah according to the Qur'an and Sunnah. This Menu is used to include the list and the number of surviving heirs along with the total amount of assets inherited in the provided column. Once the user presses the Count button, the application will automatically calculate the inheritance and display the result in the specified columns. This Menu has 8 main columns, the heirs, number of people, sections, stocks, TASHIH shares, group inheritance, Perorang inheritance, and description.

Inheritance Menu. In the summary menu of this heir, the user can see the inheritance laws mentioned in the Qur'an surah An-Nissa verses 11, 12 and 176.

Settings Menu. The last menu on the application At Tashil is the Settings Menu. In this menu, users can make arrangements about which columns will be displayed in the inheritance calculation on the Inheritance Menu.

*How to study Fiqh Mawaris for the use of Islamic learning media*

After the authors analyze the observation results and also the interviews data about teachers' competence using the media of Mawaris learning of jurisprudence during the process learning in the classroom, generally the teachers possess minimum knowledge about the learning media that makes it easier for them to solve the case of faraid. In light of this, they still used conventional media such as: pens, paper, books, whiteboards, markers, erasers.

Thus the authors conclude that using the media as a tool in the process of learning Fiqh Mawaris is very important in the educational world, both formal and non-formal education. It needs necessary competence for the teachers in using the appropriate media, which in this case is the Fiqh teachers at the level of Madrasah Aliyah. The competence of teachers of Fiqh Mawaris who are still lacking in using modern learning media need to be improved by learning IT.

*Competency analysis of teachers in the collaboration of conventional media/manual and modern media/digital software At-Tashil at the fiqh of Mawaris*

Based on the results of the interview and observation during the teacher training especially in the Islamic jurisprudence topic, it can be explained that teachers' ability to collaborate conventional media/manual and modern media/digital Software At-Tashil At the Fiqh Mawaris' management is still minimal. It is seen when the authors gave a learning activity in the form of group discussions by giving some problems to be solved. In this case they have not been able to use the modern application At-Tashil well. Generally, they still used conventional or manual media such as books, paper, pens and

simple calculators. But in the same meeting, after the author explained the advantages of modern media digital applications At-Tashil as a calculation tool and the use of the application procedures, teachers' interests, passion and motivation were increased on the science of Mawaris. In addition, their competencies are also enhance in using the modern media.

The author encouraged the trainees to use the collaborates conventional media with modern media digital applications At-Tashil. Sometimes the author directed the participants to use conventional media when dealing with the case of a mild problem, but when dealing with the problem of severe cases then the author directed the trainees to use modern media digital applications At-Tashil. This is intended to encouraged the trainees to use the collaboration of conventional and modern media in teaching and learning Mawaris and they will not forget the media later.

## Conclusion

Competency of teachers/trainees in using Mawaris learning media is still minimal. In the learning process at Balai Diklat Keagamaan Aceh, the average teachers still use conventional/digital media such as: pens, paper, books, whiteboards, markers, erasers. While their understanding of the modern media digital applications At-Tashil science counter is still low, considering the average age of training participants has entered the age of 50 years and above so that their mastery of the IT world is still low.

The ability of teachers in the collaboration of conventional media/manual and modern media/digital Safware At-Tashil to the management of Fiqh Mawaris is still minimal, this is seen when the author gives a learning activity in the form of discussion Group by giving some case problem turns out they have not been able to use the modern application At-Tashil well. Considering those new averages on this training bench receive and study the digital media. After the authors explain the advan-

tages of modern media digital application At-Tashil Science counter and the application procedures use it already shows that their interests, passion and motivation are increasingly excited about solving the case The science of Mawaris. In addition, their competencies are also embedded using the modern media.

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