KOSIM

by Abas Hidayat

The effectiveness of I-Waris application to increase inheritance understanding based on Islamic law

Abstract

One of the important parts that need to be taught by Muslims to organize their lives according to the Al-Qur'an is inheritance. Studying inheritance based on Islamic law is not easy. Some students reacted that learning about inheritance was confusing. However, advances in technology require humans to develop. With the impact of technological advances, humans can create I-Waris as one of the inheritance learning solutions. This study aims to analyze the effectiveness of the application of I-Waris in increasing the understanding of inheritance based on Islamic law. This research method is pre-experimental. The sample consisted of 38 students majoring in Constitutional Law (HTN), odd semester of the 2021-2022 academic year, IAIN Syekh Nurjati Cirebon, Indonesia. Analysis of the effectiveness of the I-Waris application was measured using the N-Gain value. The results of this study indicate that the I-Waris application is effective in increasing Islamic-based understanding of inheritance. In addition, it motivates students' learning enthusiasm.

Keywords: Inheritance; Islamic Law; Understanding; I-Waris Application; ICT

1. Introduction

An effective and efficient learning solution in the COVID-19 pandemic is using ICT-based learning (1). Using ICT properly is a challenge university lecturers face in Indonesia so that the subjects taught can be delivered correctly (2). At Islamic-based universities, some courses require lecturer skills in using ICT, one of which is inheritance.

Studying inheritance based on Islamic law, sometimes students give different responses to other subjects. Some students reacted that learning about inheritance was confusing (3). That is because students must understand the arguments of the Qur'an, Hadith, differences of opinion of Islamic experts, and the approach to mathematical formulas. However, some students consider it obligatory to study inheritance as their responsibility when they graduate, either as judges, lawyers, lecturers, or the Muslim community obliged to master heritage.

In calculating the inheritance, several problems are faced because the number of heirs is uncertain. In addition, in the Al-Qur'an, the *Ashabul-Furud* (heirs) section uses fractional numbers, so in its calculations, it must use mathematical formulas (4). In implementing the distribution of inheritance, there are several systems used by classical Islamic experts, sometimes using the *Usul Al-Masail* and *Tashih Masail* methods. *Usul Al-Masail* is one method that inheritance experts often use in solving the problem of dividing an inheritance. *Tashih Al-Masail* is a method of finding the smallest number of origins of the problem so that the portion received by the heirs is not in the form of a fractional number (5). In the distribution of inheritance, there are often cases of excess and shortage of assets. Suppose it is completed according to *Furud Al-Muqaddarah* (a predetermined amount). In that case, the excess property will occur if there are few heirs and no heirs receive *Ashabah* (the remainder of the inheritance distribution) (6). While the lack of property is due to the large number of heirs who receive a share. This, of course, can cause problems in the distribution of assets.

The explanation above shows that the division of inheritance based on Islamic law is very complex. Therefore, classical Islamic experts provide solutions through inheritance calculation methods and inheritance calculation formulas to make it easier to determine the share of each inheritance. However, it has not been able to answer how to calculate the distribution of inheritance quickly and correctly. Because inheritance material is very complex, good ICT learning is needed so that students can receive material well in this covid 19 era.

The novelty of this research is the solution to studying the understanding of inheritance law based on Islamic law and its calculation using the I-Waris application. This study aims to analyze the effectiveness of the application of I-Waris in increasing the distribution of inheritance based on Islamic law.

2. Literature review

2.1. I-Waris application

.

I-Waris is an intelligent application to make it easier for Muslims to learn and share inheritance based on Islamic law. I-Waris was created from the awareness of the importance of understanding the ummah regarding the distribution of inheritance according to Islamic law, which was presented by K.H. Saiful Akib, Lc, MA, in July 2014. In the Al-Azhar Grand Mosque, East Jakarta, Indonesia, he developed this application (7). After that, this application was distributed to all regions of Indonesia. The purpose of developing this application is for the guidance of Muslims regarding the calculation of inheritance based on Islamic law.

The I-Waris application arises because of concern for the people about the importance of understanding inheritance (7). There are many misunderstandings about how to divide inheritance correctly based on the Al-Quran and Hadith, causing people to be trapped in the practice of sharing inheritance that is not correct, even deviating from the teachings of Al-Quran and Sunnah (8).

The I-Waris application can be downloaded for free according to the choice of technology users, such as the iTunes Store, Play Store, Windows Store, Firefox Marketplace, and others. Figure 1 below is the display of the I-Waris application.
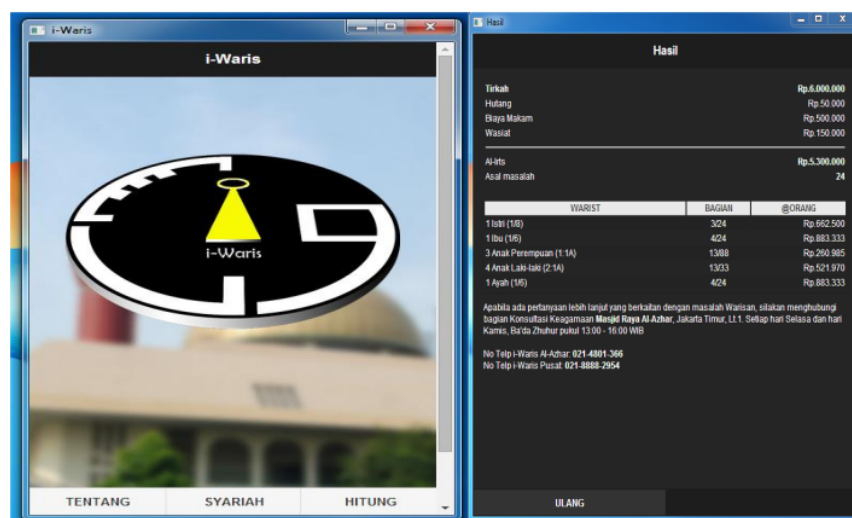

Figure 1 I-Waris application

2.2. Inheritance based on Islamic law

Islamic inheritance theory explains the person who inherits, the person who gets the inheritance, how to calculate inheritance, the share of each heir and the barriers to inheritance, and problems related to inheritance (9). In Islamic inheritance law, to facilitate understanding of inheritance, the terms that must know are *Faraidh*, *Mawarits*, *Tirkah* (*Mauruts*), *Muwarits*, and *Warits*.

According to Al-Hanbali, *Faraidh* has the meaning of a provision, a definite provision, and a gift. Lexically means a part that has been determined with certainty (10). *Faraidh*, in the term *Fiqh Mawaris* is devoted to a part of the heirs whose size has been determined by *Syara'* also called the science of inheritance distribution ((11). According to Louis Ma'luf in the book *Al-Munjid Fi Al-Lughah Wa Al-A'lam* that *Faraidh* is the science of knowing how to divide something left behind among those who have the right (12).

Mawarits lexically means inheritance or inheritance of people who have died. In Islamic law, it is known that there are provisions regarding who includes the heirs who are entitled to receive an inheritance and heirs who are not allowed to receive an inheritance. The term *Fiqh Mawarits* learns who the heirs are entitled to receive the inheritance, who does not receive the inheritance, and certain parts that they receive (9).

Tirkah (*Mauruts*) is lexically something that is left behind (13). Meanwhile, according to the term, everything left by the person who died is justified by *Syara'* to be inherited by the heirs (14). Everything left behind by a person who dies must be interpreted in such a way as to include: Materials and properties that have material value, material rights, non-material rights, and objects related to the rights of others (15).

Muwarrits are people who die *Haqiqi* and die *Hukmi* (16). Die *Haqiqi* is people who really died or died that can be proven and witnessed factually (17). Die *Hukmi* is death declared by the judge based on several reasons, even though the person is not really dead (18).

Warits are people who will inherit the inheritance because they have reasons to inherit the property (19). For example, marital ties, blood relations (descendants), and the relationship between guardianship rights and those who inherit (20).

2.2.1. Islamic inheritance law sources

The sources of inheritance law according to Islam are: First, the Al-Qur'an is contained in Surah An-Nisa verses 7-8, 11-12, and 176, Surah Al-Anfal verse 75 (21,22). Second, the *Hadith* as narrated by Imam Bukhari that was reported to Musa Ibn Isma'il, reported to Wahib, reported to Thawus from his father and Ibn Abbas from the Prophet, he said give inheritance to those who are entitled, after that, the rest goes to men who are more mainstream (23,24). Third, *Ijma'* is the agreement of the Islamic experts or friends after the death of the Prophet contained in the Al-Qur'an and *Sunnah* (25). Fourth, Ijtihad, namely the thoughts of friends or Islamic experts in resolving cases of inheritance distribution, which have not been or have not been agreed upon (26).

2.2.2. Terms and pillars of Islamic inheritance

The conditions of inheritance are the death of the person who inherits (*Muwarrist*), the life of the heir at the time of the death of the *Muwarrist*, and the absence of barriers to inheriting (27). According to Sabiq the pillars of Islamic inheritance are 1) *Muarrits*, namely people who die, and their heirs have the right to inherit their inheritance; 2) *Warits*, namely people who have the right to control or receive the inheritance of the heir due to kinship ties (Nasab) or marriage ties, or others. 3) *Mauruts* or *Tirkah*, namely all kinds of objects or ownership left by the heir, whether in the form of money, land, and others (28)

2.2.3. The reasons for getting inheritance rights

Three reasons that make a person get inheritance rights (29) are 1) Essential relatives (who have Nasab ties), such as parents, children, brothers, uncles, and others. 2) A valid marriage, namely the occurrence of a legal marriage contract (*Syar'i*) between a man and a woman. 3) *Al-Wala* (*Nasab Hukmi*), namely kinship for legal reasons.

2.2.4. Inheritance distribution according to Islamic law in Indonesia

The calculation of the division of inheritance is very complex according to the terms and conditions based on Islamic law and the law of a country. Table 1 below shows some examples of inheritance distribution based on Islamic law in Indonesia.

Table 1 Inheritance distribution

Cause/Relationship	Heir	Condition	Acquisition of inheritance	Basic Islamic law
Marriage (Still tied to status)	Wife	No children/grandchildren	1/4	Al-Qur'an Surah An-Nisa verse 12
		Have children/grandchildren	1/8	
	Husband	No children/grandchildren	1/2	
		Have children/grandchildren	1/4	
Nasab	Daughter	Alone (no other children and grandchildren)	1/2	

(Blood Relationship)		Two or daughters no sons or grandsons	2/3	Al-Qur'an Surah An-Nisa verse 11
	Son	Alone or with other children/grandchildren (boy or girl) Note: The division between men and women is two parts for men compared to one for women.	*Ashobah* (remaining all assets after being divided by other divisions)	Al-Qur'an Surah An-Nisa verse 12 and Hadith
	Biological father	No children/grandchildren	1/3	Al-Qur'an Surah An-Nisa verse 11
		There are children / grandchildren	1/6	
	Biological mother	No children/grandchildren and no two or more siblings and not with biological father	1/3	
		There are children/grandchildren and/or there are two or more siblings and not with their biological father	1/6	
		No children/grandchildren and no two or more siblings but with biological father	1/3 of the remainder after being taken by the wife/widow or husband/widower	
	Brother or sister of one mother	Alone, no children / grandchildren and no biological father	1/6	Al-Qur'an Surah An-Nisa verse 12
		Two more, no children / grandchildren and no biological father	1/3	
	Siblings (female) or same-father	Alone, no children / grandchildren and no biological father	1/2	
		Two more, no children / grandchildren and no biological father	2/3	
	Siblings (male) or same-father	Alone or with other siblings and no children/grandchildren and no biological father. Note: The division between men and women is two parts	*Ashobah* (remaining all assets after being divided by other divisions)	Al-Qur'an Surah An-Nisa verse 12 and Hadith

		for men compared to one for women.		
	Grandson/nephew (sibling's child)	Replacing the position of his parents who became heirs. Requirements according to the position of the heir who is replaced.	In accordance with his position as heir	Ijtihad

Source: https://www.hukumonline.com/berita/a/terikat-perkawinan-campuran-pahami-aturan-pokok-pembagian-warisan-lt5b1fc640e2f77?page=all

2.2.5. Rights and obligations of the heirs

The right that belongs to an heir is the right of ownership of the inheritance of the heir. The inheritance can be in the form of goods, debts, or receivables obtained by the heirs based on the provisions of Islamic law or the will of the heir (30). According to Wahyuni, it is based on Islamic law that a person may not reject the inheritance received unless the person dies or changes religion (31). However, according to Asy Syafira, it is permissible for a person to refuse inheritance rights on the condition that a person is a person who has common sense, has matured, and is not in a forced state (25).

A person who has died of course leaves all the affairs in life, whether these affairs have been completed or some matters have not been resolved. Thus, an heir has obligations that must be performed on the deceased heir. 1) The cost of treating the corpse (*Tajhiz Al-Janazah*) must be paid by the heirs. Based on the Al-Qur'an Surah Al-Furqan verse 67, the cost of treating the corpse is the responsibility of the heirs which should be carried out fairly. 2) Repayment of debts. The debt that has not been paid by the testator is a dependent that must be repaid by the heirs. Based on the Qur'an An-Nisa verse 11, the distribution of inheritance can be done after the fulfillment of the will after the debts of the deceased have been paid. 3) Execution of will (*Tanfiz Al-Wasaya*), namely the granting of material rights to other people if the deceased testator makes such a will. (25,32–35)

2.3. Student's understanding of inheritance distribution

Studying Islamic inheritance law is not easy; it needs special attention. Understanding the concept and calculating ability is essential for applying Islamic inheritance law in society. The following is the understanding ability required by students in studying the division of inheritance based on Islamic law. 1) Able to restate the concept of inheritance based on Islamic law; 2) Able to understand the classification of heirs based on Islamic law; 3) Able to understand the necessary or sufficient conditions of the concept of inheritance distribution based on Islamic law; 4) Able to provide examples of cases of inheritance distribution according to Islamic law; 5) Able to use mathematical concepts in the division of inheritance according to Islamic law; 6) Able to perform calculations in the distribution of inheritance based on Islamic law (7,36–38).

3. Methods

This research method is pre-experimental. The sample consisted of 38 students majoring in Constitutional Law (HTN), odd semester of the 2021-2022 academic year, IAIN Syekh Nurjati Cirebon, Indonesia. One-group class design is given online learning treatment using the I-Waris application. The indicators for understanding the concept of inheritance and calculating inheritance distribution in this study are (7,36–38)

U1: Able to restate the concept of inheritance based on Islamic law

U2: Able to understand the classification of heirs based on Islamic law

U3: Able to understand the necessary or sufficient conditions of the concept of inheritance distribution based on Islamic law

U4: Able to provide examples of cases of inheritance distribution according to Islamic law

U5: Able to use mathematical concepts in the division of inheritance according to Islamic law

U6: Able to perform calculations in the distribution of inheritance based on Islamic law

Pre-test and post-test value data are used to calculate the N-Gain value and analyze the effectiveness of the I-Waris application to increase the ability to understand the concept of inheritance and calculate inheritance distribution.

5

Analysis of the effectiveness of the I-Waris application was measured using the modified N-Gain value from Hidayat (39).

N-Gain = ((test score after learning using I-Waris application – test score before learning using I-Waris application) / (Maximum score – test score before learning using I-Waris application)) x 100

The N-Gain formula is useful for analyzing the increase in student achievement (40). The criteria for the effectiveness of the I-Waris application adopted from Raharjo are: The I-waris application is said to be effective if the N Gain score is more than 76 (41).

4. Results and discussion

Table 2 below is the result of processing the N-Gain score from test scores before and after learning using the I-Waris application related to all indicators of understanding the concept of inheritance and calculating inheritance based on Islamic law.

Table 2 N-Gain Results

Number of Student	N-Gain for each indicator of inheritance understanding based on Islamic Law					
	U1	U2	U3	U4	U5	U6
1	83.33	87.50	81.25	88.89	78.57	87.50
2	85.71	83.33	85.71	77.78	75.00	78.57
3	100.00	75.00	77.78	75.00	75.00	75.00
4	75.00	78.57	75.00	75.00	75.00	85.71
5	83.33	75.00	77.78	83.33	70.00	83.33
6	83.33	77.78	77.78	83.33	81.25	75.00
7	80.00	77.78	77.78	75.00	88.89	88.89
8	75.00	88.89	77.78	80.00	83.33	80.00
9	75.00	83.33	85.71	75.00	75.00	80.00
10	83.33	75.00	75.00	83.33	75.00	75.00
11	75.00	83.33	83.33	75.00	75.00	80.00
12	85.71	85.71	75.00	100.00	80.00	80.00
13	87.50	88.89	88.89	100.00	100.00	100.00
14	83.33	87.50	87.50	71.43	83.33	83.33
15	78.57	75.00	77.78	77.78	88.89	77.78

16	75.00	77.78	75.00	85.71	80.00	75.00
17	85.71	75.00	75.00	75.00	75.00	83.33
18	100.00	75.00	75.00	100.00	100.00	100.00
19	100.00	100.00	100.00	83.33	85.71	83.33
20	83.33	78.57	83.33	75.00	83.33	83.33
21	100.00	80.00	83.33	75.00	85.71	83.33
22	83.33	85.71	83.33	78.57	75.00	78.57
23	100.00	75.00	75.00	88.89	75.00	75.00
24	83.33	75.00	78.57	77.78	75.00	77.78
25	78.57	85.71	85.71	100.00	100.00	87.50
26	85.71	83.33	78.57	83.33	85.71	83.33
27	80.00	77.78	77.78	75.00	62.50	85.71
28	85.71	71.43	85.71	85.71	78.57	78.57
29	100.00	83.33	100.00	75.00	80.00	75.00
30	83.33	100.00	100.00	100.00	100.00	100.00
31	83.33	75.00	77.78	87.50	75.00	81.25
32	100.00	77.78	77.78	75.00	75.00	78.57
33	83.33	88.89	75.00	75.00	75.00	75.00
34	78.57	85.71	78.57	70.00	83.33	83.33
35	83.33	87.50	77.78	78.57	78.57	75.00
36	75.00	87.50	81.25	71.43	83.33	85.71
37	78.57	75.00	75.00	75.00	85.71	88.89
38	87.50	75.00	87.50	75.00	83.33	83.33
Average N-Gain	84.944	81.543	81.344	81.229	81.187	82.395

Based on table 2, the average N-Gain score for the U1 indicator is 84.944 which is greater than 76. This shows that the I-Waris application is effective in increasing the ability to restate the concept of inheritance based on Islamic law. The average N-Gain score for the U2 indicator is 81.543 which is greater than 76. This shows that the I-Waris application is effective in improving the ability to understand the classification of heirs based on Islamic law. The average N-Gain score for the U3 indicator is 81.344 which is greater than 76. This shows that the I-Waris application is effective in increasing the ability to understand the necessary or sufficient conditions of the concept of inheritance distribution based on Islamic law. The average N-Gain score for the U4 indicator is 81.229 which is greater than 76. This shows that the I-Waris application is effective in increasing the ability to provide examples of inheritance distribution cases according to Islamic law. The average N-Gain score for the U5 indicator is 81.187 which is greater than 76. This shows that the I-Waris application is effective in increasing the ability to use mathematical concepts in the distribution of inheritance according to Islamic law. The average N-Gain score for the U6 indicator is 82.395, which is greater than 76. This shows that the I-Waris application is effective in increasing the calculation ability in the distribution of inheritance based on Islamic law.

The results of this study are supported by Minarni that inheritance calculations are carried out manually, such as calculating the data of the heirs one by one, it is likely that errors will occur in the calculation results that occur due to human negligence, technology-based applications are effective in helping to overcome these problems (42). Research by Maarif et al. stated that digital applications can be used to facilitate inheritance learning (43).

The use of I-Waris application media in learning about inheritance and inheritance distribution is a form of teacher innovation. Because, in this digital era, teacher innovation as a form of resource development for Islamic educational institutions is a challenge (44). In general, the results of this study indicate that the I-Waris application is effective in increasing understanding of inheritance based on Islamic law.

5. Conclusion

Studying inheritance based on Islamic law is not easy. However, advances in technology require humans to develop. The impact of technological advances, humans are able to create I-Waris as one of the legacy learning solutions. The results of this study indicate that the I-Waris application is effective in increasing Islamic-based understanding of inheritance. In addition, it motivates students' enthusiasm for learning.

KOSIM

5% SIMILARITY INDEX **0**% INTERNET SOURCES **5**% PUBLICATIONS **0**% STUDENT PAPERS

PRIMARY SOURCES

1 Mujib, Mardiyah, Komarudin, Masyitho Rahmah, Debi Pranata, Cindy Dwi Novitasari. "Comparative Study of Fractional Numbers on the Division of Inheritance Based on Islamic Law and Law of Lampung Pesisir Tribe", Journal of Physics: Conference Series, 2019
Publication
3%

2 O T Kurahman, Y A Gerhana, F A Perdana, U Syarifuddin, S Khosyi'ah, N Lukman, I Taufik. "The Implementation of Breadth First Search in Determining of Waris", IOP Conference Series: Materials Science and Engineering, 2018
Publication
1%

3 httpbitlybkitugas1ilmukalamphotography.wordpress.co
Internet Source
<**1**%

4 Imron Bin Awae, Somchai Limsiroratana. "Inheritance Management Method for Set of Indivisible Item Based on Islamic Law", Proceedings of the 2017 International Conference on Data Mining, Communications
<**1**%

and Information Technology - DMCIT '17, 2017
Publication

5 belajarsemua.github.io
Internet Source
<1%

6 Kartini, Ety Nur Inah. "The Legal System of Inheritance of Indigenous Bugis-Bone: Islamic Law Perspective", IOP Conference Series: Earth and Environmental Science, 2018
Publication
<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	Off		