

## Arabic Sign Language Adaptation In Teaching Fardhu Ain To The Disabled Hearing

**Syar Meeze Mohd Rashid**

Faculty of Education  
The National University of Malaysia  
Email: cikgumeeze@ukm.edu.my  
Malaysia

**Mohd. Hanafi Mohd Yasin**

Faculty of Education  
The National University of Malaysia

**Noraidah Sahari Ashaari**

Faculty of Information Science & Technology  
The National University of Malaysia

### Abstract:

The purpose of this study is to review the consensus of experts in the adaptation of the use of sign language in teaching fardhu ain to the disabled hearing. This study has used the technique of fuzzy delphi to seek a consensus of experts skilled in sign language to answer the review questions. Distributed instruments includes 14 items in order to obtain a consensus of experts. The findings show that there are five items that need to be adopted in the Arabic sign language that is the sign language related to the pronouncement of the Shahadah, beliefs and tenets of islam, body cleanliness, the aurat and prayer with the defuzzification value of 0.767.

**Keywords:** sign language, fardhu ain, a hearing disability

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## Introduction

Sign language is a form of communication used by the hearing disabled community. The use of sign language can also be used by the communities such as those with speech problems, those unable to learn a language through speech and also by those with hearing disability (Wilbur, 2013). This is because, the use of sign language facilitates communication of the hearing disabled community and provide opportunities for them to express feelings, opinions, ideas, and so on. The uniqueness of sign language can be seen when form or hand symbol give the meaning of a situation (Loughran, 2013). In addition, body language and facial expression become the attraction and the intonation attraction in the use of sign language (Wilbur, 2013). Mohamed Sazali Shaari (2004) says that sign language is one medium of communication used by the hearing disabled community in Malaysia. Sign language is considered as a symbol of the identity of the persons with hearing disabilities because the shape of the signals are according to the way of life and their culture and are not influenced by foreign elements (Mohamed Sazali Shaari, 2004).

Religious education is absolutely compulsory for the hearing disabled community. They are individuals with sound minds and are able to accept as well as learn dakwah and religious education (Hamdi Isaac, 2010). According to Hamdi Isaac, Ab Halim Tamuri, Abdul Majid, Fields and Safani Bari (2010) it is mandatory that this community be given religious education based on the Quran and Sunnah of the Prophet (PBUH). Every baby born must be given religious education so that they will be on the path of righteousness. In addition, the hearing disabled should live like other human beings, living in the community and always worshipping Allah SWT. As Allah says in the Qur'an, "Don't I make jin and humans except to worship me" (Al-Zariyat: 125). This proves that, every Muslim must be taught Islamic education, especially the knowledge and practice of Basic Fardhu Ain as the basis of the internal strength to endure future personal muslim life (Mohd Huzairi Awang Hajaratul Bahti Zakaria, Bani Hidayat Mohd Shafie, Nor Hayati Fatmi Talib & Nabiroh Kassim 2010).

Therefore in the teaching of Basic Fardhu Ain to the hearing disabled, teacher or individual (s) teaching them must have the skills in using sign language (Siti Muhibah Nor, 2010; Hamdi Isaac et. Al., 2010; & Mohd Huzairi Awang et. Al., 2010). This is because, using sign language in the teaching fardhu ain to those with hearing disabled will be able to increase their interest and understanding in learning the religion (Mohd Mokhtar Tahar and Aliza Alias, 2003; Mohd Huzairi Awang et. al., 2010; Hamdi Isaac et. Al., 2010; Siti Muhibah Nor, 2010).

Based on locally-carried studies by Zulkifli Md Ali Tahar, Mohd Mokhtar Mohd and Mohd Yasin, Hanafi (2010); Abdullah Yusoff and Che Rabiaah Mohamed, (2009); and Iftirah Arba'iah Othman, (2001) as well as study abroad by Haung, (2012); Wilbur; (2013); Loughran, (2013); Lianna, 2013; Lieberman, Borovsky, Hatrak and Mayberry (2014); Dubot and Collet (2014); and Haung and Mann (2014) prove that sign language is one medium of communication that can be used by the disabled hearing in the teaching and learning process.

The basic fardhu ain is actually taught in schools for the hearing disabled;infact several Religious Islamic State Councils conduct fardhu ain classes for this group. However, majority of the students do not fully absorb the teaching by the teachers or teaching staff (Abdul Munir Ismail,2009). This is because there are no suitable terminology in sign language that can be used in teaching basic fardhu ain to the disabled hearing. (Siti Muhibah Nor, 2010; Hamdi Ishak et. Al.,2010 & Mohd Huzairi Awang et. Al.,2010)

In 2013, the Ministry of Touris, Culture and Heritage of Qatae invited representatives from more than 50 Arab countries and experts in the fields of both the hearing disabled and sign language to discuss on the issue of using suitable sign language in Islam (Zakarna et. Al., 2013). From this discussion they produced a sign language dictionary of Islam that contains 1200 signs associated with Islam (Zakarna et. al.,2013)

Due to the absence of Islamic sign language terminology suitable for the use of people with hearing disabilities in Malaysia, an Islamic sign language introduced by the Arab countries should be adopted into the sign language in Malaysia. Therefore, the consensus of experts' opinion need to be done to ensure that adaptation of the Arabic sign language can be used in the hearing disabled community in Malaysia.

The study aims to investigate the experts' consensus in adapting the Arabic sign language terminology in the teaching of fardhu ain to the hearing disabled community. The questions of this research is can Arabis sign language terminology be adapted in the teaching of fardhu ain for those with hearing disability?

## Materials and Methods

In getting the agreement, the experts used the technique of Fuzzy Delphi. Fuzzy Delphi technique is a technique that was recently presented in the context in the study of education in Malaysia (Norlidah Alias et. al., 2014 Saiman Sinnatamby K, S, Laily Mastura Mustafa, Norlidah Alias & Saedah Siraj, 2013). This method was introduced by Kaufman and Gupta in the year 1998 (Saedah Siraj et. al., 2013). Fuzzy Delphi technique is not something new but it is an instrument (questionnaire) produced from the findings using the Delphi technique (Saedah Siraj et. al., 2013). A total of 30 expert consensus through Fuzzy Delphi technique was used. Fuzzy Delphi technique was selected because researchers felt that this technique was the best technique to obtain the agreement of the expert in adapting the Arabic sign language in teaching fardhu ain. This study used two steps in the technique of Fuzzy Delphi. The creation of Delphi instruments used open discussion on the 5 experts for the first step. The second step was to formulate a questionnaire based on the first step and this questionnaire invloved 30 experts including the 5 who were involved in the first step.

### Research Sample

Sample 30 experts comprised of 15 teachers with disabilities hearing specialising in sign language and 15 of non-disabled teachers specializing in teaching basic Fardhu Ain to the hearing disabled.

### Data Collection Instrument

This study used the questionnaire that was created based on the discussion or interview of the 5 experts. Based on that interview, 14 items were approved by the experts to be included in the questionnaire.

### Data Analysis

There are seven steps in analyzing Fuzzy Delphi techniques. Below is the Fuzzy technique measures used by Delphi research which are as follow:

#### Step 1: Identifying the Experts Involved

30 people experts will be selected in answering the questionnaire the five experts who were interviewed.

#### Step 2: Linguistic Scale Selection

In this study, researchers have chosen the 5-point linguistic scale which are strongly disagree, disagree, moderately agree, agree and strongly agree.

#### Step 3: Mean Value

Mean value shall be determined according to a predetermined formula value. Below is a formula used in obtaining the mean value:

$$d(\bar{m}, \bar{n}) = \sqrt{\frac{1}{3}[(m_1 - n_1)^2 + (m_2 - n_2)^2 + (m_3 - n_3)^2]}.$$

#### Step 4: Determining the "d" value (*Threshold Value*)

If the value of d is  $d < 0.2$ , then all the experts have reached a consensus. If the value of D is  $d > 0.2$ ., the researchers will have carry out the items for the second round.

#### Step 5: Obtaining 75% Consensus

For this step, research has reached a mutual consensus by the experts or also known as the consensus group. For this step, if the experts come up with a mutual agreement of 75%, then the group has reached a consensus. Conversely, if the if the mutual agreement is less than 75%, the researcher has to carry out a second round to make sure that the consensus has been reached.

**Step 6: Obtaining the Fuzzy Evaluation**

Fuzzy evaluation is one method to determine the ranking for an item. Because the process is quite difficult because it involved complex numbering, then an alternative method using mathematic formula is used as a method of determination of the ranking, and this method is called defuzzification process.

**Step 7: Defuzzification (the process of determining the score)**

For defuzzification process, researchers have used formula  $A_{max} = 1/3 * (a_1 + a_2)$  to get defuzzification. At this step the researcher can determine the score or ranking according to the consensus of experts.

**Results and Discussion**

The findings below will be explicitly discussed based on the objective of the study that has been previously mentioned.

**Finding the value of threshold for terminologi Arab sign language that can be adopted in teaching fardhu ain to the disabled hearing**

The researcher analysed the data using the Duzzy Delphi approach through steps 3-7 to answer the mentioned research question. In order to find the degree of agreement between the experts, research findings for all the items are analysed by determining the distance between 2 Fuzzynumbers in order tot identify the threshold value. According to Saedah Siraj et. al., (2013) and Fuziah Rosman (2014), in order to analyse the data, the distance between 2 Fuzzy numbers is counted by measuring the deviation of the mean value. The criteria that is used to place value on the experts' consensus is based on the agreement of more than 75%.

Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.363	0.32823	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.1324	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.2546	0.2546	0.2546	0.2546	0.2342	0.0509	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444
0.0509	0.0509	0.0509	0.2546	0.0713	0.0509	0.2444	0.0611	0.2444	0.2444	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.2342	0.2546	0.0611	0.2444	0.0611	0.0611	0.0611	0.2444	0.2444	0.2444
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.2546	0.2546	0.2546	0.2546	0.2342	0.2546	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.2342	0.2546	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.2546	0.2546	0.2546	0.2546	0.2342	0.2546	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444
0.2546	0.2546	0.2546	0.0509	0.2342	0.0509	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.2546	0.2546	0.2546	0.2546	0.2342	0.2546	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444	0.2444
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.2444	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0396	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
0.0509	0.0509	0.0509	0.0509	0.0713	0.0509	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
29	24	27	23	21	14	29	30	22	25	7	6	29	29

Table 1 shows the value of threshold for Arabic sign language terminology that can be adapted in teaching fardhu ain to the disabled hearing.

In this study, one (1) is complied with because the value threshold for most items is  $\leq 0.2$ , but only some items has the value of  $\geq 0.2$ . Nonetheless, the second condition (2) has also been observed because the consensus of the Group of experts has exceeded 75%. The result of the calculation of the value of the threshold  $\leq 0.2$  from table 1, shows that the research gets the value of the threshold in excess of 75% with a total of 80% for the content item, which includes a total of 14 items. This shows the degree of agreement among the experts has reached a very good consensus. Therefore, the second round for fuzzy Delphi is not needed because data acquisition comply with both conditians.

### The findings for Arabic sign language terminology that can be adapted in teaching fardhu ain to the disabled hearing.

Analysis shows the design contents of the teaching curriculum for BIM based on the Basic Fardhu Ain theme. In part C, there are 14 types of items for the context in designing the curriculum for BIM teaching based on the Basic Fardhu Ain.

Table 2

*Adapting Arabic sign language in teaching basic fardhu ain*

Item	Adapting Arabic Sign language in teaching sign language	Fuzzy evaluation	Defuzzification	Rank
1	Sign for proclamation of the Syahadah	(17, 23, 29)	0.767	1
2	Sign for pillars of beliefs and tenets of islam	(17, 23, 29)	0.767	1
3	Sign for cleanliness	(17, 23, 29)	0.767	1
4	Sign for Aurat	(17, 23, 29)	0.767	1
5	Sign for Adhan and Iqamat	(16.6, 22.6, 28.6)	0.753	3
6	Sign for solat/prayers	(17, 23, 29)	0.767	1
7	Sign for fast	(16.8, 22.8, 28.8)	0.76	2
8	Sign for zakat/giving alms	(16.8 22.8, 28.8)	0.76	2
9	Sign for haj and umrah	(16.8 22.8, 28.8)	0.76	2
10	Sign for slaughter and giving sacrifice	(16.8 22.8, 28.8)	0.76	2
11	Sign for marriage	(16.8 22.8, 28.8)	0.76	2
12	Sign for deed	(16.8 22.8, 28.8)	0.76	2
13	Sign for dzikir (remembering Allah) and selawat (remembering Rasulullah PBUH)	(16.8 22.8, 28.8)	0.76	2
14	Sign for dua prayers	(16.8 22.8, 28.8)	0.76	2

Based on table 2 all 14 items on Arabic sign language terminology has reached the highest consensus of experts that is to say more than 0.60. This article shows all 14 items are agreed upon by all experts. However, majority of the experts agree and the selected items 1, 2, 3, 4 and 6 to the value of defuzzification (0.767) should be given greater emphasis and importance. This finding indicates that the Arabic sign language related to the proclamation of the Shahadah, sign language-related to the pillars of beliefs and tenets of Islam, sign language related issues of body cleanliness, aurat, and solat or prayers are very important and necessary in the teaching fardhu ain. This makes items 1, 2, 3, 4 and 6 are in first position in the priority list of experts based on the consensus of the collective agreement. This is followed with items 7, 8, 9, 10, 11, 12, 13 and 14 with the defuzzification value of (0.76), which is ranked in the second position. Next, the item 5 is in the third position with a value of defuzzification of (0.753).

### Discussion

Findings of research on adaptation in sign language teaching fardhu ain to people with hearing disability shows that all the experts agree with all terminology items proposed there in teaching basic fardhu ain to the hearing disabled by accessing the expert consensus more than 0.60. However, there are 5 items should come first or given emphasis. Among them are items 1, 2, 3, 4 and 6 which are signs related to the proclamation of the Shahadah, the pillars of beliefs and tenets of Islam, body cleanliness, aurat, and solat or prayers.

Owing to the experts'consensus, these 5 items must be given importance and emphasis in the adapting Arabic sign language terminology in the teaching of fardhu ain. This is because, these are the fundamental and the most important items in teaching basic fardhu ain in moulding a true Muslim. Therefore, all the experts agree that these items must be given importance; therefore the signs must be made known. These signs will then be used by the main topics in the basic fardhu ain module for both primary and secondary schools. Apart from that, basic fardhu ain classes for teens and adults will also be given emphasis on these topics as a starting point for learning fardhu ain. Furthermore, according to

Ismail Kamus and Mohd Azrul Azlen Ab Hamid (2009) in their book "*Indahnya hidup bersyariat*", topics such as the proclamation of the syhadah, pillars and tenets of Islam, body cleanliness, solat, fasting and aurat are the primary topics. Furthermore, in the research carried out by Mustapha Kamal Ahmad Kassim (2001) also shows that all the five topics are the foundation in studying basic fardhu ain in primary and secondary schools. Even (PRISMA) or the Malaysian Muslim Hearing Disabled Association shows that these five items are the first few items taught in fardhu ain classes across several states to teens and adults with hearing disabilities.

In addition, items number 7, 8, 9, 10, 11, 12, 13 and 14 are items that are in the second position with a value of defuzzification of (0.76). Among the items are sign language related to fasting, zakat or giving alms, haj and umrah, slaughter and giving sacrifice, doing deeds, zikir and salawat or remembering Allah SWT and Rasulullah SWT and practice of the dua or prayer. These items should also be included in the content design of the curriculum but be placed in the second rank of importance or emphasis based on the experts' consensus. Item number 5 is placed third in rank with the defuzzification value of (0.753). As for the item for sign language related to the adzan and iqamah, the experts feel that it is only mere knowledge of these items because sign language does not involve the sound and intonation as found in the adhaan and the iqamah.

Implications of the research:

1. The Department of Islamic Development Malaysia (JAKIM) should see this study as a significant study on the adaptation of Arabic sign language in the teaching of Fardhu Ain to people with hearing disabilities. They should study more in depth about the appropriateness of the use of terminology in teaching fardhu ain to the deaf.
2. This study actually provides an opportunity for parents and teachers who have children or students with hearing disabilities to learn Arabic sign language, especially if previously parents and teachers do not know the appropriate sign language that can be used in teaching Basic Fardhu Ain to pupils such as disability. Therefore, the adaptation of this can help parents and teachers to be able to interact with the disabled hearing to teach or discuss religion particularly in relation to Basic Fardhu Ain.

With the adaptation of Arabic sign language in the teaching of fardhu ain for the hearing disabled, it will give the opportunity for that community to have a better understanding of basic fardhu ain and further allows them the opportunity to be closer to Allah SWT.

## Conclusion

The overall summary of the study of the adaptation of Arabic sign language in the teaching of Fardhu Ain to the hearing disabled found that all 14 items reached the highest consensus of experts that is to say more than 0.60. However, majority of the experts agree and selected sign language items to the proclamation of the Shahadah, pillars of beliefs and tenets of Islam, body cleanliness, aurat, and solat or prayers with the value of defuzzification (0.767) should be given greater emphasis and importance first. This makes the item concerned to be in the first position in the priority according to list of experts based on the consensus of the collective agreement. While the remaining items is ranked second and third.

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