



The Usability of Elementary Arabic Learning Module (EALM) for Ugandan Adults *Muallaf* (UAM); (A Descriptive Evaluation of General, Specific, and Overall Constructs)

Kirembwe Rashid Abdul Hamed^{1,*}, Mohd Aderi bin Che Noh¹, Siti Rosilawati binti Ramlan¹, Sakinah binti Ahmad¹, Hayati binti Ismail¹, Sarifah Nurhanum binti Syed Sahuri¹, Hishomudin Bin Ahmad¹, Noor Azizi Ismail¹, Adibah binti Sulaiman @ Mohamad¹, Mardhiah Binti Yahaya¹, Mohammad Najib Jaffar¹

¹ Faculty of Major Language Studies, (FPBU), Universiti Sains Islam Malaysia (USIM), 71800 Nilai, Bandar Baru Nilai, Negeri Sembilan, Malaysia

*Corresponding Author; E-mail: kirembwe@usim.edu.my.

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ABSTRACT

The Ugandan adults *Muallaf* UAM faced a problem in learning Arabic for religious purposes. The elementary Arabic learning module (EALM) was developed for (UAM) using (ADDIE) procedures to mitigate the said problem. This research evaluated (EALM) usability for (UAM). The purposive sample of (UAM) (n=44) and a random sample of teachers (n=5) were used. (UAM) students and teachers questionnaires were also used. The descriptive statistics using SPSS 20 was employed to describe EALM usability data. The finding yielded positively high teachers' and students' ratings in favor of all (EALM) usability evaluation constructs. The researchers strongly recommend (EALM) for (UAM).

Keywords: (ADDIE) evaluation, content, elementary Arabic, learning module, *Muallaf*, pedagogy, usability, Ugandan adults.

INTRODUCTION AND PROBLEM

(UAM) Arabic needs' analysis survey was carried out separately at phase one prior to the commencement of (EALM) design process. The major aim of (UAM) Arabic needs' analysis survey at phase one was to diagnose (UAM) Arabic Learning needs in order to identify the major aspects pertinent to the proposed (EALM) development for (UAM) (Aldoobie 2015; Elsaid Mohammed & Nur 2018). The submitted findings imply that (EALM)

development should address the following aspects: (EALM) target population characteristics, instructional standards, quality assurance (Ahmad Zabidi, Woo, Rajesh Kumar, Fadzil, & Syed Husain 2017); (Amoako & Asamoah-Gyimah 2020); Tsai & Jao 2020); and (Karam, Fares & Al-Majeed 2021).

Due to the findings of (EALM) need analysis yielded by (EALM) first phase's survey it was recommended for (EALM) designers to proceed with the rest of conventional (ADDIE) stages for (EALM) development including: design, develop, implementation, and evaluation (Yeh, & Tseng 2019). Hence, the researchers recommended the development of "Elementary Arabic learning module (EALM) for (UAM) using elementary Arabic grammar, morphology and common Arabic vocabularies (CAV)". Various scholars such as Koderi & Syahrial (2018); Yusof, Baharudin, Hamzah, & Abdul Malek (2021) also consider instructional and curricular quality assurance for elementary Arabic language-arts for beginners. (EALM) designers asserted that the absence of (UAM) standardized Arabic syllabus with explicitly articulated aims and learning outcomes was a clear obstacle hindering their Arabic proficiency. Hence, it was recommendable to revisit (EALM) Arabic content and instructional usability so that the (UAM) standardized syllabus with explicitly articulated aims and learning outcomes can be manifested.

Thus, a team of researchers carried out a survey to investigate (EALM) usability so that (EALM) weaknesses relating to language, content, curriculum, and instructions could be rectified before any further action of (EALM) curriculum and instructions is declared. Hence, the current article is reporting the findings of perceived (EALM) quality from both; (UAM) viewpoints and (UAM) Arabic teachers points of observation. Thus, this article is reporting the findings of (EALM) quality evaluation survey conducted during week 4 of (EALM) implementation by both (UAM) students and their Arabic teachers.

DESCRIPTION OF (EALM)

(EALM) was developed for (UAM) using samples of lessons, elementary Arabic grammar EAG, Arabic derivative morphology ADM, and common Arabic vocabularies (CAV) because (UAM) needed a favorable Arabic command that could enable them to grasp basis Islamic religious provisions. This confirms the notion of a teacher as researcher in the context of language teaching (Saeed 2011). Various researchers also investigated using Arabic language as a mean to speed up their basic Islamic education (Farghal 2008; Al-haq & Al-Masaeid 2009; Pamessangi 2022). The main goal of (EALM) is to simplify the elementary Arabic learning for (UAM) using EAG, ADM and (CAV).

(EALM) contents were presented in the manner of *naqli* & *aqli* integration; Both *naqli* & *aqli* are common Islamic-Arabic terminologies. While *Aqli* refers to the conventional knowledge, *Naqli* refers to the divine knowledge. (ADDIE) module building procedures were used to build (EALM). They initially began with analysis of (UAM) needs for Arabic

learning, then designing (EALM) Arabic grammar and morphology involving some guides from Bakir (2006); Cortazzi & Nakhle (2002). Further (EALM) design phase involved designing (CAV), and instructional strategies involving expert information from Altakhaineh, Zibin, & Alkhatib (2020); Jaradat (2022); Kiynova, Kurmankulova, Zheniskyzy, & Murzabayeva (2021). Further (ADDIE) procedures included (EALM) structural development. The final two phases of (ADDIE) adaptation for (EALM) procedures were the implementation and evaluation upon which (EALM) usability is reported by the current article.

(EALM) DESIGN

(EALM) design for (UAM) using EAG, ADM and (CAV) was done after the first phase of (UAM) needs' analysis. (EALM) design was the second integral stage of the principal research grant entitled the development of (EALM) for (UAM); samples of lessons using EAG, ADM and (CAV). (EALM) design phase focused on two major components (EALM) linguistic content and (EALM) technical design. (EALM) format design was part of (EALM) technical design, it involved the design of the face-to-face (EALM) and the virtual (EALM) for interacting with (UAM) audience online via Global Open Access Learning System GOALS (Hess & Greer 2016; Almelhi 2021; Kiynova, Kurmankulova, Zheniskyzy, & Murzabayeva 2021).

(EALM) IMPLEMENTATION AND EVALUATION

(EALM) implementation and evaluation are the essence behind the current research. (EALM) implementation and evaluation mark the two final phases of (ADDIE) model adopted to accomplish (EALM) building project. (ADDIE) is an acronym that summarises the 5 phases of standard module building including: Analyze, Design, Develop, Implement, and Evaluate (Hidayat & Nizar 2021). Hence, the implementation and evaluation phases mark the 2 final milestone (EALM) research project. With reference to the final two non-experimental (ADDIE) phases and to the explicit learning model by Dunkin & Biddle (1974) presented by the Figure1, the current article intended to report the usability of the newly developed (EALM) for (UAM).

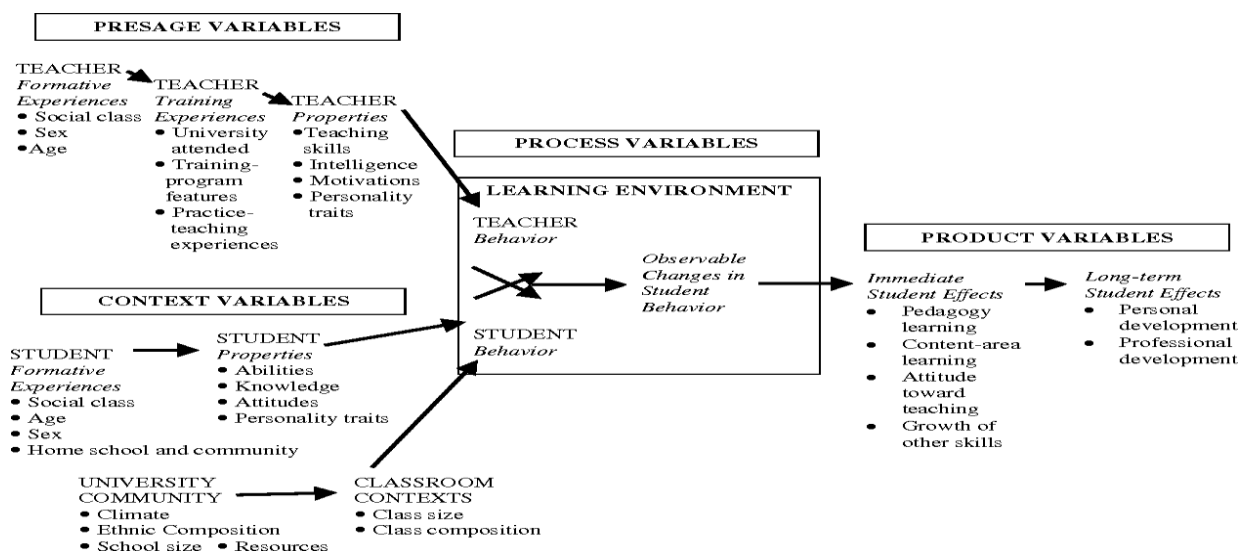


Figure 1: The model for the study of classroom teaching (Dunkin and Biddle, 1974.p.38).

The Dunkin & Biddle (1974)s' learning model is categorized with the explicit learning-based theories; they classify the learning variables in sequence of: presage, contexts, process, and products. They believed in a linear progress from teachers and learners' contexts, through teaching activities to learning outcomes (Marton 1988); (Marton & Saljo 1976). Thus, Dunkin & Biddle (1974) consider students, teaching methods, learning approaches and learning outcomes as interactive and correlated variables that affect each other. Hence, the (UAM) students and teachers' involvement in (EALM) general pedagogical, specific content, and overall (EALM) usability evaluation were in view of Dunkin & Biddle (1974) theoretical characteristics relevant for (EALM) evaluation.

OBJECTIVES

This research was conducted to evaluate the usability of (EALM) for (UAM). Thus, the main purpose of this research project was to carry out a thorough (EALM) usability evaluation so as to determine the level of (EALM) general pedagogical usability, (EALM) specific content usability, an overall (EALM) usability level in terms of flexibility, clarity, and suitability for (UAM).

LITERATURE REVIEW

Several research on academic modules usability agree on (ADDIE) needs' analyses for developing skills' and professional module developments, religious education, computer assisted learning instructions, and training programs. Elsaid & Nur (2018) conducted needs analysis in English for academic purposes for university teaching assistants. Although their research was about English it was relevant in terms of characteristics' selection and tools developments. Some teacher training programs integrate technology into Foreign Language lessons but teachers may not achieve sustainable reflection on the usability of technology in their actual practice (Yeh & Tseng 2019). Such a phenomenon

may call for technology (UAM) teachers' professional training pertinent to (EALM) delivery and evaluation (Hidayat & Nizar 2021); (Abdullah 2021; Guevarra, Ongkeko, Antonio, Bermudez, & Fernandez Marcelo 2021). Guevarra et al. (2021) confirms the necessity of scientific evaluation of academic modules and models' quality assurance before any recommendation made to include the modules in academic syllabi.

Various pedagogical implications are adaptable with (ADDIE) design to build, implement, and evaluate different academic modules. In agreement with Yeh & Tseng (2019) about the necessity of computer assisted learning skills, Hess & Greer (2016) implemented (ADDIE) model to integrate high-impact practices into an online information literacy course. The assertions of Hess & Greer (2016) agree with Almelhi (2021; Kiynova, Kurmankulova, Zheniskyzy, & Murzabayeva (2021) and Zhang & Zhang (2021) on the grounds of using (ADDIE) model for various pedagogical purposes. They concluded that (ADDIE) module is useful for various instructional design including online and face-to-face. This finding was also confirmed by (Hamdi & Abu Qudais 2018). Psychologically, Hakim, Zainiyati, Hana, & Alimina (2021) asserted that the application of (ADDIE) design for learning model building increase students' learning motivation.

This literature significantly guiding the researchers to put the entire (EALM) building research and evaluation procedures in the proper dimensions including the current phase of implementation, usability and quality evaluation before any final recommendation to use (EALM) is asserted. Since (EALM) researchers gathered favorable information about academic modules' quality assurance, they obtained an acceptable platform to conduct (EALM) quality evaluation survey after four weeks of (EALM) implementation by both (UAM) and (UAM) Arabic teachers. (EALM) implementation and evaluation research manifested the final (ADDIE) phase adapted for (EALM) building research series.

METHODS AND PROCEDURES

Basically, the adapted (ADDIE) model suggests undergoing the typical 5 phase procedure to build an effective academic learning module. The (ADDIE) adaptable 5 phases include analysis, design, development, implementation, and evaluation. Thus, (ADDIE) 5 phases were reviewed and adapted to suit in (EALM) building at all phases including the currently reported evaluation phase. The adaptation included (UAM) Arabic needs' analysis as well as designing (EALM) EAG, ADM and (CAV) content based on the findings of the analysis phase. The adaptation of (ADDIE) third phase dictated the conditions of developing (EALM) including using EAG, ADM and (CAV) based on the preceded two phases' outcomes.

The current research procedures and findings were based upon the final two phases of implementation and evaluation research. (EALM) pilot implementation and evaluation used a purposive sample of (UAM) students ($n=44$), a random sample of (UAM) teachers

($n=5$). The (ADDIE) evaluation mechanisms were applied along with two valid and reliable (EALM) evaluation questionnaires for both the students and the teachers. The questionnaires' reliability test yielded an overall coefficient of (0.944) for students' questionnaire and (0.929) for the teachers' questionnaire.

The descriptive statistics using SPSS20 was employed to describes EALM usability data collected from both; teachers and students characteristics. The descriptive statistics is a simple technique that describe and summarize the data in a meaningful way. The researchers chose the groups of EALM users in question and record their data rated on EALM usability evaluation using the mean summary statistics to describe their perception characteristics. There was no uncertainty involved in the analyses since the researchers were just describing EALM users' perception. The researchers were not aiming to infer EALM users' characteristics about a larger Ugandan population. Thus, there was no any hypothetical inferences expected to yield from the descriptive statistics employed in this research; no correlational prediction, experimental, nor control inferences were expected out such descriptive analyses. The researchers just took the research data points and reduced them into meaningful summaries of mean values without graphs because the descriptive statistics used in this research were simple and easy to comprehend.

(EALM) IMPLEMENTATION AND USABILITY ASSESSMENT

The pilot implementation of (EALM) was conducted for 4 weeks by both (UAM) students and (UAM) Arabic teachers. The purposive (UAM) sample size ($n=44$) as well as the random sample of (UAM) teachers ($n=5$) were used for data collection. Both the students' and teachers' evaluation questionnaires were used. The evaluation questionnaires were distributed via online googles forms to both (UAM) students and the selected (UAM) Arabic teachers during the 3rd week of (EALM) implementation. The completed sets of questionnaires were also collected via online googles forms during the 4th week. On one hand, the two major aims of students' questionnaire at this evaluation level were to answer questions about levels of (EALM) usability pertain the usability of specific content and overall EALM usability. On another hand, the three major aims of teachers' questionnaire were to rate the usability of (EALM) pedagogical content, usability specific (EALM) content, and overall (EALM) usability in terms of flexibility, clarity, and suitability for (UAM).

(EALM) USABILITY ASSESSMENT CONSTRUCTS

There were two different sets of (EALM) evaluation questionnaire; One for learners and another one for teachers. A set of 40 questionnaires were distributed to learners and 5 sets of questionnaires were distributed to teachers. The survey forms were distributed to learners and teachers during the 3rd week of (EALM) implementation, the filled sets of questionnaires were collected in the 4th week of Implementation. At this evaluation stage the researchers wanted to answer the following questions:

1. What are the types of error found in the EALM?
2. What are the strengths and weaknesses of the EALM?
3. What are the suggestions for improvement of the EALM?
4. What is the overall (EALM) usability in terms of flexibility, clarity, and suitability for (UAM)

The two constructs for students' questionnaire (EALM) specific content usability and EALM overall usability. While the three constructs for teachers' questionnaire were: (EALM) general pedagogical usability, (EALM) specific content usability, and (EALM) overall (EALM) usability in terms of flexibility, clarity, and suitability for (UAM). Therefore the students' questionnaire on one hand involved only two 2 sections of (EALM) evaluation construct; (i) the specific content usability construct with 8 factors; and (ii) the 3 factors construct of overall (EALM) usability in terms of flexibility, clarity, and suitability for (UAM).

On another hand, the teachers' questionnaire involved three 3 constructs of (EALM) usability evaluation: (i) (EALM) general pedagogical usability construct with 21 factors; (ii) the specific content usability construct with 8 factors, and (iii) the 3 factors construct of overall (EALM) usability in terms of flexibility, clarity, and suitability for (UAM). The following Table 1 describes the teacher' (EALM) evaluation questionnaire. Yet the Table 2 describes the students' (EALM) evaluation questionnaire.

TEACHERS' USABILITY ASSESSMENT QUESTIONNAIRE

It is vital to note in the following teachers' (EALM) usability evaluation questionnaire that the sections (C, D, & E) for the teachers' (EALM) usability evaluation contain three 3 constructs of (EALM) usability evaluation: the (EALM) general pedagogical usability with 21 factors; (EALM) specific content usability with 8 factors; and overall (EALM) usability with 3 factors. The teachers' (EALM) usability evaluation questionnaire is illustrated by the following table 1.

Table 1: Teachers' (EALM) Usability Evaluation Questionnaire

The evaluation of elementary Arabic learning module (EALM) for Ugandan adults <i>Muallaf</i> (UAM) (the teachers' copy)		
A: Investigated Module Information	"The elementary Arabic learning module (EALM) for Ugandan adults <i>Muallaf</i> (UAM) (Samples Of Lessons Using Arabic Grammar, Morphology and Common Arabic Vocabularies (CAV)".	No of Factors
B: Rate Scales instructions	This section uses a 5-point Likert scale; ranging from (1 = strongly disagree to 5 = strongly agree)	
	Teachers' (EALM) general pedagogical usability evaluation	

C: Teachers' rating of (EALM) general pedagogical usability	1. (EALM) content is relevant for the subject 2. (EALM) content coverage is adequate for the subject. 3. (EALM) is useful for (UAM) in learning the subject. 4. The information provided in (EALM) is correct. 5. (EALM) content is presented in a clear and effective manner. 6. (EALM) is written at a level suitable for (UAM) understanding. 7. The contents of (EALM) are arranged in systematic and logical order. 8. The language used in (EALM) is easy for (UAM) to understand. 9. Favorable exercises are sufficiently provided for each segment of (EALM) lesson. 10. (EALM) lessons' content matches the objectives and learning outcomes (CLO)s provided. 11. The exercises and learning activities given in (EALM) are useful. 12. (EALM) is suitable for (UAM) self-directed learning. 13. (EALM) reading exercises help (UAM) to improve their Arabic knowledge. 14. (EALM) reading exercises help (UAM) to improve their Islamic knowledge. 15. (EALM) content integrates (<i>Naqli & Aqli</i>) knowledge. 16. the general structural design of (EALM) is attractive. 17. the general instructional design of (EALM) is effective. 18. The fonts size 18 (Traditional Arabic) of the printed (EALM) is appropriate. 19. (EALM) references are useful. 20. (EALM) tables and icons are effective in directing the information. 21. (EALM) assessment mechanisms match the objectives and learning outcomes (CLO)s provided.	21
Teachers' specific (EALM) content usability evaluation		
D teachers' rating of specific (EALM) content usability evaluation	1. (EALM) (CAV) contents are relevant to (UAM) Arabic needs and understanding of subject. 2. (EALM) grammatical contents are relevant to (UAM) Arabic needs and understanding of subject. 3. (EALM) morphological contents are relevant to (UAM) Arabic needs and understanding of subject. 4. (EALM) includes key topics in all lessons. 5. (EALM) topics per lesson are appropriately sequenced to facilitate (UAM) Arabic learning. 6. (EALM) strengthens students understanding of Arabic knowledge and skills relevant to (UAM) needs. 7. (EALM) reading content provoke (UAM) to read more about similar topics. 8. (EALM) two broad sections are relevant to (UAM) Arabic literacy levels.	8
E teachers' rating of overall (EALM)	Teachers' overall (EALM) usability rating regarding the level flexibility, clarity; and suitability for (UAM) 1. What is the level of overall (EALM) usability in terms of (flexibility and easy to use)?	3

usability rating	2. What is the level of overall (EALM) usability in terms of Clarity Level? 3. What is the level of overall (EALM) usability in terms of Suitability for (UAM)?	
F open ended comments and suggestions for errors correction and (EALM) improvement	Teachers' Open ended Comments and Suggestions for Errors correction and (EALM) improvement Please provide information about (EALM) errors that you have found (if any); by providing the following information: (i) (EALM) Page Number, (ii) Error Paragraph Number and (iii) Brief description of the Error Found. Please provide suggestions for (EALM) improvement and (EALM) errors correction (IF ANY).	

Source: (Kirembwe et al. 2022).

The section (F); open ended section for comments and suggestions for errors correction and (EALM) improvement (if any) was added for the teachers only; The section (F) is not included in the students' (EALM) usability evaluation questionnaire.

STUDENTS' USABILITY ASSESSMENT QUESTIONNAIRE

The section (C & D) in the following students' (EALM) usability evaluation questionnaire contain only two 2 constructs of (EALM) usability evaluation: the (specific (EALM) content usability evaluation with 8 factors and (EALM) overall usability evaluation with 3 factors of flexibility, clarity, and suitability for (UAM). The students' (EALM) usability evaluation questionnaire is illustrated by the following table 2.

Table 2: Students' (EALM) Usability Evaluation Questionnaire

The evaluation of elementary Arabic learning module (EALM) for Ugandan adults <i>Muallaf</i> (UAM) (the students' copy)		
A: Investigated Module Information.	"The Elementary Arabic Learning Module (EALM) for Ugandan Adults <i>Muallaf</i> (UAM) (Samples of Lessons Using (EAG), (ADM) and (CAV)".	Factors
B: Rate Scales instructions	This section uses a 5-point Likert scale; ranging from (1 = strongly disagree to 5 = strongly agree)	

C: students' rating of specific (EALM) content usability evaluation	students' specific (EALM) content usability evaluation (EALM) (CAV) contents are relevant to my Arabic needs and understanding of subject. (EALM) grammatical contents are relevant to my Arabic needs and understanding of subject. (EALM) morphological contents are relevant to my Arabic needs and understanding of subject. (EALM) includes key topics in all Lessons. (EALM) topics per lesson are appropriately sequenced to facilitate my Arabic learning. (EALM) strengthens my understanding of Arabic knowledge and skills. (EALM) reading content provokes me to read more about similar topics. (EALM) two broad sections are relevant to differences in our Arabic literacy levels.	8
D Students' rating of overall (EALM) usability rating	Students' overall (EALM) usability rating regarding the level of flexibility, clarity; and suitability for (UAM) What is the level of overall (EALM) usability in terms of (Flexibility and Easy to Use)? What is the level of overall (EALM) usability in terms of Clarity Level? What is the level of overall (EALM) usability in terms of Suitability for (UAM)?	3

Source: (Kirembwe et al. 2022).

It is noticeable that the teacher' evaluation table 1 is smaller than the students' evaluation table 2 because the teacher' evaluation table 1 included additional section (C); (EALM) general pedagogical evaluation, and the teachers' section (F); open ended comments and suggestions for errors correction and (EALM) improvement which were omitted from the students' evaluation table 2; The students were not capable for providing advanced Arabic and pedagogic criticism. Although (UAM) students were adults, they were not experienced enough to detect errors in (EALM) linguistic and pedagogical contents. Unlike (UAM) students, the experienced teachers were involved in (EALM) pedagogical evaluation and error evaluations because teachers play a vital role in predicting favorable instructional characteristics for students' academic success (Fareh & Saeed 2011; Fareh, 2018; Hani, Alkhamra, Alomari, Aljazi, and Jalali-Kushki 2022). Thus, the section (F) was made open ended requesting (UAM) teacher participants to comments on errors found on (EALM) (if any) and provide suggestions on how to fix them.

DATA ANALYSIS

The descriptive statistics were used to analyze (EALM) usability evaluation data for all constructs; (EALM) general pedagogical usability, (EALM) specific content usability, and the construct of (EALM) overall usability following the sequence of their respective factors

in the questionnaires. The tables from 3 to 10 summarize the findings of teachers' (EALM) usability evaluation.

FINDINGS OF TEACHERS' USABILITY ASSESSMENT

This section present findings of teachers' evaluation for (EALM) general pedagogical usability, (EALM) specific content usability, and overall constructs due to their respective factors' order in the teachers' questionnaire, holding in the view that the major aim of teachers' questionnaire was to rate three (EALM) constructs: the general pedagogical, specific content, and overall (EALM) usability. Thus, the teachers' evaluation tables from 3 to 7 present the teachers' evaluation summary with 21 (EALM) EALM) general pedagogical usability, (EALM) specific content usability, and the construct of (EALM) overall usability. While the two teachers' evaluation tables 8 & 9 present the teachers' evaluation summary with 8 (EALM) specific usability factors. Yet, the teachers' evaluation table 10 present teachers' evaluation summary with only 3 (EALM) overall usability factors.

Findings of Teachers' Rating for (EALM) General Pedagogical Usability

The findings of teachers' evaluation for (EALM) general pedagogical usability factors; (1 to 21) are presented in the following teachers' rating tables (3 to 7) due to their respective order in the teachers' questionnaire.

Table 3: Findings of Teachers' Rating for (EALM) General Pedagogical Usability (1 to 5)

		Teachers' general pedagogical rating 1	Teachers' general pedagogical rating 2	Teachers' general pedagogical rating 3	Teachers' general pedagogical rating 4	Teachers' general pedagogical rating 5
N	Valid	5	5	5	5	5
	Missing	0	0	0	0	0
Mean		5.0000	4.8000	5.0000	5.0000	5.0000

Source: (Kirembwe et al. 2022).

The table 3 describes the finding of teachers' general pedagogical rating of (EALM) content usability relating to (EALM) relevance, coverage, usefulness, accuracy, & usability. These findings show that (UAM) teachers agree that (EALM) is excellent at the above general pedagogical usability factors; (1 to 5) table 3.

Table 4: Findings of Teachers' Rating for (EALM) General pedagogical Usability (6 to 10)

		Teachers' general pedagogical rating 6	Teachers' general pedagogical rating 7	Teachers' general pedagogical rating 8	Teachers' general pedagogical rating 9	Teachers' general pedagogical rating 10

N	Valid	5	5	5	5	5
	Missing	0	0	0	0	0
Mean		5.0000	5.0000	5.0000	4.8000	5.0000

The table 4 describes the finding of teachers' general pedagogical rating of (EALM) usability relating to suitability for (UAM) understanding, systematic and logical, easy language, sufficiently exercises, and compatibility of the content with objectives and (CLO)s. These findings show that (UAM) teachers strongly agree that (EALM) is excellent at the above general pedagogical usability factors; (6 to 10) table 4.

Table 5: Findings of Teachers' Rating for (EALM) General pedagogical Usability (11 to 15)

		Teachers' general pedagogical rating 11	Teachers' general pedagogical rating 12	Teachers' general pedagogical rating 13	Teachers' general pedagogical rating 14	Teachers' general pedagogical rating 15
N	Valid	5	5	5	5	5
	Missing	0	0	0	0	0
Mean		5.0000	4.8000	5.0000	5.0000	5.0000

Source: (Kirembwe et al. 2022).

The table 5 describes the finding of teachers' general pedagogical rating of (EALM) usability regarding the usefulness of exercises and learning activities, suitability for self-directed learning, usability of reading exercises on Arabic knowledge Islamic knowledge enhancement, and integration of (Naqli & Aqli) knowledge. These findings show that (UAM) teachers strongly agree that (EALM) is excellent at the above general pedagogical usability factors; (11 to 15) table 5.

Table 6: Findings of Teachers' Rating for (EALM) General pedagogical Usability (16 to 20)

		Teachers' general pedagogical rating 16	Teachers' general pedagogical rating 17	Teachers' general pedagogical rating 18	Teachers' general pedagogical rating 19	Teachers' general pedagogical rating 20
N	Valid	5	5	5	5	5
	Missing	0	0	0	0	0
Mean		5.0000	5.0000	5.0000	4.8000	5.0000

Source: (Kirembwe et al. 2022).

The table 6 describes the finding of teachers' general pedagogical rating of (EALM) usability regarding the Attractiveness of structural design, usability of instructional design, appropriateness of the fonts size 18 (Traditional Arabic) of the printed version, Usefulness of references and usability of tables and icons in directing the information.

These findings show that (UAM) teachers strongly agree that (EALM) is excellent at the above general pedagogical usability factors; (16 to 20) table 6.

Table 7: Findings of Teachers' Rating for (EALM) General pedagogical Factor (21)

		Teachers' general pedagogical rating 21
N	Valid	5
	Missing	0
Mean		5.0000

The table 7 describes the finding of teachers' general pedagogical evaluation of (EALM) usability regarding the compatibility of assessments with (EALM) objectives and learning outcomes (CLO)s. These findings show that (UAM) teachers strongly agree that (EALM) is excellent at the above general pedagogical factor (21) table 7.

Findings of Teachers' Rating for (EALM) Specific Usability

The findings of teachers' rating for (EALM) specific usability; (1 to 8) are presented in the following two tables; (8 & 9) due to their respective order in the teachers' questionnaire.

Table 8: Findings of Teachers' Rating for (EALM) Specific Usability (1 to 4)

		Teachers' specific rating 1	Teachers' specific rating 2	Teachers' specific rating 3	Teachers' specific rating 4
N	Valid	5	5	5	5
	Missing	0	0	0	0
Mean		4.8000	4.8000	4.8000	5.0000

Source: (Kirembwe et al. 2022).

The table 8 describes the finding of teachers' specific rating of (EALM) quality regarding the relevancy of (CAV) contents, grammatical contents, morphological contents, and inclusion of key topics in all lessons. These findings show that (UAM) teachers strongly agree that (EALM) is excellent at the above specific usability factors; (1 to 4) table 8. These findings are also supported by Alqarni (2020) and Jaradat (2022).

Table 9: Findings of teachers' rating for (EALM) specific usability (5 to 8)

		Teachers' specific rating 5	Teachers' specific rating 6	Teachers' specific rating 7	Teachers' specific rating 8
N	Valid	5	5	5	5
	Missing	0	0	0	0
Mean		5.0000	5.0000	5.0000	4.8000

Source: (Kirembwe et al. 2022).

The table 9 describes the finding of teachers' specific rating of (EALM) usability regarding the appropriateness of topics' sequence per lesson for facilitating Arabic learning, strengthening students understanding of Arabic knowledge and skills, provoke of reading content to read more about similar topics, relevancy of two (EALM) broad sections to (UAM) Arabic literacy levels. These findings show that (UAM) teachers strongly agree that (EALM) is excellent at the above specific usability factors; (5 to 8) table 9.

Findings of Teachers' Rating for (EALM) Overall Usability

The following section provides findings of teachers' rating of (EALM) overall usability regarding flexibility, clarity, and suitability for (UAM). The findings of teachers' rating for (EALM) overall usability; (1 to 3) are presented in the following table 10 due to their respective order in the teachers' questionnaire.

Table 10: Teachers' Overall (EALM) Usability Rating Factors (1 to 3)

		Teachers' overall rating 1	Teachers' overall rating 2	Teachers' overall rating 3
N	Valid	5	5	5
	Missing	0	0	0
Mean		4.6000	5.0000	5.0000

Source: (Kirembwe et al. 2022).

The table 10 describes the finding of teachers' overall rating of (EALM) usability regarding the Level of Flexibility, Clarity and Suitability for (UAM). These findings show that (UAM) teachers strongly agree that (EALM) is excellent at the above overall usability factors (1 to 3) described in the table 10 above.

FINDINGS OF STUDENTS' USABILITY ASSESSMENT

The following section present the findings of students' evaluation for (EALM) specific and overall constructs due to the sequence of their respective factors in the students' questionnaire, holding in minds that the major aim of students' questionnaire was to rate only two (EALM) contracts; the specific and overall (EALM) usability. Just like in the teachers' questionnaire, the two students' rating tables 11 & 12 present the students' rating summary of 8 (EALM) specific usability factors. Yet, the students' rating table 13 present the students' rating summary of 3 (EALM) overall usability factors.

The Findings of Students' Rating for (EALM) Specific Usability

The findings of students' rating for (EALM) specific usability; (1 to 8) are presented in the following two students' rating tables; (11 & 12) due to their respective order in the students' questionnaire.

Tables 11 Findings of Students Rating for (EALM) Specific Usability (1 to 5)

		students' specific rating 1	students' specific rating 2	students' specific rating 3	students' specific rating 4	students' specific rating 5
N	Valid	44	44	44	44	44
	Missing	0	0	0	0	0
Mean		4.8182	4.8409	4.7727	4.7955	4.7045

Source: (Kirembwe et al. 2022).

The table 11 describes the finding of students' specific rating of (EALM) usability regarding the relevancy of (CAV) contents, relevancy of the grammatical contents, relevancy of the morphological contents; inclusion of the key topics in all Lessons, and appropriateness of topics' sequency per lesson which facilitate faster Arabic learning. These findings show that (UAM) strongly agree that (EALM) is very good at the above specific usability factors (1 to 5) presented in the table 11.

Tables 12 Findings of Students Rating for (EALM) Specific Usability (6 to 8)

		students' specific rating 6	students' specific rating 7	students' specific rating 8
N	Valid	44	44	44
	Missing	0	0	0
Mean		4.7955	4.8182	4.7500

Source: (Kirembwe et al. 2022).

The table 12 describes the finding of students' specific rating of (EALM) usability regarding strengthening (UAM) understanding of Arabic knowledge and skills; provoking reading content to read more about similar topics, and relevancy of the two (EALM) broad sections to differences in (UAM) Arabic literacy levels. These findings show that (UAM) strongly agree that (EALM) is very good at the above specific usability factors; (6 to 8), table 12.

Findings of Students' Rating for (EALM) Overall Usability

The findings of students' rating for (EALM) overall usability; (1 to 3) are presented in the following students' rating table 13 due to their respective order in the students' questionnaire.

Tables 13: Findings of Students' Rating for (EALM) Overall Usability (1 to 3)

		students' overall rating 1	students' overall rating 2	students' overall rating 3
N	Valid	44	44	44
	Missing	0	0	0
Mean		4.7500	4.8636	4.9091

Source: (Kirembwe et al. 2022).

The table 13 describes the finding of students' overall rating of (EALM) usability regarding the Level of flexibility, clarity and suitability for (UAM). These findings show that (UAM) students strongly agree that (EALM) is very good at the above overall usability factors; (1 to 3) table 13.

REMARKS ON TEACHERS' RATINGS

The previous tables 3 to 10 manifest that all teachers' ratings for all (EALM) usability factors were very high. Such a very high magnitudes of teachers' rating facilitate a strong position for the researcher to conclude that (EALM) is effective in acquisition of elementary Arabic language for (UAM) using the linguistic content of EAG, ADM, and (CAV). The teachers' high ratings magnitudes for all (EALM) factors symbolize a very strong evidence for (EALM) high usability which is scientific evidence for the researchers' recommendation to use (EALM) for (UAM).

REMARKS ON STUDENTS' RATINGS

The previous tables 11 to 13 manifest that all students' ratings for all (EALM) usability factors were above the mean average which facilitated a reasonable foundation for the researcher to assert that (EALM) is effective Arabic learning module for (UAM). The students' high ratings for all (EALM) usability factors are strong evidence that reflect (EALM) high usability which strengthens the researchers' position to recommend the use of (EALM) for (UAM) and similar populations.

GENERAL REMARKS ON THE FINDINGS

The tables (3 to 10) manifest that (UAM) teachers' ratings for all (EALM) usability factors were very high. The teachers' high rate implies that (UAM) teachers strongly agree that (EALM) usability is excellent. The similar high mean average is manifested in (UAM) rating tables; (11 to 13); The (UAM) ratings of (EALM) usability were above the average for all the selected factors. Hence, it clear that both (UAM) students as well as (UAM) teachers strongly agree that (EALM) usability is excellent. Thus, the researchers can reasonably assert that (EALM) is recommendable for (UAM). However, we should not rule out the possibility that adults' literacy factors might have influenced (UAM) specific perception and rated (EALM) content in unusual way that might cause the face of finding to look the

way they are (Atari 2010).

Another concern about the face of these finding is the (UAM) anxiety, which is might have influence their specific and overall decisions for or against (EALM) that they had used for the 4 implementation weeks (Al-Shuaibi, Hamdan-Mansour, & Azzeghaiby 2014). Such a phenomena may warrant to conduct an experimental research with strong design, that can reasonably control the possible extraneous variables, to investigate the effect of (EALM) on achievements of elementary Arabic skills for (UAM). However, the researchers' position to recommend (EALM) for (UAM) remains strong and evidenced by the high magnitudes of mean average rates from both the teachers and the students.

CONCLUSION

This research was conducted to evaluate (EALM) for (UAM). The (EALM) implementation and rating was conducted in by the current research and marked the final phase 4 & 5 for (EALM) building research series. (EALM) was built using a sequence of lessons with EAG, ADM, (CAV) and common Arabic language arts.

(EALM) designers asserted that the absence of (UAM) standardized Arabic syllabus with clearly articulated aims and learning outcomes was hindering their Arabic proficiency. Hence, it was recommendable to revisit (EALM) Arabic content and instructional usability so that the (UAM) standardized syllabus with explicitly articulated aims and learning outcomes can be manifested.

The descriptive statistics, judgmental purposive sample of (UAM) students ($n=44$), and a random (UAM) teachers' sample ($n=5$) were selected for (EALM) evaluation data collection. The (ADDIE) evaluation mechanisms were applied along with two valid and reliable (EALM) evaluation questionnaires for both the students and the teachers. The major aims of students' evaluation questionnaire were to rate the level of specific and overall (EALM) usability. Whereas major aims of teachers' evaluation questionnaire were to rate the level of general pedagogical usability, specific content usability, and (EALM) overall usability.

The finding yielded a highly positively teachers' and students' ratings in favor of all (EALM) usability pertain all (EALM) constructs, including (EALM) general pedagogical usability construct, (EALM) specific content usability construct, and (EALM) overall usability construct of flexibility, clarity, and suitability for (UAM). Thus, the researchers asserted that (EALM) is effective for (UAM) and therefore they strongly recommend (UAM) to use (EALM) for their elementary Arabic acquisition, basic Arabic communication, and Islamic provisions' assimilation purposes.

RECOMMENDATIONS

Due to the finding of this research, it is strongly recommendable for (UAM) to use (EALM) for elementary Arabic acquisition, basic Arabic communication, and Islamic provisions' assimilation purposes. Since the current research was a pre-experimental case study using a judgmental purposive sample, it is recommendable for the future related research to use more empirical experiments engaging the relatively larger sample size the find of which would be significantly generalizable to wider (UAM) target population.

The findings at hand imply that EAG, ADM, (CAV), and common Arabic language arts are effective linguistic component applicable in (EALM) for (UAM) and similar population (Alghazo, Al Salem, & Alrashdan 2021). Hence, more scientific research is warranted to investigate factors influencing the above Arabic linguistic variables in favor of elementary Arabic acquisition for the similar population.

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AUTHOR CONTRIBUTIONS

All authors contributed significantly to the development and completion of this study; including conceptualization, methodology, data curation, formal analysis, investigation, writing—original draft preparation, writing—review and editing. All authors reviewed and approved the final version of the manuscript.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest related to the research, authorship, or publication of this article.

ETHICS STATEMENT

This study was conducted in accordance with established ethical research principles and received ethical approval from the Research Management Section (RMS) of the respective institution prior to data collection. Participation in the study was voluntary, and all participants were informed about the purpose, procedures, and scope of the research before providing their responses. The confidentiality and anonymity of participants were maintained throughout the research process. No personally identifiable information was collected, and all data obtained were used solely for academic research purposes. The study complied with institutional ethical requirements concerning informed consent, participant privacy, and responsible research conduct.

REFERENCES

- Abdullah, A. M. (2021). Effectiveness of the ADDIE model within an e-learning environment in developing creative writing in EFL students. *English Language Teaching*, 14(2). <https://doi.org/10.5539/elt.v14n2p20>.
- Ahmad Zabidi, N., Woo, T. K., Rajesh Kumar, P., Fadzil, M., & Syed Husain, S. H. (2017). Quality assurance in learning material development at OUM. In *Asian Association of Open Universities Journal* (Vol. 12, Issue 1). <https://doi.org/10.1108/AAOUJ-01-2017-0014>.
- Aldoobie, N. (2015). ADDIE model analysis phase. *American International Journal of Contemporary Research*, 5(6).
- Alghazo, S., Al Salem, M. N., & Alrashdan, I. (2021). Stance and engagement in English and Arabic research article abstracts. *System*, 103. <https://doi.org/10.1016/j.system.2021.102681>.
- Al-haq, F. A.-A., & Al-Masaeid, A. L. (2009). Islam and language planning in the Arab world: A case study in Jordan. *Iranian Journal of Language Studies (IJLS)*, 3(3).
- Altakhaineh, A. R. M., Zibin, A., & Alkhatib, R. N. (2020). On the acquisition of the Arabic grammatical gender by Arabic-speaking children with ASD. *Journal of Psycholinguistic Research*, 49(6). <https://doi.org/10.1007/s10936-020-09732-5>.
- Amoako, I., & Asamoah-Gyimah, K. (2020). Indicators of students' satisfaction of quality education services in some selected universities in Ghana. *South African Journal of Higher Education*, 35(4). <https://doi.org/10.20853/34-5-4252>.
- Dörnyei, Z. (2003). Questionnaires in second language research: construction, administration, and processing. London, UK: Lawrence Erlbaum Associates.
- Dunkin, M. J., & Biddle, B. J. (1974). *The study of teaching*. Holt, Rinehart & Winston.
- Elsaid Mohammed, A. S., & Nur, H. S. M. (2018). Needs' analysis in English for academic purposes: The case of teaching assistants at the University of Khartoum. *HOW*, 25(2), 49-68. <https://doi.org/10.19183/how.25.2.409>.
- Fareh, S. (2018b). Teacher characteristics and teacher role. In *The TESOL Encyclopedia of English Language Teaching*. <https://doi.org/10.1002/9781118784235.eelt0215>.
- Fareh, S., & Saeed, A. T. (2011). The teacher as researcher in the context of language teaching. *Procedia - Social and Behavioral Sciences*, 15. <https://doi.org/10.1016/j.sbspro.2011.03.066>.
- Fareh, S., Jarad, N., & Yagi, S. (2020). How well can Arab efl learners adequately use discourse markers? *International Journal of Arabic-English Studies*, 20(2). <https://doi.org/10.33806/ijaes2000.20.2.4>.
- Farghal, M. (2008). Arabic, Islam, and the Allah lexicon. *American Journal of Islam and Society*, 25(4). <https://doi.org/10.35632/ajis.v25i4.1444>.
- Guevarra, J. P., Ongkeko, A. M., Antonio, C. A. T., Bermudez, A. N. C., & Fernandez Marcelo, P. H. (2021). The application of the ADDIE model and the training cycle in the development, Implementation, and evaluation of training program on data use for decision-making among end-users of electronic health information system in geographically isolated and disadvantaged areas. *Acta Medica Philippina*, 55(4).
- Hakim, L., Zainiyati, H. S., Hana, R. Al, & Alimina, S. F. (2021). The implementation of ADDIE Al-Quran Hadith learning design model at MTs Assathi' Karas. *Edukasia: Jurnal Penelitian Pendidikan Islam*, 16(1).

- Hamdi, T., & Abu Qudais, M. (2018). Optimizing the blended learning environment: the Arab Open University experience. *Open Learning*, 33(1). <https://doi.org/10.1080/02680513.2017.1414587>.
- Hanady Bani Hani, Rana Alkhamra, Hala Alomari, Aya Aljazi, Yasaman Jalali-Kushki. (2022). Phonological awareness in Arabic among early grade teachers. *International Journal of Arabic-English Studies (IJAES)*, Vol. 22, No.2, 2022 171. <https://doi.org/10.33806/ijaes2000.22.2.10>.
- Hess, A. K. N., & Greer, K. (2016). Designing for engagement: Using the ADDIE model to integrate high-impact practices into an online information literacy course. *Communications in Information Literacy*, 10(2). <https://doi.org/10.15760/comminfolit.2016.10.2.27>.
- Hidayat, F., & Nizar, M. (2021). ADDIE analysis, design, development, implementation and evaluation model in Islamic education learning. *Jurnal Inovasi Pendidikan Agama Islam*, 1(1).
- Jaradat, A. (2022). On secondary grammaticalization: the case of hatta in rural Jordanian Arabic. *International Journal of Arabic-English Studies*, 22(1). <https://doi.org/10.33806/ijaes2000.22.1.1>.
- Karam, M., Fares, H., & Al-Majeed, S. (2021). Quality assurance framework for the design and delivery of virtual, real-time courses. *Information (Switzerland)*, 12(2). <https://doi.org/10.3390/info12020093>.
- Kirembwe R. A. H., Hishomudin A., Siti Rosilawati R., Sarifah Nurhanum S. S., Hayati Ismail, Sakinah Ahmad, Mohd Aderi C.N., Noor Azizi I., Adibah Sulaiman M., Mardhiah Y., & Mohammad Najib J., (2022). The Development of Elementary Arabic Learning Module EALM for Ugandan Adults *Muallaf UAM*; Samples of Lessons Using Elementary Arabic Grammar, Morphology and Common Arabic Vocabularies CAV. USIM- HZWU *Research Report*. (USIM/ HZWU/ FPBU/ ANTARABANGSA/ 41222).
- Kiynova, Z., Kurmankulova, A., Zheniskyzy, A., & Murzabayeva, A. (2021). Role of pedagogical design using the ADDIE model in the design of online lesson components. *Journal of Educational Sciences*, 69(4). <https://doi.org/10.26577/jes.2021.v69.i4.05>. Model, A. (2021). Instructional design models: ADDIE, Gagne's, Merrill's and Bloom's methodologies. *Education*.
- Koderi, K., & Syahrial, Z. (2018). Model development of savi-based e-module for Arabic instruction at Islamic junior high school in bandar Lampung, Indonesia. *Humaniora*, 9(1). <https://doi.org/10.21512/humaniora.v9i1.4136>.
- Marton, F. (1988). Describing and Improving Learning. In R.R. Schmeck (ed.), *Learning Strategies and Learning Styles*. New York: Plenum.
- Marton, F., & Saljo, R. (1976). On Qualitative Differences in Learning - I: Outcome and Process. *British Journal of Educational Psychology*, 46, 4-11.
- Mohamed S. Al-Seghayar. (2002). Burzio's generalization and Arabic verbs. *International Journal of Arabic-English Studies (IJAES)*, Vol. 3, 2002.
- Murtadha J. Bakir. (2006). Investigating control in English and Arabic. *International Journal of Arabic-English Studies (IJAES)*, Vol. 7, 2006.
- Muteb Alqarni. (2020). The Morphosyntax of the demonstrative system in classical Arabic: a distributed morphology account. *International Journal of Arabic-English Studies (IJAES)*, Vol. 20, No.1, 2020 19. <https://doi.org/10.33806/ijaes2000.20.1.2>.

- Nahla Nola Bacha, Martin Cortazzi, and Fouad Nakhle. (2002). Academic lexical literacy: investigating the cohesion of Arabic speakers' essays in English. *International Journal of Arabic-English Studies (IJAES)*, Vol. 3. 2002.
- Omar F. Atari. (2010). Literacy Practices in Contrast: Adult Arab literacy vs. native English literacy. *International Journal of Arabic-English Studies (IJAES)*, Vol. 11, 2010.
- Al-Shuaibi, J., Hamdan-Mansour, A. M., & Azzeghaiby, S. N. (2014). Foreign Language Anxiety among students studying foreign languages. *Life Science Journal*, 11(8).
- Pamessangi A. A. (2022). Developing Arabic language textbooks based on religious moderation in madrasah. *Al-Ishlah: Journal Pendidikan*.
- Tsai, M. F., & Jao, J. C. (2020). Evaluation of the effectiveness of student learning and teacher instruction on team-based learning during quality control of diagnostic imaging. *Medical Education Online*, 25(1). <https://doi.org/10.1080/10872981.2020.1732159>.
- Tu, J. C., Zhang, X., & Zhang, X. Y. (2021). Basic courses of design major based on the ADDIE model: Shed light on response to social trends and needs. *Sustainability (Switzerland)*, 13(8). <https://doi.org/10.3390/su13084414>.
- Yeh, H. C., & Tseng, S. S. (2019). Using the ADDIE model to nurture the development of teachers' CALL professional knowledge. *Educational Technology and Society*, 22(3).
- Yusof, N., Baharudin, H., Hamzah, M. I., & Abdul Malek, N. I. (2021). Fuzzy Delphi method application in the development of i-aqran module for Arabic vocabulary consolidation. *Ijaz Arabi Journal of Arabic Learning*, 4(2). <https://doi.org/10.18860/ijazarabi.v4i2.12050>.