Transformation of Arabic Assessment in Indonesia: Conventional Assessment Toward Digital Assessment

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Abstract

Since 1960, digital assessment has been developed and implemented in foreign language assessments, but there are still few studies that discuss Arabic digital assessment because most of them follow a traditional paper and pencil assessment. The study investigates the transformation of Arabic assessment in Indonesia from conventional to digital. It further describes the factors influencing the transformation. This study employs a qualitative-case study involving Indonesian Islamic State Universities. Data collection techniques used are interviews and observations. Then the data is analyzed interactively with data reduction, data display and conclusion. The results show that the transformation of the Arabic language assessment has begun in 2016 at UIN Maliki Malang but it faced constraints regarding its TOAFL implementation. Implementing the digital Arabic assessment is comprehensively done during the online learning policy. Two factors influence the shift in Arabic assessment culture: the rapid development of the 4.0 Industrial Revolution and the COVID-19 pandemic. There are two models of digital assessment: web-based assessment and mobile-based assessment.

Key words: digital assessment, e-assessment Arabic, computer-based assessment, mobile-based assessment

Abstrak

Sejak tahun 1960, Digital assessment sudah dikembangkan, dan diimplementasikan dalam assessment bahasa asing, namun masih sedikit penelitian yang membahas tentang digital assessment Bahasa Arab, hal ini disebabkan kebanyakan assessment Bahasa Arab masih tergolong konvensional. Tulisan ini berupaya untuk menginvestigasi transformasi assessment bahasa Arab dari konvensional ke digital assessment di Indonesia serta faktor yang mempengaruhinya. Penelitian ini menggunakan metode kualitatif dengan studi kasus. Subjek penelitian ialah beberapa universitas Islam negeri di Indonesia. Teknik pengumpulan data dengan
wawancara dan observasi, kemudian data tersebut dianalisis secara interaktif dengan data reduction, data display dan conclusion. Hasil dari penelitian ini yaitu, transformasi assessment Bahasa Arab dimulai pada tahun 2016 di UIN Malang, namun terbatas kepada pelaksanaan TOAFL. Digitalisasi assessment bahasa Arab secara menyeluruh dimulai ketika diterbitkannya kebijakan belajar online. Setidaknya ada dua faktor yang mempengaruhi transformasi assessment bahasa Arab, pertama yaitu berkembang pesatnya revolusi industry 4.0, dan pandemi covid 19. Model digital assessment yang digunakan adalah web-based assessment dan mobile-based assessment.

Kata kunci: digital assessment, e-assessment bahasa Arab, penilaian berbasis computer, penilaian berbasis seluler

INTRODUCTION

Conventional assessment has several weaknesses, including the inefficient production of question instruments in time and cost, the correction process, the complicated scoring process of test results, and the feedback for students. It takes a long time to conduct, and psychologically, it causes anxiety to students (Seteman, 2010).

The digital-based assessment begins to be developed to cover the shortcomings of conventional assessment. Changing the evaluation paradigm in the learning process is a necessity. With the development of technology, conventional assessment using paper has changed towards modern computer-based assessment (Scherer & Siddiq, 2015). Even the use of digital assessment in the language learning evaluation has exceptionally good potential and will develop (Burstein et al., 1996).

Digital assessment development began in 1960, with the PLATO (Programmed Logic for Automatic Teaching Operations) project starting at the University of Illinois (Al-Smadi & Gütl, 2008). In 1980, Cambridge Assessment developed a computer-based digital assessment for vocational training qualifications (Craven, 2009). In the 1990s, people began to develop web-based assessments, which were influenced by the development of the World Wide Web (Al-Smadi & Gütl, 2008).

Several research results show that using digital assessment has positive results from the students and has been successfully implemented in replacing the Paper-based test evaluation (Romero et al., 2009). It is suitable for summative evaluation in distance or online learning (Arthur et al., 2014), increasing student motivation, learning performance and attitudes (Nikou & Economides, 2013). Digital assessment is considered more credible, objective, fair, interesting, fun, fast, and not difficult to operate and does not stress students out (Croft et al., 2001). However, the implementation of the evaluation of Arabic learning is still conventional, and this condition is not directly proportional to the current development of digital assessment (Gebril & Taha-Thomure, 2013).

Many Arabic language teachers still favor the conventional assessment paradigm because learning Arabic is focused on reading, writing, vocabulary, and grammar (Rahman et al., 2021). Therefore, there is a need for innovation in evaluating Arabic learning using systems or technology (Zurqoni et al., 2020). The
assessment transformation from the conventional to digital is a necessity in evaluation process in Arabic learning.

Islamic Universities become the first milestone and a pioneer in this transformational flow by gradually assessing the conventional Arabic language assessment. The rapid development of technology has made Islamic Higher Education Institutions in Indonesia begin to develop digital assessments in Arabic language.

The initial gateway to the transformation assessment in Indonesia began when one of the Islamic Higher Education Institutions developed a digital assessment in 2016. Therefore, the transformation assessment is something interesting for writers to investigate further. This research is particularly important, considering that only few studies discuss the digital assessment of Arabic in Indonesia. Hopefully, the results of this research will provide new insights into the digital assessment of the Arabic language.

This research answers three important things: the transformation assessment background of the Arabic language, the transformation factors of the Arabic language assessment, and the classification of Arabic language assessment.

METHODS
Research Design

A case study approach in the qualitative method to track events without manipulation is used in this research (Cousin, 2005). This study aims to describe the transformation assessment of the Arabic language in depth.

The subject of this research is State Islamic Universities in Indonesia since they are the pioneers in developing a digital assessment of Arabic in Indonesia. The universities involved are UIN Maulana Malik Ibrahim Malang, UIN Sunan Ampel Surabaya, UIN Syarif Hidayatullah Jakarta, UIN K.H. Syaifuddin Zuhri Purwokerto, UIN Prince Antasari Banjarmasin, UIN Raden Intan Lampung, UIN Sumatera Utara Medan, UIN Sultan Maulana Hasanuddin Banten, and UIN Sunan Kalijaga Yogyakarta. Due to limitations, the authors chose these 9 Islamic universities because they represent the big cities in Indonesia.

Data Collection and Analysis Technique

Data collection techniques include interviews with administrators or Arabic language teachers at UPT PPB (Unit Pelaksana Teknis Pusat Pengembangan Bahasa/Language Development Center) in each university. The writers interviewed the following participants: MUK, INA, FA, M, MR, AM, AAS, N, SH, and MFA. To add to the data collected from interviews, the author also made observations to several universities conducting the Arabic language assessment. In addition, a literature review is used to collect data from theories related to research discussions through journals and books.

The data obtained by the writer is then analyzed interactively and continuously until it is complete so that the data is saturated. Activities in data analysis are data reduction, data display and conclusion drawing (Miles et al., 2013)
RESULTS AND DISCUSSION

Based on the data obtained through observation and interviews, this study looks at the transformation assessment of Arabic language assessment. The authors obtain three important things: the transformation assessment background of the Arabic language, the transformation factors of the Arabic language assessment, and the classification of Arabic language assessment. These three matters are explained below.

The Transformation Background of the Arabic Language Assessment

Before the authors discuss the transformation background of the Arabic language assessment in Indonesia, the authors briefly describe the history of the transformation of assessment globally. Since 1960, digital assessment has long been initiated and developed by experts. In the 1980s, the interest in using computers in teaching began, and computers were used to automate some instructional design tasks. Not long afterwards, assessment systems in other fields, such as mathematics and chemistry, emerged (Al-Smadi & Gütl, 2008).

In 1998, the use of digital assessment began to use in the CBT/Computer-Based Testing TOEFL test (Alderson, 2009), and in 2005, the implementation of TOEFL developed into IBT/Internet-Based Testing (Zareva, 2005). As for the implementation of TOAFL (Test of Arabic as a Foreign Language), it was developed in 1999 at UIN Jakarta. The implementation mechanism was still conventional, based on paper-based tests.

An Arabic online project, implemented by the European Union’s Lifelong Learning Program in 2009, aims to dispel the myth that Arabic is a difficult language to learn. It also proves that Arabic is accessible to all learners regardless of their language learning background by providing it in current pedagogical courses (Learn Arabic Online with ArabicOnline - Award-Winning Interactive Courses, nd).

In 2010, the University of the United Arab Emirates (UAE) developed a digital assessment for native speakers. Assessment, called the Alain Test of Arabic Proficiency (ATAP), moves away from the grammar-oriented paradigm that is quite common in academic circles in Arab countries and follows a communicative approach to language assessment (Gebril & Taha‐Thomure, 2013).

In 2011, Saudi Arabia launched Saudi Electronic Education (SEU). Arabic-Online.net is one of SEU’s flagship programs. This program meets the needs of teaching Arabic to non-Arabic speakers by providing an integrated online program that allows learning Arabic anywhere in the world, transcending time and space constraints (Saudi Electronic University, nd).

The Background and Transformation Factors of the Arabic Language

Assessment of Arabic in Indonesia is generally still conventional, at least until 2016. Arabic Digital Assessment is applied to the Test of Arabic as a Foreign Language (TOAFL) based web-based assessment. However, the process is still offline or requires the test-taker to come the test location (Interview with MUK, October 2021).

UIN Sunan Ampel Surabaya collaborated with Germany’s Leipzig University in 2018 to develop digital Arabic language learning. Arabic learning at UIN Sunan Ampel Surabaya uses modern standards (Interview with INA, October 2021).
learning components are digital-based, including materials, media, and evaluations, so that assessment is conducted digitally based on the 2019 WEB-based Assessment.

UIN KH. Prof. Saifuddin Zuhri Purwokerto (formerly IAIN Purwokerto) developed an evaluation tool for the Arabic digital assessment program. The digital assessment system is named the Language Information System/Sistem Informasi Bahasa (SIB) (Interview with FA, October 2021). The digital assessment is used for the placement test, middle test, and final test of Arabic held by Language Development Center/Pusat Pengembangan Bahasa (PPB) UIN KH. Saifuddin Zuhri Purwokerto.

The policy of distance learning/online classes changes all aspects of learning, and one of which is the assessment of the Arabic language. Changing the learning system to online is an obligation that must be applied by Islamic higher education institutions, especially in learning Arabic. The authors present data regarding the development of digital assessment Arabic as follows.

A. UIN Maulana Malik Ibrahim Malang (UIN Maliki Malang)

The assessment was developed in 2016 by PPBA UIN Malang, and it is called the ILAA (Al-ikhtibar al-lughah al-Arabiyyah alm’iyariyah) test or equivalence to TOAFL test (Interview with MUK, October 2021).

In November 2021, UIN Maliki Malang conducted hybrid learning, and the assessment carried out not limited to middle test and final test, but it has also reached the assessment for learning. The change toward digital assessment at UIN Malang can be considered fast and adaptive.

B. UIN Sunan Ampel Surabaya (UIN Surabaya)

During the Covid 19 pandemic, UIN Surabaya has carried out digital assessments because the learning process system and evaluation collaborated with Modern Standard Arabic (MSA). The only changes are in the digital assessment, which was originally a computer-based assessment to a mobile-based assessment. Long before the COVID-19 pandemic, the adaptation of digital assessment at UIN Surabaya can be already considered good. There was only a slight change in the mechanism. Initially, the assessment was conducted at UIN Surabaya LAB, but now it is done at the student’s respective home due to online learning policies (Interview with INA, October 2021).

C. UIN KH. Prof. Saifuddin Zuhri Purwokerto (UIN Saizu Purwokerto)

In 2019 (before the pandemic), Language Development Center/Pusat Pengembangan Bahasa (PPB) at UIN Saizu Purwokerto conducted a digital assessment using a system developed by the Language Center itself under the name SIB (Sistem Informasi Bahasa/Language Information System). The assessment implementation, whether placement tests, middle tests, or final tests, is carried out using a computer-based assessment model. The implementation is done at the laboratory of UIN Purwokerto. The digital assessment system is also in collaboration with and cannot be separated from the IT team of PPB UIN Purwokerto (Interview with FA, October 2021).

D. UIN Syarif Hidayatullah Jakarta (UIN Jakarta)

The development of digital assessment was only implemented when the pandemic and online learning policies were issued, even though the development discourse existed before the pandemic. Previously, TOAFL was carried out
conventionally, but during the pandemic, the development of TOAFL was operated using a digital system with a web-based assessment. The development of digital assessment by the UPT PPB UIN Jakarta was quite successful and very adaptive. The PPB at UIN Jakarta held an Arabic language test, both pre-test and post-test, for the 2020 Arabic language course. TOAFL held was held for students and public. (Interview with M, November 21, 2021)

E. UIN Sunan Kalijaga Yogyakarta (UIN Suka Yogyakarta)

The digital assessment began to implement during the Covid 19 pandemic, assisted by Google Form. The assessment was carried out based on a mobile-based assessment. In the beginning, online assessment learning policies implemented with the help of Google Form encountered several problems. In mid-2021, UPT PPB UIN Suka Yogyakarta developed a digital assessment, Safe Exam Browser (SEB). Digital assessment with SEB is used for IKLA, TOAFL, middle tests and final tests tests in Arabic (Interview with MR, December 2021).

F. UIN Antasari Banjarmasin (UIN Banjarmasin)

The Arabic language assessment process is divided into two parts, istima’, kalam, qiroah and kitabah. For kalam and istima’ assessment, they use Zoom/Google Meet. As for qiroah and kitabah, they use Google Form for the mobile-based assessment (Interview with AM, October 2021).

In mid-2021, UPB (Unit Pengembangan Bahasa/Language Development Unit) and UTIPD (Unit Teknologi Informasi dan Pangkalan Data/Information Technology and Database Unit) UIN Antasari collaborated in developing the digital assessment specifically for Arabic language assessment and TOAFL. The evaluation system combines istima’, qiroah and kitabah assessments. The evaluation system has been tested in TOAFL test in October 2021 and was running smoothly. The TOAFL test using this digital assessment can be done via computer/laptop and smartphone. (Interview with AAS, October 2021).

G. UIN Raden Intan Lampung (UIN Lampung)

The assessment is conducted digitally for formative assessment (middle test and final test) with the help of Google Form. In 2021, PPB UIN Lampung developed an Android application in Play Store that can be downloaded for free. The application is called P2B UINRIL to accommodate TOAFL test (Interview with N, December 2021).

H. UIN Sumatera Utara Medan (UIN SU Medan)

The assessment in teaching Arabic is difficult to track, whether digitally or conventionally. The assessment is handed over to each lecturer. However, there is the rector's policy regarding online-based assessments, most of which use Zoom/Google Meet, Google Form, and WhatsApp (Interview with SH, December 2021).

I. UIN Sultan Maulana Hasanuddin Banten (UIN SMH Banten)

Arabic language learning at UIN Banten has not been integrated with PPB. Learning Arabic is left to the lecturers of each faculty. Even some lecturers still use conventional assessments. The digital assessment tools used by lecturers are from Google Classroom and Google Forms. By sharing questions on WhatsApp, students work on the questions (Interview with MFA, December 2021).
Figure 1. Digital assessment of the Arabic language

From the background of the transformation assessment that the writer explained earlier, it can be concluded that the development of the Industrial Revolution 4.0 and the COVID-19 pandemic are the main factors for this transformation.

Industrial Revolution 4.0 affects several aspects, including education aspect. It at least affects assessment of Arabic language in Indonesia, but these factors did not have a significant effect. The boosting factor or the main trigger for the change in assessment is the COVID-19 pandemic. Most educational institutions worldwide are switching from traditional face-to-face classes to digital learning (Mulenga & Marbán, 2020).

The writers conclude that the transformation assessment that occurs in Indonesia causes a paradigm shift in the Arabic language education curriculum at the university level and bring out the need for qualified human resources related to technology. The curriculum requires to add courses related to technology development, including Arabic course. It is expected that Arabic will be more inclined to the language of technology, such as Arabic for information technology purpose.

Changes in the future will create a new paradigm for the world of Arabic language education. Students who graduate from Arabic education not only become teachers, translators, and other professionals but they can also develop distance education programs in Arabic language learning, for example learning management system developer and Android-based Arabic game developer.

The philosophical objectives and instruments of the transformation assessment of Arabic to digital assessment remain the same. Hence, the writers conclude that the transformation assessment of the Arabic language is shifting culture. Ronald Inglehart says that culture is a change that occurs in the battleground or the environment. It is caused by the environmental changes and the
influence of scientific innovation, which is a response to economic, technological, and political changes. Those who can adapt will thrive and will be emulated by society (Inglehart, 2018).

**Model Assessment Arabic**

Digital assessment of the Arabic web is based on mobile-based assessment.

**A. Web-Based Assessment**

On the writers’ observations, it was found that web-based assessment as a digital assessment was developed by several Islamic educational institutions, such as UIN Maliki Malang, UIN Saizu Purwokerto, UIN Jakarta, and UIN Surabaya. Arabic web-based assessment is implemented in the TOAFL test. Long before the pandemic hit Indonesia, the web base assessment had been developed as an Arabic digital assessment.

Based on the results of the interviews that have been described previously, in 2016, UIN Maliki Malang developed an Arabic language web-based assessment. The Language Information System developed by UIN Maliki Purwokerto in 2019 uses a web-based assessment model, covering the middle tests, final tests, and TOAFL tests. On another note, a collaboration on developing assessment model between UIN Surabaya and University of Leipzig, Germany, in 2018, also used a web-based assessment. Other than that, UIN Jakarta started developing the Arabic TOAFL Test with a web-based assessment model in 2021.

Web-based assessment can be done by opening web pages (Avraamidou, 2006). Web-based assessment is the same as traditional paper-based assessment, and it has become online based on a website (Nguyen et al., 2006). Web-based assessment can also be an alternative assessment to the online Arabic language.

**Figure 2. Web-based assessment of Arabic language**

**B. Mobile-Based Assessment**

Based on the writers' observations, the data obtained shows that mobile-based assessment is essentially the same as a web-based assessment, but it is accessed through cell phones and smartphones. All Arabic digital assessments today use a mobile-based assessment model because it is more practical and efficient.
Mobile-based assessment can accommodate online exercises and exams, for instance WhatsApp, Google Form, Google Classroom, and other applications.

The writers find that the mobile-based assessment used in the final exam of Arabic language utilize a hybrid model, as has been done by UIN Maliki Malang and UIN Saizu Purwokerto. It means that students come to class but take the final exam using their respective devices while the teacher is in charge of supervising.

Mobile-based assessment is a new paradigm in conducting assessments, a change from conventional paper-based exams to mobile devices (Nikou & Economides, 2017). It is a relatively new learning assessment delivered via wireless technology and mobile devices, smartphones or tablets (Nikou & Economides, 2018).

Mobile-based assessment is very suitable for digital assessment because of its practicality. Assessment using a web browser on a smartphone is a more efficient method in terms of cost. A mobile-based assessment model has a positive effect in increasing interest in learning and learning outcomes (Nikou & Economides, 2017).

Mobile-based assessment has been successfully implemented to replace paper-based tests (Romero et al., 2009). It is suitable for summative evaluation for distance/online learning (Arthur et al., 2014). In addition, it positively impacts student motivation, learning performance and attitudes (Nikou & Economides, 2016).

**Figure 3. Mobile-Based Assessment of Arabic Assessment**

The purpose of assessment is to solve problems in learning a new language and its language skills. The assessment must be tested by how the language is taught (Fifty Years of Language Assessment - Davies - Major Reference Works - Wiley Online Library, nd). It means that Arabic language assessment must test the ability of *mufradat, qawaid, istima’, qiroah*, and *kitabah*, even cross-cultural understanding of this second/foreign language.

Digital assessment or e-assessment is a computerized test connected to a network, and the system does corrections automatically. The digital assessment
uses digital tools to aid the construction, delivery, storage or report of student assignments, responses, grades, and feedback (Crisp, 2007). The role of feedback in assessment is easier when using a digital assessment (Black & William, 1998) because its distribution is more efficient for students. The use of technology in assessment is promising, credible, objective, fair, interesting, fun, fast, not difficult to operate and not stressful for students (Croft et al., 2001). Digital assessment is successful and can replace conventional paper-based assessment (Shedeed & Abdel, 2011).

Most digital assessment in the Arabic language is multiple choices, which are objective and have a system that will correct the answers. Multiple choices are used because they are very suitable for implementing digital assessment (Bouzidi & Jaillet, 2009). Digital assessment that uses multiple choices is relatively easy to make and easy for the system to correct student answers (Crisp, 2007). In addition, digital assessment of Arabic is made using multiple choice to bring up the students’ perceived trust (Bouzidi & Jaillet, 2009).

Perceived trust is one of the important elements in digital assessment. Perceived trust can be interpreted as students’ perceptions of trust in the system (Arpaci, 2016). Digital assessment must be objective and can reduce cheating. There are no errors when correcting answers, and it can improve the learning process (Nikou & Economides, 2017). Perceived trust is one of the most crucial factors for successful participation in digital assessment (Chang et al., 2011). Objectivity raises perceived trust in students’ assessment, the correction process must go through the system, and the role of the teacher is only to supervise.

CONCLUSION

Transformation in Arabic assessment began in 2016. UIN Maliki Malang developed a digital assessment for the implementation of TOAFL. Digitalization assessment began when the online learning policy was published due to the COVID-19 pandemic situation. The Industrial Revolution 4.0 development and the COVID-19 pandemic are two factors that influence this transformation: digitalization assessment of the Arabic language and web-based and mobile-based assessment.

The implementation of digital assessment in Indonesia is still limited to some Arabic language learning, such as qowaid, mufradat, maharah istima’, qiroah, and kitabah. Digital Arabic assessment still cannot accommodate assessment for maharah kalam. It is a potential for policymakers, leaders, and Arabic language educators to develop a digital assessment for maharah kalam. This study has shortcomings, so further research is needed on digital assessment when things are starting to return to normal, and face-to-face learning can run as it is now with the digital assessment of Arabic.

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