



ISSN 2827-8151 (Online)
SRAWUNG: Journal of Social Sciences and Humanities

<https://journal.ifpublisher.com/index.php/issn>

Vol. 1, Issue. 2, (2022)

doi.org/10.56943/issn.v1i2.52

Design and Development of Meaning-Based Tarannum Mobile Apps Model: A Prototype Model for “Kelas Khas Kemahiran Membaca dan Menghafaz Al-Qur’an” (KKQ)

Nurul Auji Hasbullah^{1*}, Assoc. Prof. Dr. Norasikin Fabil², Prof. Dr. Adnan Mohamed Yusoff³, Assoc. Prof. Dr. Ahmad Sanusi Azmi⁴

¹auji88@gmail.com, ²norasikin.fabil@usim.edu.my, ³adnan@usim.edu.my,
⁴sanusi@usim.edu.my

^{1, 3, 4}Faculty of Quran and Sunnah Studies at Universiti Sains Islam Malaysia, ²Faculty of Science & Technology at Universiti Sains Islam Malaysia

*Corresponding Author: Nurul Auji Hasbullah
Email: auji88@gmail.com

ABSTRACT

The purpose of this paper is to figure out the components and elements for the model thus to design and develop a prototype model of KKQ meaning-based Tarannum mobile app. This study employed document analysis which refers to a systematic procedure for reviewing or evaluating documents whether in printed or electronic materials. This research had systematically reviewed on ten existing Tarannum mobile apps in Google Play Store market to find out those components and elements. From document analysis, matrix analysis is used to analyse what are the components and elements that have in the existing Tarannum mobile apps to be embedded into the prototype model. The findings were analysed in thematic analysis whereby this paper explains each of the components and elements into themes. The result from the finding is a prototype model of KKQ meaning-based Tarannum mobile app was developed. The prototype model consists of six main elements and the meaning-based Tarannum element was added to the model as one of the contributions for this study.

Keywords: Design and Develop, KKQ, Mobile Apps, Model, Tarannum

INTRODUCTION

KKQ class stands for *Kelas Khas Kemahiran al-Qur'an* or *Kelas Kemahiran Membaca dan Menghafaz al-Qur'an*, translated as Special Classes of Reading and Memorizing the Qur'an (Aznil, 2015; Aznil et al., 2015). In Malaysia, KKQ classes are one of the co-curricular activities implemented in *Sekolah Menengah Kebangsaan Agama* (SMKA) and *Sekolah Menengah Kebangsaan* (SMK) that offer religious stream classes (Kelas Aliran Agama; KAA) under the Ministry of Education (MoE). This class comprises five subjects: *Ulum Qur'an*, *Tajwid al-Qur'an*, *Hafazan al-Qur'an*, *Qiraat*, and *Tarannum al-Qur'an* (Kementerian Pelajaran Malaysia, 2014).

Tarannum al-Qur'an, or Qur'anic chanting (Wan Hilmi et al., 2014), is one of the subjects in KKQ classes and refers to the art of reciting the Qur'an. Terminologically, *Tarannum* refers to the knowledge or technique of varying sounds according to specific tones, rhythms, and melodies, aiming to highlight the artistic beauty of Qur'anic recitation (Bahagian Pendidikan Islam, n.d.; Ikmal Zaidi et al., 2018; Mohd Zaini et al., 2018; Muhammad Lukman et al., 2012; Nik Jaa'far, 2012). In Malaysia, the term *Tarannum* is synonymous with *Tarannum al-Qur'an*, which refers to the rhythmic singing of Qur'anic recitation. However, in Middle Eastern countries, the term *Tarannum* is less common, with *al-Naghām* (ال نغم) and *al-Maqamat* (ال مقامات) being used instead. These terms are also adopted in Indonesia (Khalid et al., 2016). *Tarannum* is one of the branches of Qur'anic recitation that emphasizes melodious recitation. Seven popular melodies used worldwide include *Bayyati*, *Soba*, *Hijaz*, *Rast*, *Sikah*, *Jiharkah*, and *Nahawand* (Saidah et al., 2015).

The philosophy of reciting the Qur'an with *Tarannum* is based on the idea of connecting the emotions of the reciter and listener to the magnificence of Allah's words (Nik Jaa'far, 2012). Additionally, reciters can internalize the values of Qur'anic uslub while chanting, enabling both reciters and listeners to understand and practice the meanings of the Qur'anic verses (Wan Hilmi et al., 2014). According to this philosophy, an essential element of *Tarannum* recitation is understanding—reciting the Qur'an with melodies that correspond to the meaning of the verses (Nik Jaa'far, 2012; Wan Hilmi et al., 2014). Ultimately, this practice allows listeners to grasp the message conveyed through Qur'anic recitation. In conclusion, reciting the Qur'an with *Tarannum* and aligning the melodies with the meanings of the verses leads to the perfection of *Tarannum* recitation.

LITERATURE REVIEW

From past research in the *Tarannum* field, researchers have found that there are insufficient materials and studies related to *Tarannum*. Moreover, very few studies have been conducted on integrating *Tarannum* with technology.

A study conducted by Mohd Aderi (2011) indicated that teachers tend to use traditional approaches in teaching *Tarannum*, resulting in a dull atmosphere and inactive students. He suggested that KKQ teachers should continuously improve their pedagogical skills by incorporating diverse teaching strategies and teaching aids in *Tarannum* instruction.

Meanwhile, Misnan et al. (2014) found that over half of the students lacked knowledge of *Tarannum al-Qur'an* and were unable to recite the Qur'an with *Tarannum*. Their study showed that only 6.3% of students could recite the Qur'an with *Tarannum* proficiently, 20% were at a moderate level, while 63.8% were weak in recitation. The study also concluded that very few teachers utilized teaching and learning aids in their *Tarannum* instruction. Therefore, it was suggested that teachers require adequate training, particularly in ICT and the use of teaching and learning aids.

These findings align with the study conducted by Muhamad Nasir, Sedek, and Zulkifli (2017), which analyzed *Tarannum* recitation proficiency based on KPM's grading system. The results showed that 15 students (22.7%) achieved an A grade, while 44 students (66.7%) received a D grade, indicating a generally low proficiency in reciting the Qur'an with *Tarannum*.

Another study by Azmil et al. (2014) found that students, in general, were very weak in practicing the techniques taught in *Tarannum al-Qur'an* classes. The study also revealed that students' achievements in *Tarannum* learning were unsatisfactory.

Based on these issues, problems, and recommendations from previous studies, this research identified several challenges in *Tarannum* education, leading to the development of this study. The key issues include the lack of teaching and learning aids in KKQ *Tarannum* classes, low proficiency in Qur'anic recitation with *Tarannum*, and poor achievement in the *Tarannum* subject. To address these issues, this study developed a prototype model integrating interactive learning for the future development of a KKQ *Tarannum* mobile app.

The purpose of this research is to design and develop a KKQ meaning-based *Tarannum* mobile app model. To achieve this objective, the study seeks to answer the following research questions:

RQ: How can a KKQ meaning-based *Tarannum* mobile app model be designed and developed?

RQ1: What are the components of *Tarannum* learning in existing *Tarannum* mobile apps?

RQ2: What are the components of *Tarannum* learning in the KKQ *Tarannum* handbook?

RQ3: What multimedia elements are included in existing *Tarannum* mobile apps?

RQ4: What are the features of existing *Tarannum* mobile apps?

RESEARCH METHODOLOGY

This paper is a qualitative study that employs document analysis to design and develop a prototype model of the KKQ Meaning-Based *Tarannum* Mobile Apps. A qualitative study is primarily an exploratory research method used to understand underlying reasons, opinions, and motivations. It also helps uncover trends in thought and opinions while providing deeper insights into the problem (Creswell & Poth, 2018).

Document analysis is a systematic procedure for reviewing or evaluating documents, whether printed or electronic (computer-based and internet-transmitted). This method requires data to be examined and interpreted to elicit meaning, gain understanding, and develop empirical knowledge (Bowen, 2009; Mohd Zaini et al., 2021; Owen, 2014).

Through document analysis, the researcher conducted a search for *Tarannum* mobile apps in the Google Play Store. Based on the search results, ten *Tarannum* mobile apps were compiled using relevant keywords: “Tarannum al-Qur’an”, “Maqamat al-Qur’an”, and “Tilawah al-Qur’an”. The researcher selected these apps based on their suitability for KKQ students at the secondary school level, focusing on interactive elements that align with the students' learning styles.

Next, the researcher documented the content pages and navigation of each *Tarannum* mobile app before organizing them into a table for document analysis. This process was essential to identify the components and elements of *Tarannum* learning in existing mobile apps. Additionally, a document analysis of the KKQ handbook was conducted with the same objective.

Based on these analyses, the researcher summarized and organized qualitative data into matrix analysis tables. In the final step, thematic analysis was applied, where the researcher categorized the findings into specific themes.

RESULT AND DISCUSSION

Based on the search conducted in this study, the researcher has listed ten existing *Tarannum* mobile apps based on the relevant keywords mentioned in the methodology. The listed *Tarannum* mobile apps are *Tilawah Qur'an*, *Belajar BerTarannum MP3*, *Learning Al-Qur'an*, *Al-Qur'an (Belajar Qiro'at)*, *Tn Hj Radzi Kamarul Hailan*, *Syarifah Khasif Fadzilah*, *Belajar Tilawah Offline*, *Belajar Tilawah*, *Belajar Tilawah Dasar*, and *Al-Bayan*.

Table 1 below displays the icons of the apps, their developers, and their categories.

Table 1. Existing *Tarannum* Mobile Apps

Apps	Developer	Category
	LABKOMIF UIN Bandung	Education
	Khasyaff Store	Education
	Edukasi Anak Nusantara	Education
	Queenza dev	Music & audio
	Mustel App	Music & audio
	Mustel App	Music & audio
	WorthLucky	Music & audio
	Rian Cupika	Books & Reference
	cakMad	Music & audio
	Ilmiah Resources	Music & audio

Source: Google Play

Based on the search from Google Play Store on *Tarannum* apps above, the researcher detected three main categories of existing *Tarannum* mobile apps:

1. Education category
2. Music & audio category
3. Books & reference category

There are three *Tarannum* apps in the education category: '*Tilawah Qur'an*', '*Belajar BerTarannum MP3*', and '*Learning Al-Qur'an*'.

Meanwhile, there are six apps in the music & audio category: '*Al-Qur'an (Belajar Qiro'at)*', '*Tn Hj Radzi Kamarul Hailan*', '*Syarifah Khasif Fadzilah*', '*Belajar Tilawah Offline*', '*Belajar Tilawah Dasar*', and '*Al-Bayan*'.

For the books & reference category, only one *Tarannum* app falls under this category, which is '*Al-Bayan*'.

In the education category, these apps focus on learning elements. For example, they provide practice sessions for *Tarannum* recitation, allowing users to practice and receive scores for their recitation (see Fig. 1 and 2). Additionally,

Qur'anic verses are displayed alongside audio playback to help users review the recitation (see Fig. 3). The app's navigation is designed to be broad, allowing users to navigate across different pieces of content seamlessly.

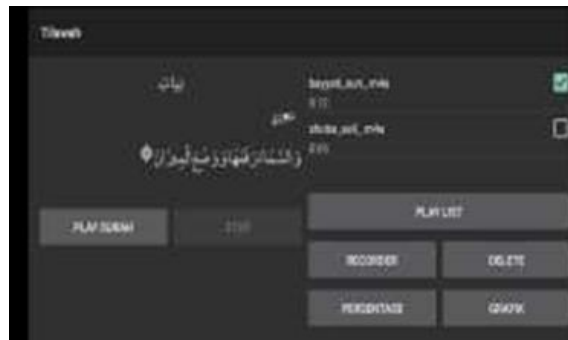


Figure 1. The Practice Page for *Tilawah Qur'an* App
Source: Processed Data by Researchers



Figure 2. The Marks Given to the *Tarannum* Recitation Practice
Source: Processed Data by Researchers



Figure 3. Show two different *Tarannum* apps that display the text of the *Tarannum* recitation along with the recited audio
Source: Processed Data by Researchers

Tarannum apps in the music & audio category focus primarily on the audio of *Tarannum* recitation. This category lacks learning elements, such as practice sessions for *Tarannum* recitation. Navigation is limited, as it only allows users to browse audio files. Additionally, one of the apps in this category provides Qur'anic verses in PDF format; however, the text and audio are displayed on separate pages, making it difficult for users to review the recitation alongside the text. Figure 4 illustrates apps that contain only audio without displaying the corresponding Qur'anic text on the same page.



Figure 4. Only the audio of *Tarannum* without the Qur'anic text
Source: Processed Data by Researchers

In the books & reference category of *Tarannum* apps, each *Tarannum* melody page displays the Qur'anic text along with an audio player. Users can follow the *Tarannum* recitation, pause, or replay it as needed. At any point, they can check and review the recitation using the displayed text on the same page. Figure 5 shows a *Tarannum* app where the audio player and Qur'anic text are presented together, allowing users to easily play the *Tarannum* melodies while simultaneously reviewing the text.



Figure 5. Audio player of *Tarannum* with the text displayed in same page
Source: Processed Data by Researchers

The Components of *Tarannum* Learning in the Existing *Tarannum* Mobile Apps

In this section, the researcher analyzed the findings using matrix analysis. A matrix analysis, or matrix method, is a way of summarizing and analyzing qualitative data in the form of table rows and columns. It allows for both cross-case comparisons and data sorting by theme (Averill, 2002; Hoehle & Venkatesh, 2015; Lee & Kim, 2014).

For research purposes, the compilation was made by documenting and analyzing existing *Tarannum* mobile apps available on the Google Play marketplace, then organizing them into a matrix table. The researcher developed the matrix (see Appendix A) to identify the components of *Tarannum* learning present in these apps. This was based on a document analysis of ten existing *Tarannum* mobile apps on Google Play. The matrix analysis was then verified by experts, including KKQ teachers and professionals with a software engineering background.

As a result, it can be concluded that six components of *Tarannum* learning are available in existing *Tarannum* mobile apps. These components include: (1) types of *Tarannum*, which comprise seven different *Tarannum* melodies; (2) qur'anic verses in text and audio; (3) *tausyikh* in text and audio; (4) *tarannum* practice; (5) *adzan*; and (6) video content.

The Components of *Tarannum* Learning in the KKQ *Tarannum* handbook

In this section, the researcher conducted a document analysis. As explained in the methodology, document analysis is a systematic procedure for reviewing or evaluating documents, whether in printed or electronic form (Bowen, 2009; Mohd Zaini et al., 2021; Owen, 2014).

In this study, the researcher analyzed the KKQ handbook to identify the components of *Tarannum* learning in the KKQ syllabus. Based on the matrix analysis (see Appendix B), there are three components of *Tarannum* learning in the KKQ handbook: (1) The types of *Tarannum*, which consist of seven different *Tarannum* melodies; (2) Qur'anic chapters or verses used in the KKQ syllabus for *Tarannum* recitation; and (3) *Tarannum* variation (harakat).

The Elements of Multimedia included in the Existing *Tarannum* Mobile Apps

In this section, the researcher identified the multimedia elements included in existing *Tarannum* mobile apps. Based on Tariq Hassan and Qais (2015) and Costello et al. (2012), there are five multimedia elements: text, audio, graphics, video, and animation.

The researcher listed ten *Tarannum* mobile apps and conducted a matrix analysis to examine the multimedia elements present in each app (see Appendix C). This analysis aimed to determine the commonly applied multimedia elements

in existing *Tarannum* mobile apps for integration into the KKQ *Tarannum* mobile app.

For text and audio, the researcher categorized them into *surah* and *tausyikh*. Based on the matrix analysis (Appendix C), it can be concluded that audio of *surah* and graphics are the most important elements to be included in *Tarannum* mobile apps. In *Tarannum al-Qur'an* learning, audio plays a crucial role in delivering lessons, while graphics help simplify presentations and attract users to engage with the learning material.

Regarding video, none of the *Tarannum* mobile apps included this element, except for one—‘*al-Bayan*’—which featured a video. However, the embedded video was unrelated to *Tarannum* learning or recitation; it contained *zikir* for babies.

As for animation, none of the studied apps applied animated transitions in their presentations. Most apps delivered content in a straightforward manner, except for ‘*al-Bayan*’, which incorporated some animation elements.

The Features of the Existing *Tarannum* Mobile Apps

Through this section, the researcher selected ten existing *Tarannum* mobile apps and categorized them based on their type: education, music and audio, and book and reference (see Appendix D). This study then compared the features of these ten apps using a matrix analysis, evaluating their interface, performance, user-friendliness, download cost, and internet usage requirements.

From the analysis, none of the ten *Tarannum* mobile apps were based on the KKQ *Tarannum* syllabus. In terms of interface and performance, most apps had a moderate level of quality. Regarding user-friendliness, most apps were easy to use and navigate, though some had malfunctioning buttons. As for download costs, all the apps were free. Lastly, all the *Tarannum* mobile apps could be used offline.

The Prototype Model of KKQ Meaning-Based *Tarannum* Mobile Apps

The research model prototype of the KKQ meaning-based *Tarannum* mobile app was developed based on document analysis conducted on existing *Tarannum* mobile apps and the KKQ handbook by the Ministry of Education (MoE). All components of the research model prototype were extracted using matrix analysis, and the KKQ *Tarannum* mobile app prototype model was developed.

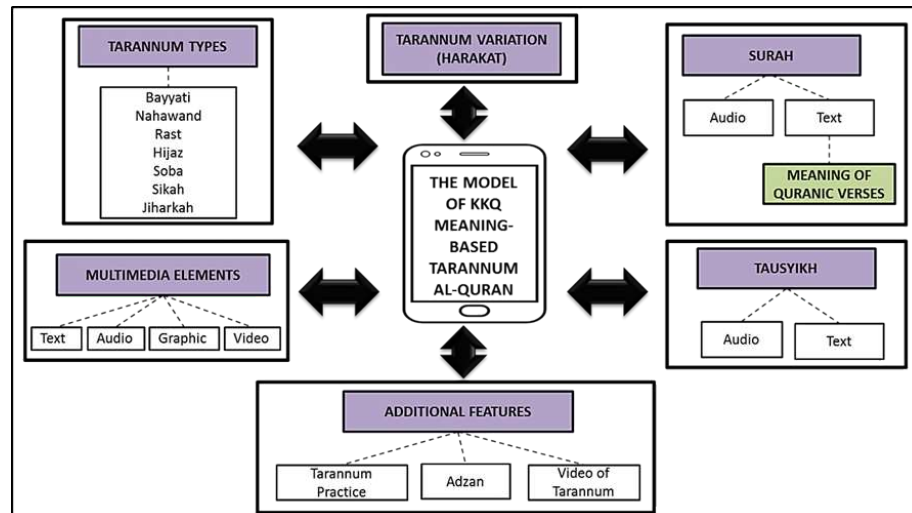


Figure 6. Prototype Model of KKQ Meaning-Based *Tarannum Al-Qur'an*

Source: Processed Data by Researchers

As depicted in Figure 6 above, based on this study, there are six main elements that should be included in the prototype model of the KKQ Meaning-Based *Tarannum Al-Qur'an* mobile application. The main elements of the model are:

1. *Tarannum* types – consisting of seven types of *Tarannum* (Bayyati, Nahawand, Rast, Hijaz, Soba, Sikah, and Jiharkah).
2. *Tarannum* variation (Harakat).
3. *Surah* – with audio, text, or both.
4. *Tausyikh* – with audio, text, or both.
5. Additional features – including *Tarannum* practice, *Adzan*, and Video of *Tarannum*.
6. Multimedia elements – including text, audio, graphics, and video.

For the element of Qur'anic verse meanings, the researcher proposes that this should be included in the prototype model in the form of text. This will allow users to apply the meaning in their *Tarannum* recitation, enabling them to understand the verses while reciting. At the same time, users can also internalize (tadabbur) the Qur'anic recitation more deeply.

CONCLUSION

Based on the findings in this paper, a prototype model of the KKQ meaning-based *Tarannum* mobile app has been developed. This model is derived from several document analyses conducted by the researcher.

A document analysis of ten existing *Tarannum* mobile apps available on the Google Play Store was carried out to identify the elements of *Tarannum* learning included in these apps. Furthermore, the study also examined the multimedia elements integrated into the apps that help attract users to utilize them as learning materials. Additionally, this study explored the features available in the selected *Tarannum* mobile apps.

Moreover, a document analysis of the KKQ handbook was conducted to determine the elements of *Tarannum* learning that are suitable for KKQ students. The results of these analyses were compiled into a matrix analysis, presenting the components of *Tarannum* learning, multimedia elements, and the features of each existing *Tarannum* mobile app.

Finally, based on the matrix analysis, a prototype model was developed to address the challenges faced in creating interactive teaching and learning aids for the KKQ subject, particularly in *Tarannum*, to enhance students' interest.

REFERENCES

- Averill, J. B. (2002). Matrix analysis as a complementary analytic strategy in qualitative inquiry. *Qualitative Health Research*, 12(6), 855–866.
- Azmil, H. (2015). Pedagogical content knowledge among the teachers of special classes of reading and memorizing the Qur'an (KKQ) in Kuala Lumpur. *Journal of Educational and Social Research*, 5(1), 175–184.
- Azmil, H., Jahidih, S., & Mohd Aderi, C. N. (2015). The relationship between pedagogical content knowledge and al-Quran Tajweed performance among students KKQ in Malaysia. *Procedia - Social and Behavioral Sciences*, 197, 1530–1537.
- Azmil, H., Mazhair Shahroz, M., & Mohd Burhan, J. (2014). Persepsi pelajar terhadap amalan pembelajaran tarannum al-Quran. *Jurnal Teknikal Dan Sains Sosial*, 1(1), 44–59.
- Bahagian Pendidikan Islam. (n.d.). Kelas Khas Kemahiran membaca dan menghafaz al-Quran (KKQ) handbook. Kementerian Pendidikan Islam.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(3).
- Costello, V., Youngblood, S., & Youngblood, N. E. (2012). Multimedia foundation core concept for digital design. Focal Press.

- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Hoehle, H., & Venkatesh, V. (2015). Mobile application usability: Conceptualization and instrument development. *MIS Quarterly*, 39(2), 435–472.
- Ikmal Zaidi, H., Muhammad Fairuz, A. A., & Shaharuddin, S. (2018). Aplikasi tarannum murattal dalam solat tarawih dan kesannya. *4th International Conference On Islamiyyat Studies 2018*, 676–683.
- Kementerian Pelajaran Malaysia. (2014). *Panduan pelaksanaan kelas khas kemahiran membaca dan menghafaz al-Quran (KKQ)*.
- Khalid, I., Muhammad Lukman, I., & Mahyudin, D. (2016). Tan Sri Dato' Haji Hassan Azhari: Metodologi pengajaran dan pembelajaran dalam ilmu tarannum al-Quran. *Al-Basirah*, 6(1), 31–47.
- Lee, C.-J., & Kim, C. (2014). An implementation study of a TPACK-based instructional design model in a technology integration course. *Education Tech Research Dev*, 62, 437–460.
- Misnan, J., Ab. Halim, T., & Azmil, H. (2014). Kaedah pengajaran al-Quran sekolah menengah kebangsaan di Negeri Perak. *International Journal of Islamic Studies and Arabic Language Education*, 1(1), 35–44.
- Mohd Aderi, C. N. (2011). Pelaksanaan kelas kemahiran al-Quran di Malaysia: Satu analisis. *Journal of Islamic and Arabic Education*, 3(1), 47–58.
- Mohd Zaini, Z., Adnan, M. Y., & Norakyairee, M. R. (2018). *Seni tarannum al-Quran*. Penerbit USIM.
- Mohd Zaini, Z., Hapini, A., Mohd Nur Adzam, R., & Ramlan, M. (2021). Tarannum interactive audiobook model: Towards a harmonious assimilation of information and communication technology into Quranic education. *Journal of Contemporary Social Science and Educational Studies*, 1(2), 37–45.
- Muhamad Nasir, M. S., Sedek, A., & Zulkifli, M. Y. (2017). Penguasaan tarannum al-Quran: Analisis terhadap peserta tilawah al-Quran sekolah menengah kementerian di daerah Klang dan Sepang. *QURANICA, International Journal of Quranic Research*, 9(1), 67–92.
- Muhammad Lukman, I., Mohd Yakub@Zulkifli, M. Y., & Mustaffa, A. (2012). Pro dan kontra tarannum di dalam tilawah al-Quran: Satu kajian perbandingan. *Proceedings: The 2nd Annual International Qur'anic Conference 2012*, 29–44.
- Nik Jaa'far, N. I. (2012). *Buku Qawaid Tarannum; Cara Berlagu*. Darul Fikir.

- Owen, G. T. (2014). Qualitative methods in higher education policy analysis: Using interviews and document analysis. *The Qualitative Report*, 19, 1–19.
- Saidah, H., Muhammad Lukman, I., & Mustaffa, A. (2015). Ilmu tarannum al-Qur'an: Sejarah dan perspektif. *Jurnal Darul Quran*, 19(1), 141–160.
- Tariq Hassan, M., & Qais, F. (2015). Multimedia instructional learning system to aid in teaching Quran recitation with effective Tajweed in primary education of Malaysia. *International Journal on Islamic Applications in Computer Science and Technology*, 3(2), 19–28.
- Wan Hilmi, W. A., Ahamad Asmadi, S., Sabri, M., & Ezad Azraai, J. (2014). Meaning-based tarannum: Preliminary research on uslub qira'ah of Sheikh Muhammad Rif'at (1880-1950). *Middle-East Journal of Scientific Research*, 20(12), 2172–2176.