

Documents

Hamid, M.F.A.^a, Sahrir, M.S.^b, Amiruddin, A.Z.^c, Yahaya, M.F.^a, Sha'ari, S.H.^a

Evaluating Student Acceptance of Interactive Infographics Module for Arabic Grammar Learning Using the Technology Acceptance Model (TAM)

(2024) *International Journal of Learning, Teaching and Educational Research*, 23 (9), pp. 121-140.

DOI: 10.26803/ijlter.23.9.7

^a Universiti Sultan Zainal Abidin (UniSZA), Terengganu, Malaysia

^b International Islamic University Malaysia (IIUM), Kuala Lumpur, Malaysia

^c Universiti Malaysia Kelantan (UMK), Kelantan, Malaysia

Abstract

Arabic grammar learning textbooks are often associated with lengthy and unfocused information. Text-only content contributes to students' disinterest in learning and in-depth comprehension of a subject. Infographics have emerged as a substitute for traditional textbooks, offering a more engaging and straightforward way to deliver knowledge through basic technological applications. An interactive infographic module based on a website has been developed and practiced for students as an alternative to the problem. This study aims to identify the level of student acceptance of the interactive infographic modules based on the Technology Acceptance Model (TAM) and identify attitudes toward usage, readiness and behavioral intention for usage. A total of 72 students of Bachelor in Arabic Studies at Universiti Sultan Zainal Abidin, Malaysia were involved as survey respondents. To gather information, a set of questionnaires was distributed and an infographic website module was developed. The quantitative study's data was descriptively analyzed using SPSS to assess how students accepted technology in terms of their attitude towards usage, readiness and behavioral intention for the module, and perceptions of its practicality and simplicity of use. The findings indicate that students who use technology have a high level of acceptability for the technology module and are prepared to continue learning Arabic grammar through the designed module because they see its advantages. The high ratings for these items indicate that the module improved their understanding of the material. The students' interaction with the module was clear and easy to understand. They believe that a website-based interactive infographic module is an effective tool for learning Arabic grammar. This module is designed to supplement classroom textbook instruction. This study is considered a contribution to the use of technology in learning courses with extensive syllabuses that require conveniently available and better-understood supplementary materials. © Authors.

Author Keywords

Arabic grammar; interactive infographics; technology; Technology Acceptance Model (TAM); website

References

- Ab Majid, M. R., Ismail, Z.
Pengertian teknologi guru bahasa Arab dan hubungannya dengan kreativiti pengajaran di Malaysia [Knowledge of Arabic teacher technology and its relationship with teaching creativity in Malaysia]
(2018) *Jurnal Islam dan Masyarakat Kontemporari*, 18 (1), p. 1.
- Abd Latif, K. A., Ismail, M. R., Ghazali, A. R., Zulkapeli, N. S.
Kelestarian turath bahasa Arab di pondok-pondok sebagai pemangkin tradisi ilmu (Satu tinjauan awal literatur) [The sustainability of Arabic turath in the pondoks as a catalyst for the tradition of knowledge (An initial review of the literature)]
(2021) *e-Jurnal Bahasa dan Linguistik (e-JBL)*, 3 (2), pp. 56-68.
- Abdul Hamid, M. F., Sahrir, M. S., Halim, Z. A., Yahaya, M. F., Nasir, M. S., Sha'ari, S. H., Amiruddin, A. Z.
Needs analysis for the development of website-based interactive infographic modules in Arabic grammar learning
(2024) *Ijaz Arabi Journal of Arabic Learning*, 7 (1), pp. 131-140.
- Abdul Samat, S., Abdullah, S., Abdul Ghani, K.
Penggunaan strategi pembelajaran nahu bahasa Arab dalam kalangan pelajar sekolah menengah agama di negeri Perak [The use of Arabic grammar learning strategies among religious secondary school students in Perak State]

- (2017) *The Online Journal of Islamic Education*, 3, pp. 1-11.
(Special 2015)
- Abdullah, A. F., Said, N. M., Misnan, S. N.
Penerimaan pelajar kursus bahasa Arab terhadap penggunaan aplikasi Google Classroom semasa proses pengajaran dan pembelajaran dalam talian [Students' acceptance of the Arabic language course towards the use of Google Classroom application during the online teaching and learning process]
(2021) *International Language and Education Conference 2021 (iLEC'21)*, pp. 23-33.
 - Afify, M. K.
The effect of the difference between infographic designing types (static vs animated) on developing visual learning designing skills and recognition of its elements and principles
(2018) *International Journal of Emerging Technologies in Learning (iJET)*, 13 (9), pp. 204-223.
 - Ahmed Ismaeel, D., Al Mulhim, E. N.
The influence of interactive and static infographics on the academic achievement of reflective and impulsive students
(2021) *Australasian Journal of Educational Technology*, 37 (1), pp. 147-162.
 - Ahmid, M. H., Abdullah, M. K., Johari, K.
Pengajaran guru dan kepercayaan motivasi pelajar dalam pembelajaran bahasa Arab di sekolah menengah [Teachers' teachings and students' motivational beliefs in learning Arabic language in secondary school]
(2018) *Malaysian Journal of Social Sciences and Humanities (MJ – SSH)*, 3 (3), pp. 136-147.
 - Ajzen, I., Fishbein, M.
(1980) *Understanding attitudes and predicting social behaviour*,
Prentice Hall
 - Ali, S. N., Khalid Khan, N. L., Abdul Ghani, A. T. W.
(2018) *Abad 21: Trend pembelajaran dan pengajaran politeknik & kolej komuniti Malaysia [21st century: Learning and teaching trends in Malaysian polytechnics and community colleges]*,
Bahagian Instruksional dan Pembelajaran Digital, Jabatan Pendidikan Politeknik dan Kolej Komuniti, Kementerian Pendidikan Malaysia
 - Alrwele, N. S.
Effects of infographics on student achievement and students' perceptions of the impacts of infographics
(2017) *Journal of Education and Human Development*, 6 (3), pp. 104-117.
 - Alsheri, M. A., Ebaid, M.
The effectiveness of using interactive infographics at teaching mathematics in elementary school
(2016) *British Journal of Education*, 4 (3), pp. 1-8.
 - Alwadei, A. M., Mohsen, M. A.
Investigation of the use of infographics to aid second language vocabulary learning
(2023) *Humanities Social Sciences Communications*, 10, p. 108.
Article
 - Aris, B., Ali, M. B., Harun, J., Tasir, Z.
(2001) *Sistem komputer dan aplikasinya [Computer systems and their applications]*,
Venton Publishing
 - Baihaqi, A. W., Rohman, L., Putri, C. A. T., Bastian, H.
Analisis implementasi kaidah kebahasaan dalam promosi pendidikan pada

infografik Kemendikbud di sosial media Instagram [Analysis of the implementation of language rules in educational promotion on the Ministry of Education's infographics on Instagram]

(2023) *Jurnal Ilmiah Wahana Pendidikan*, 9 (14), pp. 10-16.

- Bhat, S. A., Alyahya, S.
Infographics in educational settings: A literature review
(2023) *IEEE Access*, 12, pp. 1633-1649.
- Che Hat, N.
(2011) *Keberkesanan animasi dalam pembelajaran bahasa Arab [The effectiveness of animation in learning the Arabic language]*,
[Master's thesis]. Universiti Malaya
- Che Hat, N., Sha'ari, S. H., Abdul Hamid, M. F.
Persepsi pelajar terhadap penggunaan animasi dalam pembelajaran bahasa Arab [Students' perception of the use of animation in Arabic language learning]
(2013) *Jurnal Teknologi (Social Sciences)*, 63 (1), pp. 25-29.
- Che Ibrahim, N. F. S. C., Rusli, N. F. M., Raâ, M., Nallaluthan, K.
Persepsi pelajar terhadap aplikasi multimedia interaktif dalam proses pengajaran dan pembelajaran abad ke-21 [Students' perceptions of interactive multimedia applications in the 21st century teaching and learning process]
(2021) *Online Journal for TVET Practitioners*, 6 (1), pp. 15-24.
- Che Lah, A.
(2007) *Grafik animasi dalam pengajaran dan pembelajaran [Animated graphics in teaching and learning]*,
[Master's thesis]. Universiti Sains Malaysia
- Che Mat, A., Ying Soon, G.
Situasi pembelajaran bahasa asing di institut pengajian tinggi: Perbandingan antara bahasa Arab, bahasa Mandarin dan bahasa Perancis [Circumstances of foreign language learning in higher learning institutions: A comparison of Arabic, Mandarin and French]
(2010) *Asean Journal of Teaching and Learning in Higher Education (AJTLHE)*, 2 (2), pp. 9-21.
- Cleveland, W. S.
(1985) *The elements of graphing data*,
Wadsworth Advanced Books and Software
- Davis, F. D.
Perceived usefulness, perceived ease of use, and user acceptance of information technology
(1989) *MIS Quarterly*, 13 (3), pp. 319-340.
- Dur, B. İ. U.
Interactive infographics on the internet
(2014) *Online Journal of Art and Design*, 2 (4), pp. 1-14.
- Fecira, D., Abdullah, T. M. K.
Analisis penerimaan e-learning menggunakan Technology Acceptance Model (TAM) [Analysis of e-learning acceptance using the Technology Acceptance Model (TAM)]
(2020) *Jurnal Ekonomi, Sosial & Humaniora*, 2, pp. 35-50.
(04)
- Ghani, M. T. A., Daud, W. A. A. W., Jaffar, M. N.
Penerimaan pelajar kursus bahasa Arab di Universiti Malaysia Kelantan terhadap pembelajaran teradun berteraskan model penerimaan teknologi (TAM) [The acceptance of Arabic language course students at Universiti Malaysia Kelantan

- towards blended learning based on the Technology Acceptance Model (TAM)]**
(2019) *Asian People Journal (APJ)*, 2 (1), pp. 84-94.
- Ghode, R.
Infographics in news presentation: A study of its effective use in Times of India and Indian Express the two leading newspapers in India
(2012) *Journal of Business Management & Social Sciences Research (JBM & SSR)*, 1 (1), pp. 35-43.
 - Golubnycha, G.
The potential of interactive infographics: Gamification and edutainment [Conference session]
(2022) *Proceedings of the 6th International Scientific and Practical Conference*, pp. 381-392.
October, 19–20, 2024, Seattle, USA –). InterConf Scientific Publishing Center
 - Hassan, Z., bin Mat Nor, M. A. A., binti Musa, N.
Analisis penerimaan penggunaan aplikasi telegram bagi modul Latihan Penyediaan Asas (SPU1033) di Kolej Komuniti Kota Marudu, Sabah [Analysis of the acceptance of using the telegram application in the Basic Preparation Training Module (SPU 1033) at Kota Marudu Community College, Sabah]
(2021) *International Journal of Humanities Technology and Civilization*, 6 (1), pp. 16-24.
 - Husin, N., Norul 'Azmi, N. A., Mat Daud, M.
Pembelajaran kolaboratif melalui aplikasi telefon pintar dalam pembelajaran nahu [Collaborative learning through application of smartphones in learning grammar]
(2017) *e-Jurnal Penyelidikan dan Inovasi*, 4 (1), pp. 43-63.
 - Ishak, A.
(1995) *Pendidikan Islam dan pengaruhnya di Malaysia [Islamic education and its influence in Malaysia]*,
Dewan Bahasa dan Pustaka
 - Ismail, S., Mohamed, Y., Razak, Z. R. A., Ibrahim, M. H., Isa, Z.
Analisis kesilapan sintaksis bahasa Arab dalam penulisan karangan pelajar natif bahasa Melayu [Analysis of Arabic syntactic errors in essays among native students of Malay language]
(2021) *International Journal of Language Education and Applied Linguistics*, 11 (1), pp. 27-36.
 - Ismail, Z.
(2008) *Penilaian kemahiran bertutur bahasa Arab dalam kurikulum bahasa Arab komunikasi di sekolah menengah kebangsaan agama [Assessment of speaking skills in the Arabic communication curriculum in national religious secondary schools]*,
[Doctoral thesis]. Universiti Kebangsaan Malaysia
 - Jaffar, M. N., Sha'ari, A.
Penggunaan laman web i-MAJRURAT sebagai alat bantu mengajar tatabahasa Arab [i-MAJRURAT website usage as Arabic grammar teaching aid]
(2016) *Al-Qanatir International Journal of Islamic Studies*, 3 (1), pp. 1-8.
 - Jamaluddin, N. H., Baharudin, H.
Tahap penggunaan strategi pembelajaran nahu dan penguasaan kata kerja Arab dalam kalangan pelajar pengajian Arab di institusi pengajian tinggi Malaysia [The use of grammar learning strategies and mastery of Arabic verbs among students of Arabic studies in Malaysian institutions of higher learning]
(2021) *International Journal of Advanced Research in Islamic Studies and Education (ARISE)*, 1 (2), pp. 86-97.
 - Kibar, P. N., Akkoyunlu, B.
Searching for visual literacy: Secondary school students are creating infographics

- (2015) *Information literacy: Moving toward sustainability. ECIL 2015. Communications in computer and information science*, 552.
S. Kurbanoglu, J. Boustany, S. Špiranec, E. Grassian, D. Mizrachi, & L. Roy (Eds), Springer
- Krauss, J.
Infographics: More than words can say
(2012) *Learning & Leading with Technology*, 39 (5), pp. 10-14.
 - Ku Azizan, K. F., Shaharuddin, H. N., Rosnan, F. N. R., Ismail, W.
Pengajaran dan pembelajaran bahasa Arab dalam kalangan pelajar tahfiz wal qiraat [Teaching and learning Arabic Language among Tahfiz Wal Qiraat students]
(2019) *Journal of Social Sciences and Humanities*, 16 (2), pp. 1-15.
 - Kurniawan, H.
Infografik sejarah dalam media sosial: Tren pendidikan sejarah publik [Infographic of history in social media: Trends in public history education]
(2020) *Sejarah dan Budaya: Jurnal Sejarah, Budaya, dan Pengajarannya*, 14 (2), pp. 1-13.
 - Lankow, J., Ritchie, J., Crooks, R.
(2012) *Infographics: The power of visual storytelling*, John Wiley & Sons
 - Lasfeto, D. B., Ulfa, S.
The relationship between self-directed learning and students' social interaction in the online learning environment
(2020) *Journal of e-Learning and Knowledge Society*, 16 (2), pp. 34-41.
 - Loosen, W., Reimer, J., de Silva-Schmidt, F.
Data-driven reporting: An on-going (r)evolution? An analysis of projects nominated for the Data Journalism Awards 2013–2016
(2020) *Journalism*, 21 (9), pp. 1246-1263.
 - Lubis, M. A., Taib, S. H., Ismail, M. A.
Inovasi sistem pendidikan dan strategi pengajaran bahasa Arab di era milenial 4.0. [Innovation in education system and strategy for Arabic language in Millennial Era 4.0]
(2019) *Asean Comparative Education Research Journal on Islam and Civilization (ACER-J)*, 3 (2), pp. 9-20.
 - Lubis, M. A., Alias, Z., Shaharuddin, H. N.
Pelaksanaan pengajaran dan pembelajaran bahasa Arab dalam kurikulum Bu'uth Al-azhar di Sekolah Agama Bantuan Kerajaan (SABK) [The implementation of teaching and learning Arabic based on Bu'uth Al-Azhar curriculum in Sekolah Agama Bantuan Kerajaan (SABK)]
(2014) *Jurnal Pendidikan Malaysia*, 39 (1), pp. 51-61.
 - Masrom, M.
Technology Acceptance Model and e-learning [Conference session]
(2007) *12th International Conference on Education*, Sultan Hassanul Bolkhiah Institute of Education Universiti Brunei Darussalam
 - Mat Jusoh, M. N., Hamed, S., Zainal, H., Abu Bakar, K.
Teaching innovation: Module construction for teaching of Arabic language grammar based on symbols (formulas) for secondary schools in Malaysia
(2013) *IOSR Journal of Humanities and Social Science (IOSR JHSS)*, 18 (5), pp. 45-51.
 - Mat Teh, K. S.
(2009) *Penggunaan strategi pembelajaran bahasa Arab dalam kalangan pelajar sekolah menengah agama [The use of Arabic language learning strategies among students in*

Islamic secondary schools],
[Doctoral thesis]. Universiti Kebangsaan Malaysia

- MÖcander, B., Shen, N.
(2023) *The influence of interactive elements on entertainment: An interactive infographics experiment on university students [Thesis]*,
Jönköping University
- Mohamed, Y., Saad, N. M., Ismail, S., Hoque, M.
Keberkesanan gamifikasi tatabahasa Arab “Ana Sibawayh” dalam TNL: Tinjauan terhadap pelajar FPBU USIM [Effectiveness of Arabic grammar gamification “Ana Sibawayh” in teaching and learning: A survey study on FPBU students at USIM]
(2022) *Al-Azkiyaa-Jurnal Antarabangsa Bahasa dan Pendidikan*, 1 (1), pp. 92-103.
- Mohd Jamil, M. R., Mat Noh, N.
(2020) *Kepelbagaian metodologi dalam penyelidikan reka bentuk dan pembangunan [Diversity of methodologies in design and development research]*,
Qaisar Prestige Resources
- Mohd Noh, M. A., Mohd Fauzi, M. S. H., Fang Jing, H., Ilias, M. F.
Infographics: Teaching and learning tool
(2017) *Attarbawiy: Malaysian Online Journal of Education*, 1 (1), pp. 58-63.
- Muhammad, A., Abdullah, A. H., Basiron, B., Jasmi, K. A., Mohd Noor, S. S.
(2006) *Penguasaan pelajar sekolah menengah aliran agama terhadap pengajian ilmu retorik Arab [The mastery of Arabic rhetoric studies among students in Islamic secondary schools]*,
(Research Vot 75193). Pusat Pengajian Islam dan Pembangunan Sosial Universiti Teknologi Malaysia
- Nik Ali, N. R.
Kaedah permainan bahasa dalam pengajaran dan pembelajaran bahasa Arab [The method of language game in teaching and learning Arabic]
(2020) *ALQIYAM International Social Science and Humanities Journal*, 3 (3), pp. 60-66.
- Nunnally, J. C., Bernstein, I. H.
(1994) *Psychometric theory*,
(3rd ed). McGraw-Hill
- Osman, N.
(2017) *Pembangunan bahan sokongan e-pembelajaran kursus bahasa Arab permulaan di UniSZA [Development of e-learning support materials for beginner Arabic courses at UniSZA]*,
[Doctoral thesis]. Universiti Kebangsaan Malaysia
- Othman, M. S., Ismail, M. Z., Wan Abdullah, W. N.
Penggunaan ICT dalam pengajaran bahasa Arab [The use of ICT in teaching Arabic]
(2013) *Jurnal Linguistik*, 17 (2), pp. 120-127.
- Parveen, A., Husain, N.
Infographics as a promising tool for teaching and learning
(2021) *Journal of Emerging Technologies and Innovative Research*, 8 (8), pp. 554-559.
- Rahayu, F. S., Budiyanto, D., Palyama, D.
Analisis penerimaan e-learning menggunakan Technology Acceptance Model (TAM) (Studi kasus: Universitas Atma Jaya Yogyakarta) [Analysis of e-learning acceptance using the Technology Acceptance Model (TAM) (Case study: Atma Jaya University Yogyakarta)]
(2017) *Jurnal Terapan Teknologi Informasi*, 1 (2), pp. 87-98.

- Rezaei, N., Sayadian, S.
The impact of infographics on Iranian EFL learners' grammar learning
(2015) *Journal of Applied Linguistics and Language Research*, 2 (1), pp. 78-85.
- Richey, R. C., Klein, J. D.
(2007) *Design and development research: Methods, strategies and issues*,
Lawrence Erlbaum Associates Publishers
- Rusli, N. A.
(2014) *Pembelajaran bahasa Arab secara atas talian dengan menggunakan laman web FunArabic [Online Arabic language learning using the FunArabic website]*,
[Master's thesis]. Universiti Kebangsaan Malaysia
- Sahrir, M. S., Osman, N., Muhammad, I. S.
Aplikasi "Konsep 4C" pembelajaran abad ke-21 dalam kalangan guru pelajar sarjana mod pengajian pendidikan bahasa Arab cuti sekolah UIAM [Application of "4C Concept" in 21st century learning among student teachers for master in education for Arabic in school holiday mode, IIUM]
(2020) *e-Jurnal Bahasa dan Linguistik*, 2 (1), pp. 12-22.
- Sahrir, M. S., Osman, N., Muhammad, I. S.
Kajian rintis pembelajaran tatabahasa bahasa Arab bagi tujuan ibadah dalam kalangan pelajar dewasa di UMCCED, Universiti Malaya [A pilot study on the learning of Arabic grammar for the purpose of worship among adult learners at UMCCED, University of Malaya]
(2022) *e-Jurnal Bahasa dan Linguistik (e-JBL)*, 4 (2), pp. 1-15.
- Samah, R.
(2009) *Isu pembelajaran bahasa Arab di Malaysia [Issues in Arabic language learning in Malaysia]*,
Penerbit USIM
- Samah, R.
Pembinaan ayat bahasa Arab dalam kalangan lepasan sekolah menengah agama [Arabic sentences construction among the Islamic religious school graduates
(2012) *GEMA Online Journal of Language Studies*, 12 (2), pp. 555-569.
- Samah, R.
(2013) *Kaedah pengajaran kosa kata bahasa Arab [Methods of teaching Arabic vocabulary]*,
Penerbit USIM
- Sjahrony, A., Lubis, M. A., Baharudin, H., Kamis, M. S.
Kepentingan pembelajaran motivasi bahasa Arab dalam kalangan pelajar IPTA dari perspektif sorotan kajian [The importance of motivation in learning Arabic among IPTA students in the perspective of literature review]
(2017) *Asean Comparative Education Research Journal on Islam and Civilization (ACER-J)*, 1 (2), pp. 102-112.
- Smiciklas, M.
(2012) *The power of infographics: Using pictures to communicate and connect with your audiences*,
Que Publishing
- Sweeper, D.
Data visualizations and infographics
(2016) *Journal of Electronic Resources Librarianship*, 28 (3), p. 215.
- Tarkhova, L., Tarkhov, S., Nafikov, M., Akhmetyanov, I., Gusev, D., Akhmarov, R.
Infographics and their application in the educational process

(2020) *International Journal of Emerging Technologies in Learning (IJET)*, 15 (13), pp. 63-80.

- Williams, R. W. P., Kent, J., Heazlewood, T.
(2002) *Measuring readability in accounting: An application and evaluation of the cloze procedure (Electronic version)*,
Working Paper 21/02: Faculty of Commerce Working Paper Series. Charles Strut University
- Wulandari, V., Abidin, Z., Praherdhiono, H.
Pengembangan media pembelajaran e-book infografis sebagai penguatan kognitif siswa X MIA [The development of infographic e-book learning media as cognitive reinforcement for X MIA students]
(2019) *Jurnal Kajian Teknologi Pendidikan*, 2 (1), pp. 37-44.
- Yusoff, M.
(1999) *Strategi pengajaran bacaan dan kefahaman [Strategies for teaching reading and comprehension]*,
Dewan Bahasa dan Pustaka
- Zaini, A. R., Zakaria, N., Hamdan, H., Ghazali, M. R., Ismail, M. R.
Pengajaran bahasa Arab di Malaysia: Permasalahan dan cabaran [Teaching of Arabic in Malaysia: Problems and challenges]
(2019) *Jurnal Pengajian Islam*, 12 (1), pp. 47-57.

Correspondence Address

Sahrir M.S.; International Islamic University Malaysia (IIUM)Malaysia; email: muhdsabri@iium.edu.my

Publisher: Society for Research and Knowledge Management

ISSN: 16942116

Language of Original Document: English

Abbreviated Source Title: Intl. J. Learn. Teach. Edu. Res.

2-s2.0-85206902169

Document Type: Article

Publication Stage: Final

Source: Scopus

ELSEVIER

Copyright © 2024 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

 RELX Group™