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Integration of Interactive Lumio Media for the Development of Arabic Listening Skills in Islamic Senior High Schools

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Abstract

This study aims to examine the impact of using Lumio by SMART media on enhancing Arabic listening skills among students at an Islamic Senior High School and to explore its implementation in Arabic listening instruction. The integration of technology-based media plays a crucial role in improving the quality of learning, particularly in developing Arabic listening proficiency. However, limitations in infrastructure such as damaged projectors, the unavailability of language laboratories, and low levels of teachers' digital literacy often lead educators to rely on conventional media. As a result, students' Arabic listening skills remain suboptimal. This research employed a quantitative approach with a quasi-experimental design, specifically a non-equivalent control group design. The participants consisted of 36 students from class XI A5 as the experimental group and 36 students from class XI A2 as the control group, selected through purposive sampling. The participants were chosen based on the criterion that they had not previously been exposed to technological media in Arabic listening lessons. Data were analyzed using descriptive statistics, prerequisite tests, and independent sample t-tests. The results showed a substantial increase in students' average scores from the pre-test (48.61) to the post-test (81.39). The study also revealed positive psychological effects, including increased participation, motivation,

and interest in learning Arabic listening, as observed through student response sheets, classroom observations, and completed worksheets. These findings indicate that the use of Lumio by SMART media significantly enhances Arabic listening skills compared to conventional instructional methods.

Keywords: Arabic listening skills, lumio by smart, islamic high school

Introduction

With the advancement of time, the use of technology in education has become increasingly essential to enhance learning quality, particularly by boosting students' motivation[1] and learning effectiveness. This is particularly crucial for developing listening skills in Islamic senior high schools across Indonesia. Nevertheless, in practice, numerous teachers continue to depend on traditional instructional media. Conventional teaching methods, such as using whiteboards and oral presentations, often make the learning process less effective [2], less interactive[3], less engaging[4], and seemingly monotonous, especially when solely relying on textbooks[5], and makes students lazy.[6] This, in turn, affects students' Arabic listening skills, leading to lower proficiency levels.

The first reason is that listening is the most challenging skill among the four language skills.[7] Research in the United States even states that high school

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[1] H Haryani, E Astriyani, and V T Devana, "Exploration of Islamic Religious Learning Innovation Technology with the ILearning Approach," *APTISI Transactions on Technopreneurship* 3, no. 2 (2021): 75–86, https://doi.org/10.34306/att.v3i2.211.

[2] Habibah Sholichah and Farikh Marzuki Ammar, "Efektivitas Penggunaan Media Aplikasi Mondly Arabic Dalam Meningkatkan Maharah Istima' Kosakata Bahasa Arab Kelas XI Sma Muhammadiyah 2 Sidoarjo," *Jurnal Dedikasi Pendidikan* 8, no. 2 (July 2024): 791–99, https://doi.org/10.30601/dedikasi.v8i2.4997.

[3] Jamaluddin Shiddiq et al., "Feasibility of Web-Based Digital Arabic Gamification Media for Islamic Junior High School Students," *Arabiyatuna: Jurnal Bahasa Arab* 8, no. 1 (2024): 169, https://doi.org/10.29240/jba.v8i1.8946.

[4] Fatwiah Noor et al., "The Implementation of Cooperative Learning Method for Arabic Language Learning," *Arabiyatuna: Jurnal Bahasa Arab* 7, no. 2 November (2023): 589, https://doi.org/10.29240/jba.v7i2.6791.

[5] R M Burhan, H Rante, and N R Arini, "Implementation of Speech Commands on Construct 3 In Developing A Renewable Energy Gamification," in *International Electronics Symposium (IES)*, ed. Yunanto A.A. et al. (Surabaya, Indonesia: Institute of Electrical and Electronics Engineers Inc., 2022), 638–43, https://doi.org/10.1109/IES55876.2022.9888330.

[6] Muhammad Irfan, "Faʿāliyyatu Istikhdāmi Al-Luʿbah Fī Taʿlīmi Mahārati Al-Istimāʿ Fī Madrasati Al-Mutawassiṭah Al-Insān Al-Amānah Mālānj" (Universitas Islam Negeri Maulana Malik Ibrahim, 2024).

[7] G Artyushina and O A Sheypak, "Mobile Phones Help Develop Listening Skills," *Informatics* 5, no. 3 (2018), https://doi.org/10.3390/informatics5030032.

students spend 45% of their time learning through listening[8], highlighting the critical importance of this skill. Moreover, a study conducted in Jordan underscores the significance of listening skills, particularly in the context of learning the Arabic language. It even advocates for the Jordanian Ministry of Education to offer specialized training for Arabic language teachers to enhance their ability to teach listening effectively,[9] reflecting the vital role this skill plays in language acquisition. Therefore, interactive technology-based media serve as a tool to facilitate the delivery of knowledge and understanding.[10] The second reason is that the use of technology-based and interactive media has been proven to enhance students' motivation and competence in listening learning. Examples include interactive media such as Mondly Arabic[11] and Alefbata.com.[12] Studies have shown that using web-based applications makes learning more accessible and stimulates students' cognitive development[13], as seen in Lumio by Smart. This media is an interactive and flexible tool, as it can be accessed via mobile phones or laptops. Research has reported that the use of interactive media, such as Lumio by Smart, helps enhance students' critical thinking skills[14], and participation.[15] Therefore, Lumio by Smart serves as a practical and effective alternative for improving Arabic listening skills in Islamic senior high schools.

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[8] Nur Hanifatus Sholeha, Abdul Hafidz Zaid, and Fairuz Subakir, "Tashmim Al-Kitab Al-Raqmy Muassasan 'Ala Tathbiq Flippdf Professional Fi Maharah Al Istima' Li Al-Fashl Al-Tahdhiri," *Arabiyatuna : Jurnal Bahasa Arab* 6, no. 2 (2022): 671, https://doi.org/10.29240/jba.v6i2.5247.

[9] M Al-Badawi, A Aljaafreh, and R S Al-Mawdieh, "The Employment of Listening Teaching Strategies in Elementary Classrooms by Jordanian Arabic Teachers," *International Journal of Instruction* 13, no. 2 (2020): 783–96, https://doi.org/10.29333/iji.2020.13253a.

[10] S F M Alfalah, "Perceptions toward Adopting Virtual Reality as a Teaching Aid in Information Technology," *Education and Information Technologies* 23, no. 6 (2018): 2633–53, https://doi.org/10.1007/s10639-018-9734-2.

[11] Sholichah and Ammar, "Efektivitas Penggunaan Media Aplikasi Mondly Arabic Dalam Meningkatkan Maharah Istima' Kosakata Bahasa Arab Kelas XI Sma Muhammadiyah 2 Sidoarjo."

[12] Ubaidillah Ubaidillah, Fanni Izzatul Millah, and Neli Sapitri, "The Use of Online Media 'Alefbata.Com' in Improving Arabic Listening Skills: Experimental Study," *Al-Ta'rib : Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya* 12, no. 1 (2024): 103–14, https://doi.org/10.23971/altarib.v12i1.7852.

[13] I Firsova, D Vasbieva, and A Abaev, "A Gamification Conceptual Framework for Marketing Courses," in *Lecture Notes in Networks and Systems*, ed. Bylieva D. and Nordmann A., vol. 829 LNNS (Financial University under the Government of the Russian Federation, Leningradsky Prospekt 49, Moscow, 125167, Russian Federation: Springer Science and Business Media Deutschland GmbH, 2023), 169–86, https://doi.org/10.1007/978-3-031-48016-4_13.

[14] Novitasari Sudar Riyanti et al., "Pengaruh Media Lumio by Smart Terhadap Kemampuan Berpikir Kreatif Dan Hasil Belajar Geografi Siswa SMA/MA," *Jurnal Majalah Pembelajaran Geografi* 7, no. 1 (2024), https://doi.org/https://doi.org/10.19184/pgeo.v7i1.47690.

[15] I.S. Fontes et al., "Upaya Meningkatkan Partisipasi Belajar Peserta Didik Menggunakan Media Interaktif Lumio by Smart Dengan Model Pembelajaran Cooperative Learning," *Pendas: Jurnal Ilmiah Pendidikan Dasar* 9, no. 2 (2024): 6114–21, https://doi.org/https://doi.org/10.23969/jp.v9i2.14235.

Previous research on the use of technology-based and interactive media to enhance Arabic listening skills has provided significant insights. Broadly, these studies fall into two main categories. The first category consists of research highlighting the effectiveness of technology-based and interactive media in teaching Arabic listening skills. Various media, such as YouTube[16], academic arapca[17], alefbata.com[18], white boards[19], kahoot[20], Mondly[21] have been proven to significantly improve listening skills. The second category focuses on the use of Lumio by Smart in different subjects. Although specific studies on Lumio in Arabic listening instruction are not yet available, several studies have shown significant results in other contexts, such as increasing student participation in social studies[22], fostering independence in Islamic education[23], enhancing motivation in science[24], developing critical thinking in spreadsheet applications[25],

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[16] Shorouk Mohamed Farag Mohamed Farag Aboudahr, "The Effect of Using Youtube to Increase the Level of Listening Skills Among Non-Native Students of Arabic Speakers in Malaysian Universities," *Education Quarterly Reviews* 3, no. 2 (2020): 207–19, https://doi.org/10.31014/aior.1993.03.02.133.

[17] Nur Aini Sholihatun Jannah, Nurhidayati Nurhidayati, and Mohammad Ahsanuddin, "Utilization of Materials 'Academic Arapça' for Listening Skills in Arabic Language Education," *Arabiyat : Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban* 9, no. 2 (2022): 191–204, https://doi.org/10.15408/a.v9i2.28971.

[18] Ubaidillah, Millah, and Sapitri, "The Use of Online Media 'Alefbata.Com' in Improving Arabic Listening Skills: Experimental Study."

[19] Mohammad D. Aldhafiri, "The Effectiveness of Using Interactive White Boards in Improving the Arabic Listening Skills of Undergraduates Majoring in Arabic Language at Kuwaiti Universities," *Education and Information Technologies* 25, no. 5 (2020): 3577–91, https://doi.org/https://doi.org/10.1007/s10639-020-10107-5.

[20] Noza Aflisia et al., "Pemanfaatan Aplikasi Kahoot Untuk Meningkatkan Penguasaan Unsur Bahasa Arab," in *Al-Mu'tamar Ats-Tsanawi Li Al-Lughah Al-'Arabiyyah*, vol. 1 (Prodi Pendidikan Bahasa Arab IAIN Curup, 2020), 1–17, http://prosiding.iaincurup.ac.id/index.php/musla/article/view/8.

[21] Sholichah, Habibah, and Farikh Marzuki Ammar. "Efektivitas Penggunaan Media Aplikasi Mondly Arabic Dalam Meningkatkan Keterampilan Menyimak Kosakata Bahasa Arab Kelas XI Sma Muhammadiyah 2 Sidoarjo." *Jurnal Dedikasi Pendidikan* 8, no. 2 (July 31, 2024): 791–99. https://doi.org/10.30601/dedikasi.v8i2.4997.

[22] Fontes et al., "Upaya Meningkatkan Partisipasi Belajar Peserta Didik Menggunakan Media Interaktif Lumio by Smart Dengan Model Pembelajaran Cooperative Learning."

[23] Siti Khodijah, Nurul Wahdah, and Muhammad Redha Anshari, "Application of Lumio By Smart Media in Increasing Student Learning Independence in Islamic Religious Education Subjects," *Didaktika: Jurnal Kependidikan* 13, no. 001 (2024): 43–56, https://doi.org/https://doi.org/10.58230/27454312.1350.

[24] Anike Dyah Ayu Suryandani and Sri Sami Asih, "Development of Interactive Learning Media Assisted by Lumio by Smart to Increase The Learning Motivation of IPAS," *Journal of Research in Science Education* 10, no. 11 (2024): 9003–11, https://doi.org/10.29303/jppipa.v10i11.9161.

[25] S W Janah, D Surani, and A Fricticarani, "Pengaruh Penggunaan Media Presentasi Lumio By Smart Pada Mata Pelajaran Aplikasi Pengolah Angka Dalam Meningkatkan Pola Pikir

improving learning outcomes in Indonesian language studies[26], and analyzing the use of Lumio in the teaching of reading (Qirā'ah) and writing (Kitābah) skills in Arabic.[27] The findings reveal the promising potential of Lumio in Arabic language education. These studies strive to optimize the learning process, especially in teaching listening skills through technology-driven and interactive tools. Consequently, this research aims to investigate the application of Lumio by Smart in improving Arabic listening skills—an area that remains relatively underexplored.

Based on previous research, various technology-based and interactive media have been proven effective in developing Arabic listening skills. Interactive platforms like Lumio by Smart have been applied across a range of general subjects and show strong potential for integration into Arabic language instruction. Nevertheless, their specific application in teaching Arabic listening skills at the Islamic senior high school level remains largely unexamined. Therefore, this study aims to fill that gap by integrating Lumio by Smart specifically into Arabic listening instruction in Islamic senior high schools. The novelty of this research lies in the use of Lumio as a new alternative for teaching Arabic listening skills, an area that has not been extensively studied to date.

Lumio by Smart has specific advantages that set it apart from other interactive media. First, Lumio enables real-time collaborative learning[28] , where students can access and contribute directly through their devices without having to wait their turn or watch passively. Second, Lumio provides teachers with full control over learning materials and activities[29], uch as slide transitions and interactive assessments, making the learning process more structured and well-managed. Third, it provides tailored learning experiences. Lumio integrates game-based activities, interactive quizzes, and both individual and collaborative assignments within one unified platform, removing the need to switch between multiple documents or applications. Its flexibility makes it easier for teachers to deliver lessons while creating a more engaging and interactive learning experience.

Kritis Siswa Di Kelas VII," *Journal on Education* 6, no. 1 (2023): 8041–47, https://doi.org/https://doi.org/10.31004/joe.v6i1.4217.

[26] Desy Yantene Sukinarti, Asih Andriyati Mardliyah, and Taswirul Afkar, "Penerapan Media Digital Lumio by Smart Terhadap Hasil Belajar Bahasa Indonesia Siswa Kelas 7 SMPN 2 Puri," *Innovative: Journal Of Social Science Research* 4, no. 4 (2024): 16076–83, https://doi.org/https://doi.org/10.31004/innovative.v4i4.14252.

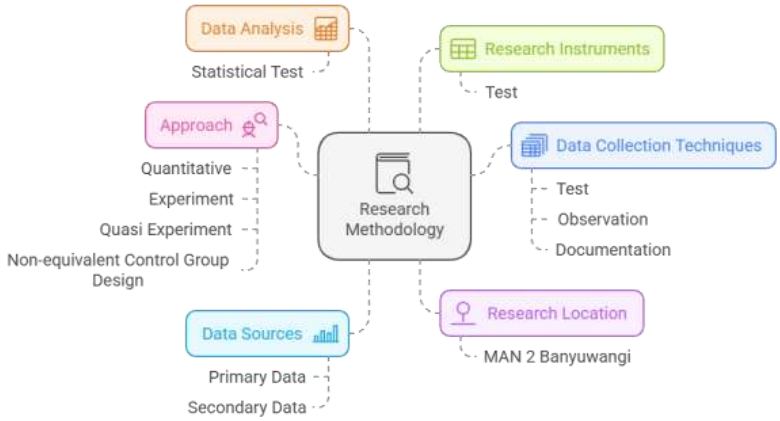
[27] Imas Maisarah and Anisul Imamah, "Penggunaan Aplikasi Lumio by Smart Dalam Maharah Qiraah Dan Kitabah Pada Pembelajaran Bahasa Arab," *Journal of Learning, Teaching and Educational Studies* 2, no. 2 (2024): 89–98, https://doi.org/https://doi.org/10.61166/amd.v2i2.69 Vol.

[28] Maisarah and Imamah.

[29] Nuraziza Rahma, Nurjannah Nurjannah, and Fitriani Fitriani, "Implementasi Lumio By Smart Untuk Meningkatkan Interaktivitas Pembelajaran Di Madrasah Aliyah," *Mosaic: Jurnal Pengabdian Kepada Masyarakat* 1, no. 2 (2024): 38–46, https://doi.org/10.61220/mosaic.v1i2.506.

This study aims to examine the impact of using Lumio by Smart in improving students' Arabic listening skills at Islamic Senior High Schools and to explore the implementation of Lumio by Smart in Arabic listening skill instruction. Based on this, the researcher proposes a hypothesis that the integration of Lumio by Smart has a significant effect on enhancing students' listening skills at Islamic Senior High Schools.

Figure 1. Research Method



This study utilizes a quantitative approach with a quasi-experimental design. This method is deemed appropriate as, within the school setting, participants are organized into pre-existing groups, preventing the random assignment of individuals to different groups.[30] The research design used is the Non-Equivalent Control Group Design, in which the experimental group receives treatment while the control group does not, serving as a comparison.[31] The research instrument consists of tests, including a pre-test and a post-test (multiple-choice), administered to both groups. The pre-test is given to assess students' initial abilities[32], and after the learning process, the post-test is conducted using the same 20 multiple-choice questions as the pre-test. The use of multiple-choice questions is considered appropriate to ensure more objective results and facilitate data analysis.

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[30] Muhamad Galang Isnawan, *KUASI-EKSPERIMEN*, ed. Sudirman, 1st ed. (Lombok: Nashir Al-Kutub Indonesia, 2020).

[31] Karimuddin Abdullah et al., *Metodologi Penelitian Kuantitatif*, ed. M.Pd. Nanda Saputra (Aceh: Yayasan Penerbit Muhammad Zaini, 2022).

[32] Mochamad Hasyim, Mu'alim Wijaya, and Mufidatul Iliah, "Using the SAVI Model through Video and Peabody Media in Learning Arabic Speaking Skills," *Arabiyatuna: Jurnal Bahasa Arab* 7, no. 1 (2023): 79–90, https://doi.org/https://doi.org/10.29240/jba.v7i1.6397.

The sample for this study includes 36 students from class XI A5 at MAN 2 Banyuwangi as the experimental group and 36 students from class XI A2 as the control group. This sample size is sufficient to fulfill the conditions necessary for performing an Independent Sample T-Test.[33] The sample was selected using purposive sampling, a technique in which participants are deliberately chosen based on specific criteria.[34] The selection criteria were based on students who had never been exposed to technology-based media in learning Arabic listening skills.

Data collection methods involve tests, observations, and documentation. Preliminary observations were carried out to assess the learning environment and identify existing challenges, while ongoing observations during the study focused on tracking the implementation of Lumio by Smart and monitoring student engagement. Documentation served as visual evidence of the implementation, while tests were used to measure students' improvement in listening skills.

Data analysis was performed using SPSS for Windows version 27, encompassing Descriptive Analysis, Assumption Testing (including Normality and Homogeneity tests), and Hypothesis Testing through the Independent Sample T-Test**.** Descriptive analysis was used to describe the characteristics of the data [35],], while assumption tests ensured that the data met statistical requirements before hypothesis testing.[36] The Independent Sample T-Test was applied to compare the mean scores of the two groups to determine whether there was a significant difference.[37]

Findings and Discussion

1. Implementation of Lumio by Smart Media in Arabic Listening Skills Learning

According to databases such as Scopus, Google Scholar, and Sinta over the past five years (2019–2024), publications on Lumio by Smart demonstrate an interesting trend. Complete data on this study can be seen in the following figure:

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[33] Nuryadi et al., *Buku Ajar Dasar-Dasar Statistik Penelitian*, *Sibuku Media*, 1st ed. (Yogyakarta: SIBUKU MEDIA, 2017).

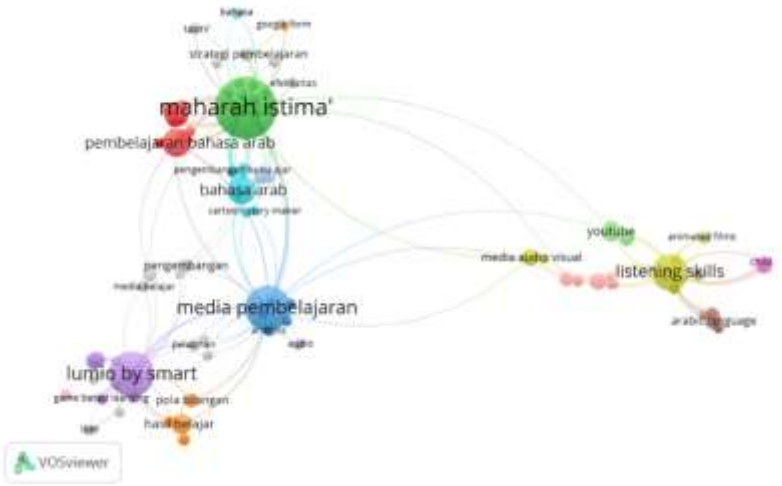
[34] Mundir, *Metode Penelitian Kualitatif Dan Kuantitatif*, ed. Hisbiyatul Hasanah, 1st ed. (Jember: STAIN Jember Press, 2013).

[35] Molly Wahyuni, *Statistik Deskriptif Untuk Penelitian Olah Data Manual Dan SPSS Versi 25*, *Angewandte Chemie International Edition, 6(11), 951–952.* (Yogyakarta: Bintang Pustaka Madani, 2020).

[36] Usmadi Usmadi, "Pengujian Persyaratan Analisis (Uji Homogenitas Dan Uji Normalitas)," *Inovasi Pendidikan: Jurnal Pendidikan* 7, no. 1 (2020): 50–62, https://doi.org/10.31869/ip.v7i1.2281.

[37] Nuryadi et al., *Buku Ajar Dasar-Dasar Statistik Penelitian*.

Figure 2. Visualization of Lumio by Smart Media



Source: Author's Analysis using VOSviewer (2025)

Research conducted over the past five years (2019–2024) has explored the use of Lumio by Smart in a range of subject areas. Despite this, there remains a lack of studies specifically connecting its application to Arabic listening skills, underscoring the necessity for further investigation in this area. This study is unique as it specifically integrates Lumio by Smart into listening skill development**,** which has not been done before. By incorporating various interactive features, such as presentation templates, multisensory tools, interactive games, and digital worksheets, Lumio enables more flexible learning that aligns with students' needs.[38]

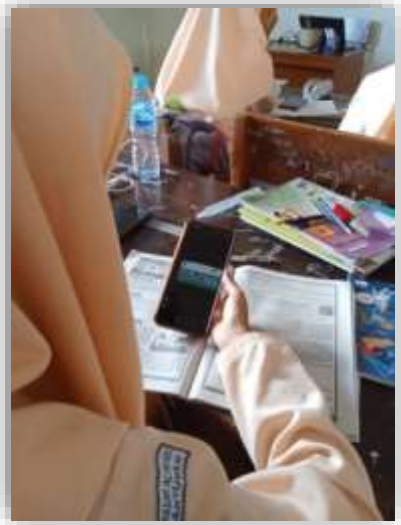
Observations indicate that the teaching of Arabic listening skills in Grade XI Science at MAN 2 Banyuwangi still relies on conventional media and has not yet been integrated with technology. Limited facilities, such as damaged projectors, the absence of a laboratory, and low digital literacy among teachers, have led to the dominance of conventional teaching methods. According to the Ministry of Education of China, the integration of technology in education contributes to enhancing students' skills[39] The role of technology in education is particularly crucial in foreign language learning,

[38] L Prayogo, D Chandrawan, and T Achyani, "Media Pembelajaran Lumio By Smart: Workshop Untuk Guru SMKN 2 Cikarang Barat," *SENADA: Semangat Nasional Dalam Mengabdi* 5, no. 1 (2024): 20–29, https://doi.org/https://doi.org/10.56881/senada.v5i1.228.

[39] Y Zhou, X Li, and T T Wijaya, "Determinants of Behavioral Intention and Use of Interactive Whiteboard by K-12 Teachers in Remote and Rural Areas," *Frontiers in Psychology* 13 (2022), https://doi.org/10.3389/fpsyg.2022.934423.

especially in teaching Arabic listening skills.[40] Moreover, listening skills play a critical role, as they enable students to better comprehend conversations[41] and engage in social interactions.[42] Therefore, it is essential for learners to develop strong listening skills in order to understand what they hear and avoid misunderstandings in receiving information.[43] Therefore, it is necessary to have adaptive learning media that can support listening instruction even with limited facilities.

Figure 3. Documentation of the Implementation of Lumio by Smart Media



Lumio by Smart serves as an effective tool for teaching Arabic listening skills, offering a range of multisensory features that enhance students' comprehension of the material. Moreover, it allows learners to actively engage with the listening content shared by the teacher through the platform. They do not just act as passive listeners but also participate actively in the learning process.

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[40] I Gusti Ayu et al., "Pengembangan Pembelajaran Yang Berinovatif Pada Kemampuan Menyimak Bahasa Jepang Melalui Media Interaktif," *Edukatif: Jurnal Ilmu Pendidikan* 6, no. 6 (2024): 6557–63, https://doi.org/https://doi.org/10.31004/edukatif.v6i6.7704.

[41] R Xing, "Advancements in English Listening Education: Chat GPT and Convolutional Neural Network Integration," *Journal of Pedagogical Research* 7, no. 5 (2023): 280–90, https://doi.org/10.33902/JPR.202323980.

[42] Khairul Mizan et al., "Optimizing Arabic Text Listening Skills through the Numbered Head Together Strategy," *Arabiyatuna: Jurnal Bahasa Arab* 8, no. 1 (2024): 435, https://doi.org/10.29240/jba.v8i1.9082.

[43] *Kitāb Mahārāt Al-Istimāʿ Fī Al-Lughati Al-ʿarabiyyah Lil-Marḥalati Al-Ibtidāʾiyyah Wa Ṭuruq Wa Asālīb Tadrīsihā Wa Al-Tadrīb ʿalayhā – Al-Risālah Al-ʿilmiyyah* (noor-book.com, 2006).

As a result, active listening can boost students' enthusiasm for the topics being studied.[44]

In its implementation, learning with Lumio by Smart begins with a greeting, followed by student orientation, aperception, and the presentation of learning objectives. Aperception is crucial to help students focus and prepare for the lesson.[45] Selanjutnya, siswa masuk pada link yang telah dikirimkan guru: Next, students access the link provided by the teacher: https://lum.io/share/006a95e3-205c-4ba2-bdec-6a049d2c1f3d or visit Google directly by typing lum.io and entering the class code (505082) given by the teacher. The teacher can monitor which students have joined and which have not, as the total number of participants is displayed on the Lumio platform. The lesson then begins with a brainstorming session related to the topic title. The learning process continues with vocabulary listening activities and concludes with reflection questions. Details of the core activities are presented in table 1.

Table 1. Core Activities in Implementing Lumio by Smart in Arabic Listening Skills Learning

	Implementation	Purpose	Explanation	Description
a.	Vocabulary Listening	Identifying Vocabulary	Students listen to an audio related to vocabulary accompanied by illustrations	 https://drive.google.com/drive/folders/14hfK5ex9D-GNwNJsS7Dlfpc_IaOUlUyn?usp=drive_link
	Sound Recognition Tests	To train and assess students' phonological awareness	Students are asked to choose the word or sentence that matches what they have directly heard.	

[44] "مهارة الاستماع ودورها في عملية التعلم," Akademi Bahasa Arab, 2024.

[45] Mamluatul Hasanah, Renni Hasibuan, and Muhammad Jundi, "Elevating Arabic Vocabulary Learning : Integrating Teams Games Tournament and Show & Tell Method Arabiyât," *Arabiyat: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban* 11, no. 1 (2024): 31–45, https://doi.org/http://dx.doi.org/10.15408/a.v11i1.37937.

				 https://drive.google.com/drive/folders/1Gllsbatztjd5rVr50DMBLp5ANQExpviP?usp=drive_link
	Understanding the meaning	Understanding and analyzing meaning	Students listen to audio containing dialogues and readings accompanied by illustrations	 https://drive.google.com/file/d/1R1ie3PNTsiC7m1jv97y2Bdp4LBWVhSi0/view?usp=sharing
b.	Interactive Worksheet	Enhancing student engagement to be more active (not passive)	The reading material is not presented in full on a single slide but is divided into multiple slides. This approach allows for the integration of interactive student worksheets, both individual and group-based, enabling students to actively engage in the comprehension process by discovering the	 https://drive.google.com/drive/folders/18FqNeF178b5J2ZJWOiEaQXrCW6X1aNdt?usp=sharing

			meaning of the text they hear	
c.	Interactive Game	Student Practice	After the lesson delivery, students complete a listening exercise based on the previously studied text, presented in an interactive game format	 https://drive.google.com/file/d/1PxeGayGVANJVuL57YddI_tTlwzTACbnG/view?usp=drive_link
d.	Reflection Sheet (student response)	Providing feedback	Students are asked to complete five reflection questions. This is done to understand their responses to the implementation of Lumio by Smart in learning	 https://drive.google.com/file/d/1-Hx0Hm4Yi3l0E206A1fxy4VgZwOidAft/view?usp=drive_link

a. Vocabulary Listening and Understanding the meaning

According to Abdul Kholiq[46,47], listening tests in Arabic language skills are divided into two types: sound recognition tests and comprehension tests for spoken texts. Additionally, there are key principles in teaching listening that should be considered. Two of these principles include:[48] first, presenting material from easy to difficult and from short to long; second, ensuring that each presented material is accompanied by questions. In line with these principles, the instruction of listening skills emphasizes the recognition of sounds and the comprehension of meaning. The learning process starts with listening to vocabulary associated with the topic *as-safar* (travel), supported by visual illustrations to deepen students'

[46] A Hamid, *Mengukur Kemampuan Bahasa Arab Untuk Studi Islam* (Malang: UIN Maliki-Press, 2010).

[47] M. Riza Pahlefi, "Pengembangan Instrumen Penilaian Keterampilan Menyimak (Mahārah Al-Istima') Dalam Pembelajaran Bahasa Arab," *Uktub: Journal of Arabic Studies* 2, no. 2 (2022): 68–84, https://doi.org/10.32678/uktub.v2i2.6458.

[48] Sitti Aisyah Chalik, "Metode Dan Strategi Pembelajaran Istima'," *Shaut Al-'Arabiyah* 9, no. 2 (2021): 269–81, https://doi.org/10.24252/saa.v9i2.31777.

understanding and leave a more lasting impression than audio alone.[49] The audio is played using the classroom's available sound system. Next, the teacher conducts a direct question-and-answer session to train students' sensitivity to similar-sounding words or sentences. This listening process aligns with the bottom-up approach, which emphasizes micro-level understanding, progressing from language to meaning.[50] Next, students listen to a passage titled "Yogyakarta and Its Tourist Attractions,**"** which consists of both narrative and dialogue. The passage is delivered in audio format, accompanied by illustrations to aid students in understanding and interpreting the content. This stage follows the top-down approach, prioritizing macro-level comprehension that moves from understanding meaning to grasping the language.[51] After listening, students interpret their understanding through interactive worksheets. The results are then discussed sequentially, slide by slide, to facilitate comprehension.

b. Interactive Worksheet

To promote active student participation in developing listening skills, the researcher employed the Shout It Out and Handout Activities features available on each reading slide. The Shout It Out feature enables students to share their personal responses to the material they have listened to, while the Handout Activities feature supports collaborative learning by automatically grouping students, thereby removing the need for teachers to assign groups manually. The transition of a slide into a collaborative worksheet can be adjusted in real time during the lesson through the Lesson Pacing menu. Throughout the learning process, the teacher can monitor whether the worksheets have been completed, whether individually or collaboratively. For individual worksheets, students' responses are instantly visible on the teacher's screen, while collaborative worksheets can be accessed by selecting the respective group's name tag. This integration supports a student-centered learning environment, shifting the focus away from the teacher as the sole source of knowledge and encouraging active student involvement.[52]

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[49] Rustam, Mantasiah Rivai, and Fatkhul Ulum, "Efektivitas Media Audio-Visual Dalam Penguasaan Kosakata (Mufradat) Bahasa Arab Siswa Madrasah Tsanawiyah Di Kabupaten Bantaeng," *Pinis Journal Of ART, Humanity, & Social Studies* 4, no. 2 (2024): 135–52.

[50] Siti Nikmatul Rochma, Umi Mahmudah, and Yuangga Kurnia Yahya, "Utilizing Technology in Arabic Teaching: Implementation of Media 'Learning Aljazeera.Net' on Listening Skill Teaching at University of Darussalam Gontor," *Arabiyatuna : Jurnal Bahasa Arab* 5, no. 2 (2021): 197–216, https://doi.org/10.29240/jba.v5i2.2730.

[51] Rochma, Mahmudah, and Yahya.

[52] Noor et al., "The Implementation of Cooperative Learning Method for Arabic Language Learning."

c. Interactive Game

Psychologically, humans tend to enjoy activities that involve games.[53] The presence of games can influence students' psychology, such as increasing motivation and interest.[54] Studies suggest that a learning environment incorporating games can reduce students' anxiety levels.[55] Therefore, integrating educational games into lessons can create a more enjoyable learning atmosphere.

In practice, after delivering the lesson, the researcher utilized interactive games as both practice and a material review for students. This feature helps students feel more relaxed while answering the questions. Literature suggests that incorporating interactive games into learning assessments can boost student engagement, fostering greater enthusiasm and making the learning experience more enjoyable.[56] This aligns with the purpose of practicing or reviewing material at the end of the lesson. It is important to note that Lumio only provides 12 interactive game templates. If teachers wish to use these templates for evaluation or listening practice, they must select those that support audio-based questions and allow simultaneous participation. Thus, the features offered by Lumio can effectively facilitate a more engaging and efficient learning experience, significantly contributing to the effectiveness of the learning process.[57]

d. Reflection Sheet (student response)

Learning reflection is an activity in which students express their impressions after a lesson to identify its strengths and weaknesses.[58] This reflective practice offers valuable insights for teachers in crafting more effective and enhanced learning experiences. Simultaneously, Lumio

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[53] Dhillan Zalillah and Alfurqan Alfurqan, "Penggunaan Game Interaktif Wordwall Dalam Evaluasi Mata Pelajaran Pendidikan Agama Islam Di SDN 17 Gurun Laweh Padang," *Manazhim* 4, no. 2 (2022): 491–504, https://doi.org/10.36088/manazhim.v4i2.1996.

[54] Rois Hidayah Darojat and Zukhaira Zukhaira, "The Development of Lauhul Qilab (Flip Chart) Media for the Introduction of Arabic Vocabularies to Students at Kindergarten/RA/Pengembangan Media Lauhul Qilab (Flip Chart) Untuk Pengenalan Kosakata Bahasa Arab Pada Anak TK/RA," *Arabiyatuna : Jurnal Bahasa Arab* 5, no. 1 (2021): 23, https://doi.org/10.29240/jba.v5i1.1966.

[55] T K Tekman and M Yeniasır, "The Impact of Play-Based Learning Settings on Reading, Writing, Listening, and Speaking Skills," *Sustainability (Switzerland)* 15, no. 12 (2023), https://doi.org/10.3390/su15129419.

[56] Zalillah and Alfurqan, "Penggunaan Game Interaktif Wordwall Dalam Evaluasi Mata Pelajaran Pendidikan Agama Islam Di SDN 17 Gurun Laweh Padang."

[57] Noza Aflisia et al., "Tathbiq Al-Thariqah Al-Ihaiyyah Fi Ta'lim Al-Lughah Al-Arabiyyah Fi Indunisiya," *Arabiyatuna : Jurnal Bahasa Arab* 5, no. 2 (October 25, 2021): 249, https://doi.org/10.29240/jba.v5i2.3128.

[58] Miftahul Jannah, Safrizal, and Husnani, "Implementasi Kurikulum Merdeka Pada Proses Pembelajaran Di SDN X Batusangkar," *Jurnal Pendidikan MINDA* 4, no. 2 (2023): 61–74.

provides a range of templates for reflection questions, simplifying the process of creating prompts and enabling students to express their thoughts without the need for verbal communication. In Lumio, this reflection feature is available under the "Ready Made - Resources" section. The researcher utilized the "Response Activities" feature to gather student feedback on their listening skills learning experience using Lumio by Smart. The reflection questions included:

1) What are students' perceptions and feelings toward their listening learning experience using Lumio by Smart, particularly in recognizing Arabic language sounds presented in class?
2) Does the use of Lumio by Smart help students understand the meaning of utterances or sentences they hear during the learning process?
3) Does the use of Lumio by Smart affect your ability to recognize and understand sounds in Arabic listening skills?
4) How interested are students in technology-based listening learning, especially through the use of Lumio by Smart?
5) Do you experience any difficulties in recognizing or understanding sounds when using Lumio during the learning process?

Table 2. Student Responses to Listening Skills Learning Assisted by Lumio by Smart

Reflection 1	**Happy**	**Happy enough**	**Not happy**
What are students' perceptions and feelings toward their listening learning experience using Lumio by Smart, particularly in recognizing Arabic language sounds presented in class	29 students	7 students	0
Reflection 2	**Easy to understand**	**Easy enough to understand**	**Difficult to understand**
Does the use of Lumio by Smart help students understand the meaning of utterances or sentences they hear during the learning process	28 students	8 students	0
Reflection 3	**Yes, Impact**	**Yes, enough impact**	**No impact**
Does the use of Lumio by Smart affect your ability to recognize and understand sounds in Arabic listening skills	28 students	8 students	0

Reflection 4	**Interested**	**Interested Enough**	**Not Interested**
How interested are students in technology-based listening learning, especially through the use of Lumio by Smart	26 students	10 students	0
Reflection 5	**Easy**	**Easy enough**	**Difficult**
Do you experience any difficulties in recognizing or understanding sounds when using Lumio during the learning process	32 students	4 students	0

The response results show that the majority of students (80%) provided a positive response to learning Arabic listening skills using Lumio by Smart. Meanwhile, 20% of students gave a moderately positive response, indicating that although most students felt positive, some experienced slight challenges, but still at a reasonable level.

2. The Effect of Using Lumio by Smart Media on the Development of Arabic Listening Skills

After the pre-test and post-test were administered, all scores were collected and analyzed using statistical tests, as the data obtained were numerical. Statistical tests are used to analyze quantitative data and draw conclusions from the collected research data. For more details, look at Table 3, Table 4, Table 5, and Table 6.

Table 3. Descriptive Analysis Test

	Pre Test Kontrol	**Post Test Kontrol**	**Pre Test Eksperimen**	**Post Test Eksperimen**
Mean	48.75	65.69	48.61	81.39
Median	50.00	65.00	45.00	80.00
Modus	50	65	40	85
Std. Deviation	9.811	7.187	10.185	7.133
Minimum	30	50	30	65
Maximum	70	80	70	95
Sum	1755	2365	1750	2930

Tabel 3 describes the data from the post test and pre test results of two groups, namely the control and experimental classes. Here are the details of the data:

a. Pre Test

1) Control class: the average score is 48.61 with a standard deviation of 9.811. The minimum to maximum scores ranged from 30-70 with a mode of 50 and a total score of 1755;
2) Experimental class: the average score is 48.75 with a standard deviation of 10.185. The minimum to maximum scores ranged from 30-70 with a mode of 40 and a total score of 1750.

b. Post Test
1) Control class: the average score is 65.69 with a standard deviation of 7.187. The minimum to maximum scores ranged from 50-80 with a mode of 65 and a total score of 2365;
2) Experimental class: the average score is 81.39 with a standard deviation of 7.133. The minimum to maximum scores ranged from 65-95 with a mode of 85 and a total score of 2930.

Table 4. Shapiro Wilk Normality Test

	Kelas	Statistic	df	Sig.
Listening Test Results	Pre test Kontrol	.959	36	.198
	Post test Kontrol	.947	36	.085
	Pre test Eksperimen	.951	36	.111
	Post test Eksperimen	.946	36	.080

Table 4 shows the results of the pre-test and post-test data normality test in the control class and experimental class using the Shapiro-Wilk normality test. This test is used to determine whether the data is normally distributed or not. Based on the results of the normality test, the data get the score as below:

a. Control Class:
1) Pre-test: the significance value (sig) is 0.198
2) Post-test: the significance value (sig) of 0.085

b. Experimental Class:
1) Pre-test**:** Nilai signifikansi (sig) sebesar 0,111
2) Post-test**:** Nilai signifikansi (sig) sebesar 0,080

Data is considered normal if the significance value is more than 0.05, and if it is smaller than 0.05, then the data is considered abnormal. The test results show that the significance values include 0.198, 0.085, 0.111, and 0.080. This results in the conclusion that the sig. values are more than 0.05. This means that the pre-test and post-test data are normally distributed so that it can proceed to the next prerequisite test.

Table 5. Levene's Homogeneity Test

Listening Test Results	Lavene Statistic	df1	df2	Sig.
	.120	1	70	.730

Table 5 reports the results of the homogeneity test using Levene's test. The decision-making criteria state that if the significance value (sig.) is greater than 0.05, the data is considered homogeneous, while if the significance value is less than 0.05, the data is considered non-homogeneous. The test results indicate a significance value of 0.730, meaning that the sig. value is greater than the 0.05 significance level, thus confirming that the data is homogeneous.

Table 6. Independent Sample T-Test

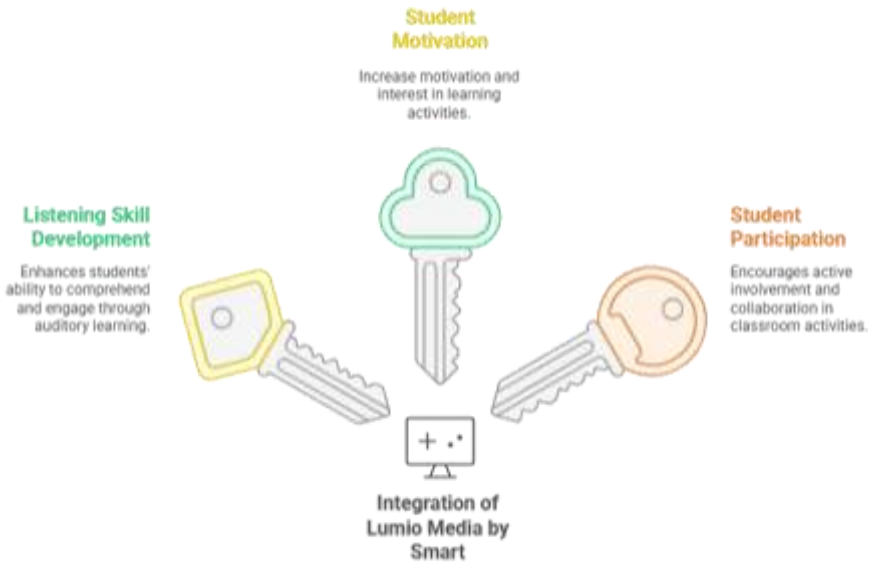
	F	Sig.	t	df	Sig. (2-tailed)
Listening Test Results	.120	.730	-9.300	70	.000

To know if the treatment in the experimental class has a significant effect, a t-test is needed. The t-test used is the Independent Sample T-Test because the data used is not paired. To know this, it can be seen from the sig value. (2-tailed) and can also compare the value of the t table with the t count. The basis for decision-making is if the sig. value. < 0.05, then H0 is rejected and Ha is accepted, which indicates that there is a significant effect, and if the sig. value is greater, then H0 is accepted and Ha is rejected. The test results state that the sig value. (2-tailed) is 0.000 < 0.05. In addition, decision-making can be seen from the comparison of t count and t table; if t count > t table, then H0 is rejected and Ha is accepted. The comparison results show that the T-count value (9.300) is greater than the T-table value (1.994437). So it can be concluded that there is a significant influence in learning that integrates Lumio by Smart Media on the development of Arabic listening skills in 11th grade students at MAN 2 Banyuwangi.

In addition to the empirical evidence from this study, existing literature also supports the potential use of Lumio by Smart in learning beyond listening skills. Sukinarti et al. conducted a study on the use of Lumio by Smart in Indonesian language learning outcomes. The findings indicate that the use of Lumio by Smart enhances student engagement and has a positive impact on their learning achievements.[59] These findings provide a strong foundation for improving the quality of learning, particularly in the development of Arabic listening skills.

[59] Sukinarti, Mardliyah, and Afkar, "Penerapan Media Digital Lumio by Smart Terhadap Hasil Belajar Bahasa Indonesia Siswa Kelas 7 SMPN 2 Puri."

Picture 4. The Impact of Using Lumio Media in Listening Skills Instruction



The use of this media had a direct impact on enhancing students' Arabic listening skills, with the experimental group demonstrating significantly greater improvement than those using conventional media. This was reflected in the higher post-test scores achieved by the experimental class compared to the control group. In addition, the researcher also found that this media had a positive effect on students' psychological aspects, such as increased participation, learning motivation, and interest during the learning process.

a. Enhancing student participation in learning. Student engagement plays a crucial role in the learning process, as it greatly influences its success and effectiveness. According to Guthrie & Davis, students who actively participate in learning are generally able to understand the material more effectively.[60]] This is further supported by other studies, which state that students who actively participate in learning develop stronger emotional connections and a deeper understanding of the material.[61] Student participation in listening learning using Lumio media can be seen from

[60] Mustika Khurotul Farida, Punaji Setyosari, and Fikri Aulia, "ANALISIS KETERLIBATAN MAHASISWA DALAM PEMBELAJARAN BERBASIS PROYEK," *JKTP* 7, no. 3 (2024): 172–81, https://doi.org/10.17977/um038v7i32024p172.

[61] H.H.-S. Ip et al., "The SAMAL Model for Affective Learning: A Multidimensional Model Incorporating the Body, Mind and Emotion in Learning," in *Proceedings: DMS 2011 - 17th International Conference on Distributed Multimedia Systems* (AIMtech Centre, Department of Computer Science, City University of Hong Kong, Hong Kong: Knowledge Systems Institute Graduate School, 2011), 216–21.

giving responses and working on student assignments.[62] This is in line with the listening learning process, which involves interactive sheets and games. The availability of interactive worksheets, both individual and group, makes it easier for students to respond to and convey what they hear, while interactive games offer practice questions that relate to the material they have previously learned.

b. Enhancing students' learning motivation. One of the external factors influencing learning motivation is the learning environment.[63] The use of Lumio media presents a new atmosphere and learning experience. This is evidenced through the student response sheet, which states that students feel happy and more interested in using technology-based learning media such as Lumio than conventional media because they find it easier to understand the material. In addition, direct observations made by researchers reported enthusiastic student expressions in learning. The literature also supports that the use of interactive multimedia, such as Lumio by Smart, can enhance students' learning motivation.[64]

c. Enhancing students' interest in learning Arabic. According to Muliani and Arusman, student interest in learning is affected by internal factors, such as a feeling of enjoyment during the learning process.[65] This can be proven through the student response sheet, which states the feeling of enjoyment, interest in using Lumio media in learning, and ease of use. Other literature also reveals that the use of Lumio media, in addition to improving material understanding, also builds higher interest in learning.[66]

At the same time, there are certain drawbacks to using Lumio, particularly in terms of technological access, such as unstable internet connectivity. This means that not all students have equal access to devices or a stable internet connection. Such disparities can create learning inequalities, where some students can fully utilise the platform while others face technical

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[62] Fitri Barokah and Dewi Mulyani, "Analisis Terhadap Partisipasi Belajar Siswa Pada Mata Pelajaran Sejarah Kebudayaan Islam Di MTsN 2 Garut," *Jurnal Riset Pendidikan Agama Islam* 1, no. 1 (2021): 15–20, https://doi.org/10.29313/jrpai.v1i1.39.

[63] Evita Candra, Deka Setiawan, and Diana Ermawati, "Analisis Motivasi Belajar Siswa Dalam Pembelajaran Pendidikan Pancasila Dan Kewarganegaraan," *JLEB: Journal of Law, Education and Business* 1, no. 2 (2023): 139–46, https://doi.org/10.57235/jleb.v1i2.1088.

[64] G WIDAYANA et al., "Interactive Multimedia to Enhance Students' Understanding of Concepts in Engineering Drawing Course," *Periodico Tche Quimica* 17, no. 36 (2020): 608–23.

[65] Farah Dita Nabiila, M. Shaefur Rokhman, and Baeti Zumaro, "MENINGKATKAN PARTISIPASI AKTIF SISWA DALAM PEMBELAJARAN DENGAN MODEL PEMBELAJARAN TEAMS GAME TOURNAMENT (TGT)," *Jurnal Program Pendidikan Profesi Guru* 2, no. 1 (2024): 71–83.

[66] Evalia Nasidah, "Penerapan Media Pembelajaran Interaktif Berbasis Web Lumio Untuk Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran Al- Qur ' an Hadist," *Jurnal Penelitian Pendidikan Indonesia* 2, no. 2 (2025): 378–82, https://doi.org/https://doi.org/10.62017/jppi.v2i2.3284.

difficulties that hinder their learning experience. As a result, students with stable connections may have a different learning experience compared to those with unstable access. Additionally, some students have limited digital literacy, which further hampers their learning process.

Conclusion

The Lumio by Smart is an interactive technology-based learning medium that is easily accessible and can serve as a solution for teachers in teaching listening skills, even in situations with limited facilities. The research findings reveal that the integration of Lumio by Smart plays a significant role in enhancing the Arabic listening skills of 11th-grade students at MAN 2 Banyuwangi. Furthermore, the study also found that this medium positively impacts student participation, learning motivation, and interest throughout the learning process. The novelty of this research lies in the implementation of a new interactive technology, Lumio by Smart, which is specifically designed to support linguistic skills, providing a more effective and engaging learning experience. However, this study also identified challenges during the learning process, such as limited technological access due to unstable internet connectivity and low digital literacy among students. To address these challenges, schools are advised to provide adequate technological facilities and offer training for both teachers and students to optimize the use of interactive media. Moreover, the researcher acknowledges several limitations of this study. First, it involved a small sample size, which could be expanded in future studies to obtain more generalizable data. Second, the study relied on a single instrument, which may not be sufficient for generating highly accurate data. Third, this research was conducted over a short period, highlighting the need for a longitudinal study to evaluate the long-term impact of this media. Lastly, the use of Lumio by Smart has so far been limited to listening skills, suggesting the need for further exploration in other language skills.

References

Abdullah, Karimuddin, Misbahul Jannah, Ummu Aiman, Suryadin Hasda, Zahara Fadilla, Masita, Taqwin, Ketut Ngurah Ardiawan, and Meilida Eka Sari. *Metodologi Penelitian Kuantitatif*. Edited by M.Pd. Nanda Saputra. Aceh: Yayasan Penerbit Muhammad Zaini, 2022.

Aboudahr, Shorouk Mohamed Farag Mohamed Farag. "The Effect of Using Youtube to Increase the Level of Listening Skills Among Non-Native Students of Arabic Speakers in Malaysian Universities." *Education Quarterly Reviews* 3, no. 2 (2020): 207–19. https://doi.org/10.31014/aior.1993.03.02.133.

Aflisia, Noza, Rahmad Hidayat, Renti Yasmar, and Deri Wanto. "Tathbiq Al-Thariqah Al-Ihaiyyah Fi Ta'lim Al-Lughah Al-Arabiyyah Fi Indunisiya." *Arabiyatuna : Jurnal Bahasa Arab* 5, no. 2 (October 25, 2021): 249.

https://doi.org/10.29240/jba.v5i2.3128.

Aflisia, Noza, Asri Karolina, Eka Yanuarti, and Muhammad Raihan. "Pemanfaatan Aplikasi Kahoot Untuk Meningkatkan Penguasaan Unsur Bahasa Arab." In *Al-Mu'tamar Ats-Tsanawi Li Al-Lughah Al-'Arabiyyah*, 1:1–17. Prodi Pendidikan Bahasa Arab IAIN Curup, 2020. http://prosiding.iaincurup.ac.id/index.php/musla/article/view/8.

Al-Badawi, M, A Aljaafreh, and R S Al-Mawdieh. "The Employment of Listening Teaching Strategies in Elementary Classrooms by Jordanian Arabic Teachers." *International Journal of Instruction* 13, no. 2 (2020): 783–96. https://doi.org/10.29333/iji.2020.13253a.

Aldhafiri, Mohammad D. "The Effectiveness of Using Interactive White Boards in Improving the Arabic Listening Skills of Undergraduates Majoring in Arabic Language at Kuwaiti Universities." *Education and Information Technologies* 25, no. 5 (2020): 3577–91. https://doi.org/https://doi.org/10.1007/s10639-020-10107-5.

Alfalah, S F M. "Perceptions toward Adopting Virtual Reality as a Teaching Aid in Information Technology." *Education and Information Technologies* 23, no. 6 (2018): 2633–53. https://doi.org/10.1007/s10639-018-9734-2.

Artyushina, G, and O A Sheypak. "Mobile Phones Help Develop Listening Skills." *Informatics* 5, no. 3 (2018). https://doi.org/10.3390/informatics5030032.

Ayu, I Gusti, Niken Launingtia, I Made Sutama, I Putu Mas Dewantara, and Kadek Wirahyuni. "Pengembangan Pembelajaran Yang Berinovatif Pada Kemampuan Menyimak Bahasa Jepang Melalui Media Interaktif." *Edukatif: Jurnal Ilmu Pendidikan* 6, no. 6 (2024): 6557–63. https://doi.org/https://doi.org/10.31004/edukatif.v6i6.7704.

Barokah, Fitri, and Dewi Mulyani. "Analisis Terhadap Partisipasi Belajar Siswa Pada Mata Pelajaran Sejarah Kebudayaan Islam Di MTsN 2 Garut." *Jurnal Riset Pendidikan Agama Islam* 1, no. 1 (2021): 15–20. https://doi.org/10.29313/jrpai.v1i1.39.

Burhan, R M, H Rante, and N R Arini. "Implementation of Speech Commands on Construct 3 In Developing A Renewable Energy Gamification." In *International Electronics Symposium (IES)*, edited by Yunanto A.A., Prayogi Y.R., Putra P.A.M., Hermawan H., Nailussa'ada N., Ruswiansari M., Ridwan M., et al., 638–43. Surabaya, Indonesia: Institute of Electrical and Electronics Engineers Inc., 2022. https://doi.org/10.1109/IES55876.2022.9888330.

Candra, Evita, Deka Setiawan, and Diana Ermawati. "Analisis Motivasi Belajar Siswa Dalam Pembelajaran Pendidikan Pancasila Dan Kewarganegaraan." *JLEB: Journal of Law, Education and Business* 1, no. 2 (2023): 139–46. https://doi.org/10.57235/jleb.v1i2.1088.

Chalik, Sitti Aisyah. "Metode Dan Strategi Pembelajaran Istima'." *Shaut Al-'Arabiyah* 9, no. 2 (2021): 269–81. https://doi.org/10.24252/saa.v9i2.31777.

Darojat, Rois Hidayah, and Zukhaira Zukhaira. "The Development of Lauhul

Qilab (Flip Chart) Media for the Introduction of Arabic Vocabularies to Students at Kindergarten/RA/Pengembangan Media Lauhul Qilab (Flip Chart) Untuk Pengenalan Kosakata Bahasa Arab Pada Anak TK/RA." *Arabiyatuna : Jurnal Bahasa Arab* 5, no. 1 (2021): 23. https://doi.org/10.29240/jba.v5i1.1966.

Farida, Mustika Khurotul, Punaji Setyosari, and Fikri Aulia. "ANALISIS KETERLIBATAN MAHASISWA DALAM PEMBELAJARAN BERBASIS PROYEK." *JKTP* 7, no. 3 (2024): 172–81. https://doi.org/10.17977/um038v7i32024p172.

Firsova, I, D Vasbieva, and A Abaev. "A Gamification Conceptual Framework for Marketing Courses." In *Lecture Notes in Networks and Systems*, edited by Bylieva D. and Nordmann A., 829 LNNS:169–86. Financial University under the Government of the Russian Federation, Leningradsky Prospekt 49, Moscow, 125167, Russian Federation: Springer Science and Business Media Deutschland GmbH, 2023. https://doi.org/10.1007/978-3-031-48016-4_13.

Fontes, I.S., M.V.I Sanam, M.I.T Putri, D. Murwanti, and D.A. Larasati. "Upaya Meningkatkan Partisipasi Belajar Peserta Didik Menggunakan Media Interaktif Lumio by Smart Dengan Model Pembelajaran Cooperative Learning." *Pendas: Jurnal Ilmiah Pendidikan Dasar* 9, no. 2 (2024): 6114–21. https://doi.org/https://doi.org/10.23969/jp.v9i2.14235.

Hamid, A. *Mengukur Kemampuan Bahasa Arab Untuk Studi Islam*. Malang: UIN Maliki-Press, 2010.

Haryani, H, E Astriyani, and V T Devana. "Exploration of Islamic Religious Learning Innovation Technology with the ILearning Approach." *APTISI Transactions on Technopreneurship* 3, no. 2 (2021): 75–86. https://doi.org/10.34306/att.v3i2.211.

Hasanah, Mamluatul, Renni Hasibuan, and Muhammad Jundi. "Elevating Arabic Vocabulary Learning : Integrating Teams Games Tournament and Show & Tell Method Arabiyât." *Arabiyat: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban* 11, no. 1 (2024): 31–45. https://doi.org/http://dx.doi.org/10.15408/a.v11i1.37937.

Hasyim, Mochamad, Mu'alim Wijaya, and Mufidatul Iliah. "Using the SAVI Model through Video and Peabody Media in Learning Arabic Speaking Skills." *Arabiyatuna: Jurnal Bahasa Arab* 7, no. 1 (2023): 79–90. https://doi.org/https://doi.org/10.29240/jba.v7i1.6397.

Ip, H.H.-S., J Byrne, S.-H. Cheng, and R.C.-W. Kwok. "The SAMAL Model for Affective Learning: A Multidimensional Model Incorporating the Body, Mind and Emotion in Learning." In *Proceedings: DMS 2011 - 17th International Conference on Distributed Multimedia Systems*, 216–21. AIMtech Centre, Department of Computer Science, City University of Hong Kong, Hong Kong: Knowledge Systems Institute Graduate School, 2011.

Irfan, Muhammad. "Faʿāliyyatu Istikhdāmi Al-Luʿbah Fī Taʿlīmi Mahārati Al-

Istimāʿ Fī Madrasati Al-Mutawassiṭah Al-Insān Al-Amānah Mālānj." Universitas Islam Negeri Maulana Malik Ibrahim, 2024.

Isnawan, Muhamad Galang. *KUASI-EKSPERIMEN*. Edited by Sudirman. 1st ed. Lombok: Nashir Al-Kutub Indonesia, 2020.

Janah, S W, D Surani, and A Fricticarani. "Pengaruh Penggunaan Media Presentasi Lumio By Smart Pada Mata Pelajaran Aplikasi Pengolah Angka Dalam Meningkatkan Pola Pikir Kritis Siswa Di Kelas VII." *Journal on Education* 6, no. 1 (2023): 8041–47. https://doi.org/https://doi.org/10.31004/joe.v6i1.4217.

Jannah, Miftahul, Safrizal, and Husnani. "Implementasi Kurikulum Merdeka Pada Proses Pembelajaran Di SDN X Batusangkar." *Jurnal Pendidikan MINDA* 4, no. 2 (2023): 61–74.

Jannah, Nur Aini Sholihatun, Nurhidayati Nurhidayati, and Mohammad Ahsanuddin. "Utilization of Materials 'Academic Arapça' for Listening Skills in Arabic Language Education." *Arabiyat : Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban* 9, no. 2 (2022): 191–204. https://doi.org/10.15408/a.v9i2.28971.

Khodijah, Siti, Nurul Wahdah, and Muhammad Redha Anshari. "Application of Lumio By Smart Media in Increasing Student Learning Independence in Islamic Religious Education Subjects." *Didaktika: Jurnal Kependidikan* 13, no. 001 (2024): 43–56. https://doi.org/https://doi.org/10.58230/27454312.1350.

Kitāb Mahārāt Al-Istimāʿ Fī Al-Lughati Al-ʿarabiyyah Lil-Marḥalati Al-Ibtidāʾiyyah Wa Ṭuruq Wa Asālīb Tadrīsihā Wa Al-Tadrīb ʿalayhā – Al-Risālah Al-ʿilmiyyah. noor-book.com, 2006.

Maisarah, Imas, and Anisul Imamah. "Penggunaan Aplikasi Lumio by Smart Dalam Maharah Qiraah Dan Kitabah Pada Pembelajaran Bahasa Arab." *Journal of Learning, Teaching and Educational Studies* 2, no. 2 (2024): 89–98. https://doi.org/https://doi.org/10.61166/amd.v2i2.69 Vol.

Mizan, Khairul, Muassomah Muassomah, Lapas Zoni, Ahmad Iqbal Alkampary, and Wachida Muhlis. "Optimizing Arabic Text Listening Skills through the Numbered Head Together Strategy." *Arabiyatuna: Jurnal Bahasa Arab* 8, no. 1 (2024): 435. https://doi.org/10.29240/jba.v8i1.9082.

Mundir. *Metode Penelitian Kualitatif Dan Kuantitatif*. Edited by Hisbiyatul Hasanah. 1st ed. Jember: STAIN Jember Press, 2013.

Nabiila, Farah Dita, M. Shaefur Rokhman, and Baeti Zumaro. "MENINGKATKAN PARTISIPASI AKTIF SISWA DALAM PEMBELAJARAN DENGAN MODEL PEMBELAJARAN TEAMS GAME TOURNAMENT (TGT)." *Jurnal Program Pendidikan Profesi Guru* 2, no. 1 (2024): 71–83.

Nasidah, Evalia. "Penerapan Media Pembelajaran Interaktif Berbasis Web Lumio Untuk Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran Al- Qur ' an Hadist." *Jurnal Penelitian Pendidikan Indonesia* 2, no. 2 (2025): 378–82.

https://doi.org/https://doi.org/10.62017/jppi.v2i2.3284.

Noor, Fatwiah, Nor Jainah, M. Anwar, Ridha Darmawaty, and Mostafa Farouk Abdelaleem Muhmood. "The Implementation of Cooperative Learning Method for Arabic Language Learning." *Arabiyatuna: Jurnal Bahasa Arab* 7, no. 2 November (2023): 589. https://doi.org/10.29240/jba.v7i2.6791.

Nuryadi, Tutut Dewi Astuti, Endang Sri Utami, and M. Budiantara. *Buku Ajar Dasar-Dasar Statistik Penelitian*. *Sibuku Media*. 1st ed. Yogyakarta: SIBUKU MEDIA, 2017.

Pahlefi, M. Riza. "Pengembangan Instrumen Penilaian Keterampilan Menyimak (Mahārah Al-Istima') Dalam Pembelajaran Bahasa Arab." *Uktub: Journal of Arabic Studies* 2, no. 2 (2022): 68–84. https://doi.org/10.32678/uktub.v2i2.6458.

Prayogo, L, D Chandrawan, and T Achyani. "Media Pembelajaran Lumio By Smart: Workshop Untuk Guru SMKN 2 Cikarang Barat." *SENADA: Semangat Nasional Dalam Mengabdi* 5, no. 1 (2024): 20–29. https://doi.org/https://doi.org/10.56881/senada.v5i1.228.

Rahma, Nuraziza, Nurjannah Nurjannah, and Fitriani Fitriani. "Implementasi Lumio By Smart Untuk Meningkatkan Interaktivitas Pembelajaran Di Madrasah Aliyah." *Mosaic: Jurnal Pengabdian Kepada Masyarakat* 1, no. 2 (2024): 38–46. https://doi.org/10.61220/mosaic.v1i2.506.

Riyanti, Novitasari Sudar, Fahmi Arif Kurnianto, Bejo Apriyanto, Sri Astutik, Indonesia, and Ana Susiati. "Pengaruh Media Lumio by Smart Terhadap Kemampuan Berpikir Kreatif Dan Hasil Belajar Geografi Siswa SMA/MA." *Jurnal Majalah Pembelajaran Geografi* 7, no. 1 (2024). https://doi.org/https://doi.org/10.19184/pgeo.v7i1.47690.

Rochma, Siti Nikmatul, Umi Mahmudah, and Yuangga Kurnia Yahya. "Utilizing Technology in Arabic Teaching: Implementation of Media 'Learning Aljazeera.Net' on Listening Skill Teaching at University of Darussalam Gontor." *Arabiyatuna : Jurnal Bahasa Arab* 5, no. 2 (2021): 197–216. https://doi.org/10.29240/jba.v5i2.2730.

Rustam, Mantasiah Rivai, and Fatkhul Ulum. "Efektivitas Media Audio-Visual Dalam Penguasaan Kosakata (Mufradat) Bahasa Arab Siswa Madrasah Tsanawiyah Di Kabupaten Bantaeng." *Pinis Journal Of ART, Humanity, & Social Studies* 4, no. 2 (2024): 135–52.

Shiddiq, Jamaluddin, Ahmad Zubaidi, Muhammad Nur Kholis, and Rokhani Rokhani. "Feasibility of Web-Based Digital Arabic Gamification Media for Islamic Junior High School Students." *Arabiyatuna: Jurnal Bahasa Arab* 8, no. 1 (2024): 169. https://doi.org/10.29240/jba.v8i1.8946.

Sholeha, Nur Hanifatus, Abdul Hafidz Zaid, and Fairuz Subakir. "Tashmim Al-Kitab Al-Raqmy Muassasan 'Ala Tathbiq Flippdf Professional Fi Maharah Al Istima' Li Al-Fashl Al-Tahdhiri." *Arabiyatuna : Jurnal Bahasa Arab* 6, no. 2 (2022): 671. https://doi.org/10.29240/jba.v6i2.5247.

Sholichah, Habibah, and Farikh Marzuki Ammar. "Efektivitas Penggunaan Media

Aplikasi Mondly Arabic Dalam Meningkatkan Maharah Istima' Kosakata Bahasa Arab Kelas XI Sma Muhammadiyah 2 Sidoarjo." *Jurnal Dedikasi Pendidikan* 8, no. 2 (July 2024): 791–99. https://doi.org/10.30601/dedikasi.v8i2.4997.

Sukinarti, Desy Yantene, Asih Andriyati Mardliyah, and Taswirul Afkar. "Penerapan Media Digital Lumio by Smart Terhadap Hasil Belajar Bahasa Indonesia Siswa Kelas 7 SMPN 2 Puri." *Innovative: Journal Of Social Science Research* 4, no. 4 (2024): 16076–83. https://doi.org/https://doi.org/10.31004/innovative.v4i4.14252.

Suryandani, Anike Dyah Ayu, and Sri Sami Asih. "Development of Interactive Learning Media Assisted by Lumio by Smart to Increase The Learning Motivation of IPAS." *Journal of Research in Science Education* 10, no. 11 (2024): 9003–11. https://doi.org/10.29303/jppipa.v10i11.9161.

Tekman, T K, and M Yeniasır. "The Impact of Play-Based Learning Settings on Reading, Writing, Listening, and Speaking Skills." *Sustainability (Switzerland)* 15, no. 12 (2023). https://doi.org/10.3390/su15129419.

Ubaidillah, Ubaidillah, Fanni Izzatul Millah, and Neli Sapitri. "The Use of Online Media 'Alefbata.Com' in Improving Arabic Listening Skills: Experimental Study." *Al-Ta'rib : Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya* 12, no. 1 (2024): 103–14. https://doi.org/10.23971/altarib.v12i1.7852.

Usmadi, Usmadi. "Pengujian Persyaratan Analisis (Uji Homogenitas Dan Uji Normalitas)." *Inovasi Pendidikan: Jurnal Pendidikan* 7, no. 1 (2020): 50–62. https://doi.org/10.31869/ip.v7i1.2281.

Wahyuni, Molly. *Statistik Deskriptif Untuk Penelitian Olah Data Manual Dan SPSS Versi 25*. *Angewandte Chemie International Edition, 6(11), 951–952*. Yogyakarta: Bintang Pustaka Madani, 2020.

WIDAYANA, G, D RATNAWATI, M ROHMAN, and S SURYAMAN. "Interactive Multimedia to Enhance Students' Understanding of Concepts in Engineering Drawing Course." *Periodico Tche Quimica* 17, no. 36 (2020): 608–23.

Xing, R. "Advancements in English Listening Education: Chat GPT and Convolutional Neural Network Integration." *Journal of Pedagogical Research* 7, no. 5 (2023): 280–90. https://doi.org/10.33902/JPR.202323980.

Zalillah, Dhillan, and Alfurqan Alfurqan. "Penggunaan Game Interaktif Wordwall Dalam Evaluasi Mata Pelajaran Pendidikan Agama Islam Di SDN 17 Gurun Laweh Padang." *Manazhim* 4, no. 2 (2022): 491–504. https://doi.org/10.36088/manazhim.v4i2.1996.

Zhou, Y, X Li, and T T Wijaya. "Determinants of Behavioral Intention and Use of Interactive Whiteboard by K-12 Teachers in Remote and Rural Areas." *Frontiers in Psychology* 13 (2022). https://doi.org/10.3389/fpsyg.2022.934423.

"مهارة الاستماع ودورها في عملية التعلم." Akademi Bahasa Arab, 2024.