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## Al-Ta'rib

Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab  
IAIN Palangka Raya

Vol. 12, No. 1, June 2024, 17-32

p-ISSN 2354-5887 | e-ISSN 2655-5867

<https://doi.org/10.23971/altarib.v12i1.7564>



### Elevating Arabic Speaking Skills: Plotagon and Digital Comics as Catalysts for Enhanced Learning Engagement and Proficiency

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#### Abstract

*Active student participation and engagement in diverse practice exercises are essential for mastering all four language skills. Due to the lack of active participation, students' proficiency in Arabic language learning, particularly in speaking skills (maharah kalam), falls below the required educational benchmarks. This research uses a quasi-experimental approach to assess the effectiveness of two different learning media: Plotagon for Tenth-grade students of IPS 1 and digital comics for Tenth-grade students of IPS 2 in improving Arabic speaking skills. The research findings indicate that students who used Plotagon as a learning tool to enhance their speaking skills achieved significantly better learning outcomes on average compared to students who used digital comics for the same purpose. Additionally, this study found that students who utilized Plotagon for learning exhibited higher engagement levels than those who used digital comics. These findings highlight the significance of active engagement in learning Arabic and indicate that Plotagon animation can be a valuable tool for enhancing learning outcomes and student engagement.*

**Keywords:** Digital Comic, Learning Outcome, Plotagon, Speaking Skills, Student Engagement

#### Abstrak

Partisipasi dan keterlibatan siswa aktif dalam beragam latihan praktik sangat penting untuk menguasai keempat keterampilan bahasa. Karena kurangnya partisipasi aktif, kemampuan siswa dalam pembelajaran bahasa Arab, khususnya dalam keterampilan berbicara (maharah kalam), berada di bawah tolak ukur pendidikan yang diperlukan. Penelitian ini menggunakan pendekatan penelitian quasi eksperimental untuk menilai efektivitas dua media pembelajaran yang berbeda: Plotagon untuk siswa IPS 1 kelas 1 dan komik digital untuk siswa IPS 2 kelas 10 dalam meningkatkan keterampilan berbahasa Arab. Temuan penelitian menunjukkan bahwa siswa yang menggunakan Plotagon sebagai alat pembelajaran untuk meningkatkan keterampilan berbicara mereka mencapai

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rata-rata hasil belajar yang jauh lebih baik dibandingkan dengan siswa yang menggunakan komik digital untuk tujuan yang sama. Selain itu, penelitian ini menemukan bahwa siswa yang menggunakan Plotagon untuk belajar menunjukkan tingkat keterlibatan yang lebih tinggi dibandingkan dengan mereka yang menggunakan komik digital. Temuan ini menyoroti pentingnya keterlibatan aktif dalam proses belajar bahasa Arab dan menunjukkan bahwa animasi Plotagon dapat menjadi alat yang berharga untuk meningkatkan hasil belajar dan keterlibatan siswa.

**Kata kunci:** Komik Digital, Hasil Belajar, Plotagon, Keterampilan Berbicara, Keterlibatan Siswa

## INTRODUCTION

Insufficient engagement in the educational process is a significant factor contributing to students' inadequate acquisition of proficiency in all four Arabic language skills, with a particular emphasis on speaking skills (*Maharah Kalam*). The importance of active student participation in the learning process has been emphasized in various research, such as those conducted by Mačianskienė et al. (2018), Mango (2015) and Eltahir et al. (2021).

When students experience a lack of enthusiasm or fail to participate in the learning materials and activities actively, they become vulnerable to distractions (Cohen & Henry, 2019), which frequently lead to academic procrastination (Ljubin-Golub et al., 2019; Wirajaya, 2020). Active involvement is paramount when acquiring proficiency in a foreign language such as Arabic. Acquiring language, particularly in speaking and communication, dramatically depends on regular interaction with the language through consistent practice and exercises (Gudu, 2015; Mubarak et al., 2023).

Participation is notably prominent in the Arabic language learning program at MAN 4 Hulu Sungai Tengah. The acquisition of a foreign language, mainly a highly intricate one like Arabic, necessitates active engagement on the part of pupils. The process of acquiring a language is fundamentally centered around developing skills, necessitating theoretical understanding and the actual implementation of knowledge through consistent practice, active engagement, and immersive experiences.

The provided graph shows that none of the classes achieved an average score meeting the minimum learning standard of 75. It indicates that the students in all classes did not perform at the desired level in their Arabic language learning. Furthermore, across all classes, there was a consistent issue of students needing to complete their assignments, and this problem was most pronounced in X IPS 1 and 2.

The limited availability of learning resources exacerbates this issue, as it negatively affects students' engagement in learning Arabic, especially in speaking skills (*maharah kalam*), which is crucial for achieving language proficiency. Inadequate learning resources can hinder students from actively participating in language exercises and practice (Golonka et al., 2014; Huang, 2016).

Speaking skills, or "*Maharah Kalam*" in Arabic, are the ability to use language to express thoughts, feelings, and goals to others (Hendri, 2017). The

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speaker learns to speak by organizing thoughts and ideas. As their thoughts solidify, they seek ways to communicate them (Baoumy et al., 2018). Since it encompasses all linguistic development, speaking skills are superior to writing skills in human communication (Meyer, 2018).

Speaking abilities are clearly and coherently expressing thoughts and ideas through verbal communication. Effective communication involves organizing thoughts, using appropriate terminology and syntax, and conveying ideas and emotions (Dimbleby & Burton, 2020). Burns and Joyce (1997) define speaking as a deeply participatory process of information generation, reception, and cognitive processing. The deliberate combination of sounds stresses structure and coherence in oral communication to create intelligible phrases. Thornbury (2016) defines speaking as a genuine and practical act in which people express their thoughts, ideas, and emotions in interpersonal communication.

Speaking proficiency requires fluency and accuracy. According to Hughes (2002), fluency is the ability to speak without interruptions or hesitations. Coherent communication requires careful word and sentence integration, precise pronunciation, and effective emphasis and intonation. Fluency includes mechanical skills, language use, and contextual cue-based response assessment (2020). The second factor, accuracy, is how well the speaker uses the target language's pronunciation, vocabulary, and grammar (Michel, 2017). To achieve precision, learners must use linguistic structures carefully and thoroughly. It includes using grammar correctly, choosing vocabulary appropriately, and mastering phonological rules, stress patterns, intonation, and pitch in pronunciation.

The lack of student engagement and the limited availability of appropriate learning tools are key factors that contribute to students' inadequate speaking proficiency (Alrabai, 2016). The interactionist hypothesis emphasizes language acquisition through meaningful social interactions (Pereira & Conti-Ramsden, 2019). It posits that when pupils are disengaged, these interactions become restricted, impeding language skills development. Similarly, Behavioral Language Acquisition Theory emphasizes the importance of practice and reinforcement in language acquisition (Genesee, 2014). Insufficient engagement, in this context, results in a reduction of possibilities for both practice and reinforcement.

Several studies have shown that videos and digital comics improve students' Arabic language skills. Ardiansyah et al. (2022) examined how animated movies engage Arabic language learners. The research found that animated movies increase students' interest, focus, pleasure, excitement, and engagement in learning at MTs Daarul Uluum PUI Majalengka. Animations simplify learning, motivate students, and help teachers deliver educational content. However, poor internet connectivity and teachers' inexperience with animated videos limit its use. Researchers recommend further research on learning interests and animated films. To improve research in this area, they recommend better research tool preparation.

Ahkas et al. (2023) use Camtasia Studio to create educational videos for Arabic Language Education. The five-stage ADDIE model is used in the study's R&D approach. The video is tested by media and material experts and 30 students. Student trials had an average success rate of 86% and material expert validation of 92%, making the product feasible/valid. Additionally, product trials with limited

35 availability receive an average rating of 80% and 93%, making them "highly valid". Thus, Camtasia Studio-created learning media is feasible and suitable for Arabic Language Education instructors and students.

34 Using unique and interactive technologies, the comic 'Kaifa Haluka' helps learn Arabic (Saad et al., 2023). This multilingual app uses cutting-edge technology to provide a transliterated Arabic and English interface. The survey results show that this tool is a practical instructional resource. Interactive elements like QR codes for videos have helped the comic promote learning. Due to its high quality, UiTM Kelantan's Invention, Innovation & Design Staff event named the comic best invention and commercial product.

1 In their study, Promoting Digital Learning Environment in Arabic Language Education: The Use of Animated Video (AV) For Vocabulary Acquisition among Primary School Students, Rahimi et al. examine how animated video (AV) helps Malaysian primary school students learn Arabic (2021). The quasi-experimental design divided fourth graders learning Arabic as a foreign language into treatment and control groups. The treatment group learned using AV, while the control group learned in a classroom. Multimedia helped the AV demonstrate Arabic vocabulary. Both groups learned five to seven new words in two 30-minute lessons per week. Assessment results were analyzed using SPSS Version 20 after three weeks. Significant differences were found between the groups ( $t(22) = -3.98, p < .001$ ), with the treatment group ( $M = 86.06, SD = 10.86$ ) outperforming the control group ( $M = 80.53, SD = 15.48$ ). These findings demonstrate the efficacy of AV for Arabic vocabulary acquisition.

1 In order to improve students' mastery of speaking skills, it is suggested that the integration of animated learning materials, as advocated by Choi and Yi (2016) and Cakici (2016) in their research, be considered a viable and efficient resolution. The findings of their research indicated that students who incorporated animation as a learning tool experienced notable enhancements in their post-test performance relative to their pretest scores. The efficacy of Plotagon, a form of animated content, in enhancing students' proficiency in Arabic listening abilities was examined in a developmental study conducted by Salma (2022). In recent research conducted by Ana (2015), Thang (2014) and Chen (2018), it has been observed that digital comics have demonstrated efficacy in augmenting foreign language ability. According to Mahdi (2022) and Chun (2016), utilizing these resources enhances oral communication abilities, contributes to a more comprehensive educational encounter, and fosters a favorable atmosphere inside the classroom.

25 Plotagon Education is a helpful tool for educators and students to create animated films, characters, and storylines related to various subjects (Çoban et al., 2021). This website has many creative ideas for language arts, social studies, and math classes. Plotagon creates 3D animations (Hashimi, 2022). This simple tool speeds up animated video production. Animation has become a popular medium for visualizing ideas, narratives, and communications in the digital age. Students, content providers, and experts can use this program because of its simple design. Individuals can choose from Plotagon's wide selection or customize characters to their liking. Users can customize character visuals, facial expressions, and bodily gestures to create animations that match their narratives. Plotagon's novel Text to

Voice (TTS) feature lets users turn written text into audible voice in 3D animations (Faradisa, 2021). Adding voices to animation characters is easier and more efficient with this function. Text-to-speech (TTS) lets people enter dialogues or scripts for animation characters.

Comics are visual narratives that use a deliberate order of images and symbols to convey information and elicit aesthetic responses (Miodrag, 2013). Comic adaptation on digital platforms has proven effective in second language (L2) reading instruction. According to Vassilikopoulou et al. (2011), digital comics help students develop language skills, imagination, and cultural awareness through narrative. Hoffman (2018) claims digital comics can motivate, engage, and involve students in language discussions. Digital comics combine organized graphic elements with audio or multimedia storytelling (Dittmar, 2015). Computer applications are used to create these comics, which feature vibrant imagery, dialogue in text balloons, and sometimes musical effects (Kustianingsari & Dewi, 2015). Digital comics are engaging and interactive, helping students learn a foreign language and communicate more fluently (Fatimah et al., 2019). These resources combine text and images for multimodal learning (Allen, 2018). Digital comics can captivate viewers with their stunning visuals, colorful text, and emotive speech bubbles. The captivating visual appeal of instructional materials keeps learners engaged and interested throughout language acquisition, which is crucial. Digital comics also present authentic scenes and dialogues, allowing learners to observe language use in realistic contexts (Abuzahra et al., 2016).

This research focuses on filling a significant gap in the existing research by specifically examining methods to improve students' proficiency in speaking Arabic. This research offers a comparative analysis of two educational tools: Plotagon and digital comics. It differs from previous research that mainly concentrated on vocabulary or learning motivation. This research aims to assess and compare the effectiveness of Plotagon animated movies and digital comics implementation in improving the oral speaking of X-grade students at MAN 4 HST. It acknowledges the significant impact of media in promoting student engagement for the development of *maharah kalam*.

## METHOD

### *Research Design*

This research adopts a quasi-experimental approach, utilizing a non-equivalent control group pretest-posttest design due to the practical constraints of randomization within a typical classroom environment. The study involves two intact groups, both of which underwent a pretest assessment before the treatment phase and a post-test evaluation after the treatment. The research was conducted at MAN 4 Hulu Sungai Tengah, South Kalimantan, Indonesia. Class X IPS 1 was designated experimental group 1, where the Plotagon Story animation learning media was implemented. Class X IPS 2 served as experimental group 2, where digital comics were utilized as the primary instructional tool.

### *Data Collection Technique*

The assessment of student learning outcomes in both groups was based on a rubric assessment criterion. This rubric encompassed various aspects, including fluency, grammatical accuracy, organization of ideas, intonation, interaction, and

vocabulary usage. These criteria allowed for a comprehensive evaluation of the student's language proficiency and speaking skills.

In addition to assessing learning outcomes, data regarding student engagement in the Arabic language learning process were collected through a questionnaire. This questionnaire featured three distinct dimensions: cognitive, emotional, and behavioral engagement. Closed-ended questions were employed to gather responses, utilizing a four-point Likert scale that ranged from "strongly agree" to "strongly disagree." This comprehensive data collection approach ensured a thorough analysis of both the effectiveness of the teaching methods and the student's level of engagement in the learning process.

The hypotheses for this research are as follows: (1) There is a significant difference between students' speaking skills' (*maharah kalam*) learning outcomes before and after applying Plotagon animation media. (2) There is a significant difference between students' speaking skills' (*maharah kalam*) learning outcomes before and after applying digital comics media. (3) There is a significant difference between the speaking skills (*maharah kalam*) learning outcomes of students using Plotagon animation media and those using digital comics media.

**Data Analysis Technique**

Student learning outcome data will be analyzed using SPSS, including tests for normality and homogeneity of variances as assumption tests. Hypothesis testing will involve t-tests. Decision-making in the t-test will follow the guidelines. If the Sig. value is less than 0.05, the hypothesis is accepted (Santoso, 2016). Meanwhile, data from the questionnaire on student engagement in Arabic language learning, specifically *Maharah Kalam*, will be analyzed using descriptive statistical techniques.

**RESULT**

**Description of Pretest and Post-test Data**

**Table 2.**

**Descriptive Data of Student Learning Outcomes Before and After Treatment**

Statistics		PretestX1	PretestX2	PosttestX1	PosttestX2
N	Valid	22	22	22	22
Mean		55.64	54.09	81.45	79.64
Median		56.00	54.00	82.00	78.00
Mode		40a	54a	78	78
Std. Deviation		12.308	11.800	4.240	5.113
Minimum		34	36	74	72
Maximum		76	86	90	92
<b>Sum</b>		<b>1224</b>	<b>1190</b>	<b>1792</b>	<b>1752</b>

The table above shows that the number of students (N) in each class is the same, with 22 students in each group. The average pretest score in experimental group 1 is 55.64, while in experimental group 2, it is 54.09. The average post-test score in experimental group 1 is 81.45, and in experimental group 2, it is 79.64.

**Assumption Testing for Normality and Homogeneity of Data**

**Table 3.**  
**Normality Test Results**

Result	Group	Shapiro-Wilk		
		Statistic	df	Sig.
	PretestX1	.967	22	.644
	PretestX2	.930	22	.123
	PosttestX1	.938	22	.181
	PosttestX2	.946	22	.259

The decision-making guideline for normality data in the Shapiro-Wilk test is that if the Sig. value is greater than 0.05, the data is considered normally distributed. Based on the table above, the Sig. Values for pretestX1 (experimental group 1), pretestX2 (experimental group 2), posttestX1, and posttestX2 are greater than 0.05, indicating that all data are normally distributed.

**Table 4.**  
**Homogeneity Test Results**

Test of Homogeneity of Variances					
		Levene	df1	df2	Sig.
Pretest	Based on Mean	.396	1	42	.532
	Based on Median	.379	1	42	.541
Post-test	Based on Mean	.319	1	42	.575
	Based on Median	.149	1	42	.701

The decision-making guideline for homogeneity of data is that if the Sig. value is greater than 0.05, the data is considered homogeneous. From the table above, the Sig. value for the pretest based on the mean is 0.532, and the Sig. The value for the post-test based on the mean is 0.575, and both of these are greater than 0.05, indicating that the data is homogeneous.

**Hypothesis Testing**

**Analysis of Speaking Skills LO Using Plotagon**

**Table 5.**

**Paired T-Test Results for Pretest and Post-test Data in Experimental Group 1**

		Paired Differences					t	df	Sig. (2-
		Lower	Upper						
Pair 1	PretestX1 - PosttestX1	- 10.103	2.154	-	-	-	21	.000	
		25.818		30.297	21.339	11.987			

The table above, in the Sig. (2-tailed) column shows a value of 0.000, which is less than 0.05. Based on this, there is a significant difference in the average learning outcomes for speaking skills before students received the treatment of applying Plotagon animation media compared to the learning outcomes after students received this treatment. Plotagon animation media has a positive and

significant impact on improving student learning outcomes in speaking skills (*Maharah Kalam*).

### Analysis of Speaking Skills LO Using Digital Comics

Table 6. Paired T-Test Results for Pretest and Post-test Data in Experimental Group 2

		Paired Samples Test							
		Paired Differences			t	df	Sig. (2-		
			Lower	Upper			tailed)		
Pair 2	PretestX2 - PosttestX2	- 8.022	1.710	-	-	-	21	.000	
		25.545	29.102	21.989	14.936				

The table above, in the Sig. (2-tailed) column shows a value of 0.000, which is less than 0.05. Based on this, there is a significant difference in the average learning outcomes for speaking skills before students receive the treatment of applying digital comic media compared to the learning outcomes for speaking skills after students receive this treatment. Using digital comic media also positively and significantly improves student learning outcomes in speaking skills (*Maharah Kalam*).

### Comparison of Speaking Skills LO in Class X IPS 1 and Class X IPS 2

Table 7.

#### Independent T-Test Results for Post-test Data in Experimental Groups 1 and 2

Levene's Test for Equality of Variances		t-test for Equality of Means						
	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		
Hasil	Equal variances assumed	.575	1.284	42	.206	1.818	1.416	
	Equal variances not assumed	1.284	40.607	.206	1.818	1.416		

The table above shows that the Sig. value in Levene's Test for Equality of Variances column is 0.575, greater than 0.05, indicating that the post-test data for experimental group 1 and experimental group 2 are homogenous. Based on this, the decision-making in the independent sample t-test relies on the value in the "equal variances assumed" row. In this table, the Sig. (2-tailed) column for the t-test for Equality of Means is 0.206, greater than 0.05, so H0 is accepted. Based on the interpretation of the independent t-test analysis, it can be stated that there is no significant difference in the average learning outcomes between Class X IPS 1, which used Plotagon animation media, and Class X IPS 2, which used digital comics media in the learning of speaking skills (*maharah kalam*) in Arabic. However, the Mean Difference column has a value of 1.818, indicating that the average speaking skills learning outcomes of students using Plotagon animation media were 1.818 points better than those of students who learned using digital comics.

**Student Engagement in Maharah Kalam Learning Using Plotagon and Digital Comics**

**Table 8.**  
**Data from the Student Engagement Questionnaire in Learning**

No	Indicator	Item	Mean X1	Indicator Mean	Mean X2	Indicator Mean
1	Behavioral Engagement	1	3.5	3.15	3.3	2.8
		2	3.3		3.2	
		3	3.3		3	
		4	2.7		2	
		5	3.2		3	
		6	2.9		2.5	
2	Emotional Engagement	1	3.1	3.05	3	2.9
		2	3.1		3.1	
		3	3		2.9	
		4	3		2.6	
3	Cognitive Engagement	1	2.8	2.96	2.3	2.7
		2	3.1		2.9	
		3	2.7		2.7	
		4	3.3		3	
		5	2.9		2.6	

**DISCUSSION**

Based on the table above, it can be seen that experimental group 1 exhibits better engagement compared to experimental group 2. In the indicator of behavioral engagement, experimental group 1 has an average score of 3.15, while experimental group 2 has an average score of 2.8. In the emotional engagement indicator, experimental group 1 has an average score of 3.05, while experimental group 2 has an average score of 2.9. Meanwhile, in the cognitive engagement indicator, experimental group 1 has an average score of 2.96, while experimental group 2 has an average score of 2.7.

According to a study by Hsu et al. (2019), meeting fundamental psychological needs in the context of the learning environment might increase self-regulation motivation, which is linked to better learning goal attainment and higher information transfer. According to Chiu's (2021) subsequent research, students are more likely to be cognitively engaged in online learning environments that encourage greater autonomy. However, the study also found that emotional attachment, a lack of equipment and resources, digital illiteracy, and inadequate learning opportunities all dramatically lower student participation in learning environments.

Self-determination theory is one macro-level human motivation theory that aims to explain the dynamics of human wants, motivation, and well-being in a social setting. According to this theory, every person has three psychological needs that determine whether or not they take action (Chiu, 2022). These needs are relatedness (feeling connected, loved, and interacting), competence (feeling competent and effective), and autonomy (feeling self-directed and supported). When the educational design adequately satisfies the psychological demands

outlined in this SDT theory, students will actively engage in learning (Ferriz et al., 2016). Students are more likely to be engaged in learning in classrooms that satisfy these three psychological demands (Reeve, 2013).

The degree to which a learner succeeds in learning a foreign language depends on many personal factors. Success in learning a foreign language is supported by characteristics including motivation and student involvement (Aubrey et al., 2022). Additionally, it has been demonstrated that the capacity for self-directed learning is a critical individual difference that influences learning outcomes in educational contexts, including acquiring foreign languages (C.-H. Lin et al., 2017). A study by Hromalik and Koszalka (2018) found that given the physical and time separation between students and teachers, engaging and effective digital learning resources and media are needed to improve students' motivation and self-directed learning abilities in foreign language learning, especially in speaking skills (*maharah kalam*).

This study indicates how engaging learning materials like digital comics and Plotagon animation can improve learning results by increasing student involvement. In previous studies, Plotagon has been found to improve students' writing abilities when learning English; it has also been demonstrated to significantly lower students' anxiety when speaking a foreign language and boost their involvement in language practice. Several other language competencies, such as vocabulary mastery (Bahri et al., 2022), speaking skills (Kallinikou & Nicolaidou, 2019), writing skills (Williams & Beam, 2019), reading skills (Saputri et al., 2021), and other language competencies, have also been shown to be improved by digital comics.

The results of this study corroborate those of a study on English language learning by Lin & Tseng (2012), which found that students who learned English words through video animation and text had better learning outcomes than students who used text and images. In terms of motivating students, a study by Zhao et al. (2023) on incorporating animation into second language learning showed that it successfully fostered a positive learning environment and affected students' feelings. According to research by Sahrir et al. (2013), using animation as a learning tool enhanced Arabic language learning outcomes.

## CONCLUSION

The issue of students' needs for more engagement in Arabic language learning, especially in speaking skills (*maharah kalam*), leading to subpar learning results, can be effectively addressed by implementing captivating educational resources. In this research, both Plotagon animation and digital comics as learning media have demonstrated their ability to enhance students' learning outcomes significantly. Based on the results of an independent T-Test, no noteworthy disparity exists in the learning achievements of students utilizing Plotagon animation media compared to those employing digital comics media. Nevertheless, Plotagon animation media exhibits the capacity to elevate the average learning outcomes by 1.818 points in contrast to digital comics media. Furthermore, it is worth noting that Plotagon animation media proves to be more proficient at fostering student engagement than digital comic media.

## REFERENCES

- Ahkas, A. W., Zulheddi, Z., Ardiansyah, M., & Al, M. D. (2023). Camtasia Studio-Based Arabic Learning Video Design for Arabic Language Education Students. *Jurnal Al Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, 15(1), 224–243. <http://dx.doi.org/10.24042/albayan.v15i1.16366>
- Alhabahba, M. M., Pandian, A., & Mahfoodh, O. H. A. (2016). English language education in Jordan: Some recent trends and challenges. *Cogent Education*, 3(1), 1156809. <https://doi.org/10.1080/2331186X.2016.1156809>
- Alobaid, A. (2020). Smart multimedia learning of ICT: role and impact on language learners' writing fluency—YouTube online English learning resources as an example. *Smart Learning Environments*, 7(1), 24. <https://doi.org/10.1186/s40561-020-00134-7>
- Arabai, F. (2016). Factors underlying low achievement of Saudi EFL learners. *International Journal of English Linguistics*, 6(3), 21–37. <https://doi.org/10.5539/ijel.v6n3p21>
- Ana, I. K. T. A. (2015). Teaching English for young learners using a digital comic strip. *Jurnal Pendidikan Dan Pengajaran*, 48(1–3). <https://doi.org/10.23887/jppundiksha.v48i1-3.6920>
- Ardiansyah, A. A., Kosim, N., & Hermawan, A. (2022). The Use of Animated Videos in Increasing the Arabic Learning Interest. *Al-Ta'rib: Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya*, 10(1), 35–50. <https://doi.org/10.23971/altarib.v10i1.3942>
- Aubrey, S., King, J., & Almukhaild, H. (2022). Language learner engagement during speaking tasks: A longitudinal study. *RELC Journal*, 53(3), 519–533. <https://doi.org/10.1177/0033688220945418>
- Bahri, S., Reski, M., & Ahmad, G. (2022). An Authentic Material Comic to Improve Students' Vocabulary Mastery. *ETDC: Indonesian Journal of Research and Educational Review*, 1(2), 201–209. <https://doi.org/10.51574/ijrer.v1i2.336>
- Baioumy, N., Ismail, M. Z., Ab Rahman, R., Mohd, T., Annuar, M. Z. M., & Haridi, E. A. (2018). The effectiveness of a proposed strategy based on video stories on Youtube in the development of listening and speaking skills among the non-Arabic speakers. *International Journal of Academic Research in Business and Social Sciences*, 8(10), 414–436. <http://dx.doi.org/10.6007/IJARBS/v8-i10/4745>
- Burns, A., & Joyce, H. (1997). *Focus on Speaking*. ERIC. <https://eric.ed.gov/?id=ED411709>
- Cakici, D. (2016). The use of ICT in teaching English as a foreign language. *Participatory Educational Research*, 4(2), 73–77. [http://perjournal.com/archieve/spi\\_16\\_4/per\\_16\\_spi\\_4\\_10.pdf](http://perjournal.com/archieve/spi_16_4/per_16_spi_4_10.pdf)
- Chen, G.-D., Fan, C.-Y., Chang, C.-K., Chang, Y.-H., & Chen, Y.-H. (2018). Promoting autonomy and ownership in students studying English using digital comic

- performance-based learning. *Educational Technology Research and Development*, 66, 955–978. <https://doi.org/10.1007/s11423-018-9597-7>
- Chiu, T. K. (2021). Student engagement in K-12 online learning amid COVID-19: A qualitative approach from a self-determination theory perspective. *Interactive Learning Environments*, 1–14. <https://doi.org/10.1080/10494820.2021.1926289>
- Chiu, T. K. (2022). Applying the self-determination theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *Journal of Research on Technology in Education*, 54(sup1), S14–S30. <https://doi.org/10.1080/15391523.2021.1891998>
- Choi, J., & Yi, Y. (2016). Teachers' integration of multimodality into classroom practices for English language learners. *Tesol Journal*, 7(2), 304–327. <https://doi.org/10.1002/tesj.204>
- Chun, D., Kern, R., & Smith, B. (2016). Technology in language use, language teaching, and language learning. *The Modern Language Journal*, 100(S1), 64–80. <https://doi.org/10.1111/modl.12302>
- Cohen, A. D., & Henry, A. (2019). Focus on the language learner: Styles, strategies and motivation 1. In *An introduction to applied linguistics* (pp. 165–189). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9780429424465-10/focus-language-learner-andrew-cohen-alastair-henry>
- De Houwer, A., Miller, D., Bayram, F., Rothman, J., & Serratrice, L. (2017). The role of language input environments for language outcomes and language acquisition in young bilingual children. *Bilingual Cognition and Language: The State of the Science across Its Subfields*, 127–154. <https://doi.org/10.1075/sibil.54.07hou>
- Dimbleby, R., & Burton, G. (2020). *More than words: An introduction to communication*. Routledge. <https://www.routledge.com/More-Than-Words-An-Introduction-to-Communication/Dimbleby-Burton/p/book/9780415303835>
- Eltahir, M. E., Alsalhi, N. R., Al-Qatawneh, S., AlQudah, H. A., & Jaradat, M. (2021). The impact of game-based learning (GBL) on students' motivation, engagement and academic performance on an Arabic language grammar course in higher education. *Education and Information Technologies*, 26, 3251–3278. <https://doi.org/10.1007/s10639-020-10396-w>
- Ferriz, R., González-Cutre, D., Sicilia, Á., & Hagger, M. (2016). Predicting healthy and unhealthy behaviors through physical education: A self-determination theory-based longitudinal approach. *Scandinavian Journal of Medicine & Science in Sports*, 26(5), 579–592. <https://doi.org/10.1111/sms.12470>
- Genesee, F. (2014). Second language learning in school settings: Lessons from immersion. In *Bilingualism, multiculturalism, and second language learning* (pp. 183–201). Psychology Press.

- <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315807478-9/second-language-learning-school-settings-lessons-immersion-fred-genesee?context=ubx&refId=a1374129-cd37-4db6-9769-d5a3e6568b6c>
- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70–105. <https://doi.org/10.1080/09588221.2012.700315>
- Gudu, B. O. (2015). Teaching Speaking Skills in English Language Using Classroom Activities in Secondary School Level in Eldoret Municipality, Kenya. *Journal of Education and Practice*, 6(35), 55–63. <https://eric.ed.gov/?id=EJ1086371>
- Hendri, M. (2017). Pembelajaran Keterampilan Berbicara Bahasa Arab Melalui Pendekatan Komunkatif. *POTENSIA: Jurnal Kependidikan Islam*, 3(2), 196–210. <http://dx.doi.org/10.24014/potensia.v3i2.3929>
- Hromalik, C. D., & Koszalka, T. A. (2018). Self-regulation of the use of digital resources in an online language learning course improves learning outcomes. *Distance Education*, 39(4), 528–547. <https://doi.org/10.1080/01587919.2018.1520044>
- Hsu, H.-C. K., Wang, C. V., & Levesque-Bristol, C. (2019). Reexamining the impact of self-determination theory on learning outcomes in the online learning environment. *Education and Information Technologies*, 24, 2159–2174. <https://doi.org/10.1007/s10639-019-09863-w>
- Huang, S.-H. (2016). Communicative Language Teaching: Practical Difficulties in the Rural EFL Classrooms in Taiwan. *Journal of Education and Practice*, 7(24), 186–202. <https://eric.ed.gov/?id=EJ1112915>
- Hughes, R. (2010). Teaching and Researching Speaking Rebecca Hughes. *Applied Linguistics in Action Series [Edited by CN Candlin, DR Hall].-Hong Kong: Pearson Education*, 269–293. <https://www.taylorfrancis.com/books/mono/10.4324/9781315833736/teaching-researching-speaking-rebecca-hughes>
- Kallinikou, E., & Nicolaidou, I. (2019). Digital storytelling to enhance adults' speaking skills in learning foreign languages: A case study. *Multimodal Technologies and Interaction*, 3(3), 59. <https://doi.org/10.3390/mti3030059>
- Lin, C., & Tseng, Y. (2012). Videos and Animations for Vocabulary Learning: A Study on Difficult Words. *Turkish Online Journal of Educational Technology-TOJET*, 11(4), 346–355. <http://www.tojet.net/articles/v11i4/11434.pdf>
- Lin, C.-H., Zhang, Y., & Zheng, B. (2017). The roles of learning strategies and motivation in online language learning: A structural equation modeling analysis. *Computers & Education*, 113, 75–85. <https://doi.org/10.1016/j.compedu.2017.05.014>
- Ljubin-Golub, T., Petričević, E., & Rován, D. (2019). The role of personality in motivational regulation and academic procrastination. *Educational*

- Psychology*, 39(4), 550–568.  
<https://doi.org/10.1080/01443410.2018.1537479>
- Mačianskienė, N., & Bijeikienė, V. (2018). Fostering active learner engagement in ESP classes. *Key Issues in English for Specific Purposes in Higher Education*, 223–242. [https://doi.org/10.1007/978-3-319-70214-8\\_13](https://doi.org/10.1007/978-3-319-70214-8_13)
- Mahdi, D. A. (2022). Improving speaking and presentation skills through interactive multimedia environment for non-native speakers of English. *SAGE Open*, 12(1), 21582440221079811. <https://doi.org/10.1177/21582440221079811>
- Mubarak, M. R., Audina, N. A., & Muhammad, B. (2023). Enhancing Arabic Speaking Skills: A Societal Approach at an Indonesian Islamic Boarding School University - Implementation Challenges and Remedies. *Journal of Arabic Language Learning and Teaching (JALLT)*, 1(2), 101–116. <https://doi.org/10.23971/jallt.v1i2.148>
- Mango, O. (2015). iPad use and student engagement in the classroom. *Turkish Online Journal of Educational Technology-TOJET*, 14(1), 53–57. <https://eric.ed.gov/?id=EJ1057341>
- Meyer, L. (2018). The neural oscillations of speech processing and language comprehension: State of the art and emerging mechanisms. *European Journal of Neuroscience*, 48(7), 2609–2621. <https://doi.org/10.1111/ejn.13748>
- Michel, M. (2017). Complexity, accuracy and fluency in L2 production. *The Routledge Handbook of Instructed Second Language Acquisition*, 50, 68. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315676968-4/complexity-accuracy-fluency-l2-production-marije-michel>
- Pereira, M. P., & Conti-Ramsden, G. (2019). *Language development and social interaction in blind children*. Routledge. <https://www.routledge.com/Language-Development-and-Social-Interaction-in-Blind-Children/Pereira-Conti-Ramsden/p/book/9780367895426>
- Rahimi, N. M., Nasri, N., & Samihah, S. (2021). Promoting Digital Learning Environment in Arabic Language Education: The Use of Animated Video (AV) For Vocabulary Acquisition among Primary School Students. *Ijaz Arabi Journal of Arabic Learning*, 4(3). <https://doi.org/10.18860/ijazarabi.v4i3.12941>
- Ramírez-Esparza, N., García-Sierra, A., & Kuhl, P. K. (2017). The impact of early social interactions on later language development in Spanish–English bilingual infants. *Child Development*, 88(4), 1216–1234. <https://doi.org/10.1111/cdev.12648>
- Reeve, J. (2013). How students create motivationally supportive learning environments for themselves: The concept of agentic engagement. *Journal*

- of *Educational Psychology*, 105(3), 579.  
<https://psycnet.apa.org/doi/10.1037/a0032690>
- Saad, M. L. I. H. M., Badaruddin, M. I., Mayidin, M. B., Zakaria, R., & Jamaludin, J. (2023). Kaifa Haluka Comic: Facilitating Arabic Language Learning through Innovative and Interactive Technology. *Malaysia Journal of Invention and Innovation*, 2(6), 1-5.  
<https://digit360.com.my/mjii/index.php/home/article/view/46>
- Sahrir, M. S., Yahaya, M. F., & Nasir, M. S. (2013). EZ-Arabic for children: A virtual learning resource tool for Malaysian primary schools. *Procedia-Social and Behavioral Sciences*, 90, 396-404.  
<https://doi.org/10.1016/j.sbspro.2013.07.108>
- Salma, K. N., Machmudah, U., & Nurhidayati, N. (2022). *Development of Listening Skills Materials Using Plotagon Story Application Multimedia*. 70-75.  
<https://doi.org/10.2991/assehr.k.220206.009>
- Santoso, S. (2016). *Panduan Lengkap SPSS Versi 23*. Elex Media Komputindo.
- Saputri, A. D., Sunardi, S., & Musadad, A. A. (2021). Digital Comics as A Media in EFL Reading Classrooms. *Al-Ishlah: Jurnal Pendidikan*, 13(2), 1097-1102.  
<https://doi.org/10.35445/alishlah.v13i2.758>
- Thang, S. M., Sim, L. Y., Mahmud, N., Lin, L. K., Zabidi, N. A., & Ismail, K. (2014). Enhancing 21st century learning skills via digital storytelling: Voices of Malaysian teachers and undergraduates. *Procedia-Social and Behavioral Sciences*, 118, 489-494. <https://doi.org/10.1016/j.sbspro.2014.02.067>
- Thornbury, S. (2016). Communicative language teaching in theory and practice. In *The Routledge handbook of English language teaching* (pp. 224-237). Routledge.  
<https://www.taylorfrancis.com/chapters/edit/10.4324/9781315676203-20/communicative-language-teaching-theory-practice-scott-thornbury>
- Williams, C., & Beam, S. (2019). Technology and writing: Review of research. *Computers & Education*, 128, 227-242.  
<https://doi.org/10.1016/j.compedu.2018.09.024>
- Wirajaya, M. M. (2020). Investigating the academic procrastination of EFL students. *Jurnal Pendidikan Bahasa Inggris Indonesia*, 8(2), 67-77.  
<https://doi.org/10.23887/jpbi.v8i2.3498>
- Zhao, Y., & Lai, C. (2023). Technology and second language learning: Promises and problems. In *Technology-mediated learning environments for young English learners* (pp. 167-206). Routledge.  
<https://www.taylorfrancis.com/books/edit/10.4324/9781003418009/technology-mediated-learning-environments-young-english-learners-leann-parker>

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