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ENHANCING STUDENT ENGAGEMENT IN ARABIC LANGUAGE LEARNING THROUGH ISPRING SUITE 11

Alwi Nizar Al-Ghifari[1], Uswatun Hasanah[2], Hanan Mohammed Ali Zaid Al Nahari[3], Rose Mary Adelia Subagyo[4]
[1] MAN 5 Garut, Indonesia
[2] SDIT Miftahul Jannah Bekasi, Indonesia
[3] Pesantren Madani Bekasi, Indonesia
[4] SD Bandung Islamic School, Indonesia
Corresponding E-mail: nizaralwi199@gmail.com

ABSTRACT

The advancement of technology has significantly facilitated human activities, including in the educational sector. This study aimed to evaluate the effectiveness of the iSpring Suite 11 interactive learning media in enhancing students' interest and engagement in Arabic language learning at MAN 5 Garut. Employing a quasi-experimental design with pre-test and post-test control groups and a quantitative approach, data were collected through observation, interviews, questionnaires, tests, and documentation. The findings revealed that students' interest and activity levels were initially low, with mean scores of 32 and 50, respectively. After the intervention using iSpring Suite 11, these scores increased to 87 (very high interest) and 90 (very high activity). Statistical analysis showed a significant improvement in the experimental group (interest gain = 0.8; activity gain = 0.8), surpassing the control group (interest gain = 0.7; activity gain = 0.6). The study concludes that iSpring Suite 11 is more effective than conventional methods in fostering student interest and engagement in Arabic language education. Future research should explore the long-term effects of such technologies across different educational contexts and subject areas.

Keywords: Arabic Learning, Learning Media, Learning Activity, Student Interest

ABSTRAK

Kemajuan teknologi telah secara signifikan mempermudah berbagai aktivitas manusia, termasuk dalam sektor pendidikan. Penelitian ini bertujuan untuk mengevaluasi efektivitas media pembelajaran interaktif iSpring Suite 11 dalam meningkatkan minat dan keterlibatan siswa dalam pembelajaran bahasa Arab di MAN 5 Garut. Penelitian ini menggunakan desain kuasi-eksperimen dengan kelompok kontrol pre-test dan post-test serta pendekatan kuantitatif. Pengumpulan data dilakukan melalui observasi, wawancara, kuesioner, tes, dan dokumentasi. Temuan menunjukkan bahwa tingkat minat dan aktivitas siswa pada awalnya tergolong rendah, dengan skor rata-rata masing-masing sebesar 32 dan 50. Setelah penerapan iSpring Suite 11, skor tersebut meningkat menjadi 87 (minat sangat tinggi) dan 90 (aktivitas sangat tinggi). Analisis statistik menunjukkan peningkatan signifikan pada kelompok eksperimen (kenaikan minat = 0,8; kenaikan aktivitas = 0,8), melampaui kelompok kontrol (kenaikan minat = 0,7; kenaikan aktivitas = 0,6). Studi ini menyimpulkan bahwa iSpring Suite 11 lebih efektif dibandingkan metode konvensional dalam meningkatkan minat dan keterlibatan siswa dalam pembelajaran bahasa Arab. Disarankan penelitian selanjutnya dapat mengkaji dampak jangka panjang dari penggunaan teknologi serupa pada berbagai konteks pendidikan dan mata pelajaran yang berbeda.

Kata Kunci: Belajar Bahasa Arab, Media Pembelajaran, Kegiatan Pembelajaran, Minat Siswa

INTRODUCTION

In the digital era, Arabic language learning faces new challenges in maintaining student engagement. Student engagement has become a key factor in the success of language learning, especially Arabic, which carries its complexities (Albantani & Madkur, 2019). Arabic language learning in the digital era faces significant challenges in maintaining student engagement. Student engagement is a key factor in language acquisition success, especially in Arabic, which presents its complexities (Maryani et al., 2024). The integration of technology into education has been shown to enhance student motivation and engagement (Amaliyah & Hasan, 2025). One technological tool that can be utilized is iSpring Suite 11, an e-learning platform that enables interactive content creation (Mahadi & Tohe, 2023). iSpring Suite 11 offers quizzes, simulations, and videos that can increase student engagement in Arabic language learning (Ainiyah et al., 2024).

Several studies have shown that using gamification and augmented reality technologies can boost motivation and engagement in Arabic learning. For instance, using digital games has enhanced vocabulary acquisition and student participation (Abdul Ghani et al., 2022). Furthermore, the edutainment approach has also raised students' learning motivation (Fauziyah & Syafei, 2024). However, there are still limitations in maximizing the use of technology in Arabic language education. A study by Arifin et al. indicates that using innovative technologies can make learning more interactive and effective. Yet, challenges such as digital infrastructure and teacher readiness still need to be addressed (Arifin et al., 2023). Research by Khairanis highlights the importance of integrating technology and interactive approaches in Arabic learning to enhance effectiveness and student engagement (Khairanis, 2024). This approach includes using online learning applications and multimedia tools to boost student motivation (Mahadi & Tohe, 2023).

Another study by Rezi et al. demonstrates that gamification in Arabic language learning can improve student motivation and learning outcomes (Rezi et al., 2024). Gamification creates a fun and interactive learning environment, encouraging active student participation in learning activities (Yaccob et al., 2022). Augmented reality technology has also enhanced student motivation in Arabic learning (Fatimah et al., 2022). A study by Aldjanabi et al. (2021) reveals that this technology can strengthen students' engagement with learning materials and improve their understanding of Arabic language contexts.

After conducting research through observation in January 2024 at MAN 5 Garut, data was found that supported previous data that showed a lack of interest in Arabic, which caused their learning activities not to meet expectations. Various factors affect this, including the lack of interaction between teachers and students and the instability of teachers' schedules and routines in the teaching process, so students prefer not to be present during Arabic lessons. In addition, the lack of use of electronic teaching media by teachers at MAN 5 Garut causes the process of delivering material to be less attractive for students. These problems lead to a lack of interest in students learning Arabic. According to Jack Ma in Sorani, education is the great challenge of the century. If you don't change how we teach and educate, we will face great difficulties in the next thirty years. Through digital platforms, teaching difficult material, such as physics, to young children will be very easy.

Based on the considerations above, the researcher believes that using iSpring Suite 11 as a teaching medium in Arabic language instruction represents a valuable and promising approach. Therefore, this study, titled *"The Use of iSpring Suite 11 Teaching Media to Increase Students' Interest and Activity in Arabic Language Learning at MAN 5 Garut,"* seeks to investigate its potential to enhance student motivation and engagement. The researcher expects that implementing iSpring Suite 11

will foster a more enjoyable and enthusiastic learning environment, thereby increasing students' interest and participation, which is essential to achieving educational goals.

This research differs from previous studies in several key aspects. While earlier research employed iSpring version 8, this study will utilize the latest iteration—iSpring Suite version 11—which includes updated features and enhanced interactivity. Moreover, the educational setting also varies: prior studies were conducted at the junior high school level, whereas this research will focus on students at the senior high school level, specifically at MAN 5 Garut. These differences are critical in assessing the media's effectiveness across different learner demographics and educational contexts.

Furthermore, this study introduces a novel exploration within the field of Arabic language education, as no previous research has examined the application of iSpring Suite 11 in this specific context. Using the latest version of the software, combined with a new research site, offers fresh insights into how modern educational technology can be leveraged to improve Arabic learning outcomes. In light of these distinctions, the present study aims to contribute to the advancement of more engaging, innovative, and effective Arabic language teaching strategies in the digital era.

METHOD

This study adopted a quantitative approach utilizing a quasi-experimental design with a pre-test and post-test control group design (Musthafa & Hermawan, 2018) to evaluate the effectiveness of iSpring Suite 11 in enhancing student engagement in Arabic language learning. The research involved two groups: an experimental group taught using iSpring Suite 11 and a control group taught through conventional methods. The independent variable used iSpring Suite 11, while the dependent variables were student interest and activity. Data were gathered from both primary and secondary sources. Primary data came from eleventh-grade students at MAN 5 Garut, while secondary data were obtained from Arabic language teachers. Data collection methods included observation, interviews, questionnaires, tests, and documentation.

The study was conducted at MAN 5 Garut, a senior high school under Indonesia's Ministry of Religious Affairs. Two science classes (XI MIPA 1 and XI MIPA 3), each with 36 students, participated in the research. XI MIPA 1 was the experimental group, and XI MIPA 3 was the control group. The intervention was a structured Arabic language learning program using iSpring Suite 11 in the experimental group. This tool enabled the integration of interactive digital materials, quizzes, and simulations. Student engagement was measured through pre-and post-tests, focusing on interest and activity. The instruments used were validated and aligned with the classification standards set by the Ministry of Education.

Data analysis was performed using SPSS 26. Descriptive statistics were used to summarize the data, including central tendency and dispersion measures. Normality tests using Kolmogorov-Smirnov and Shapiro-Wilk indicated that the data were not normally distributed ($p < 0.05$), prompting the use of non-parametric methods. The Wilcoxon Signed-Rank Test was applied to assess differences between pre-and post-test scores within each group. The Mann-Whitney U Test was employed to evaluate differences between the experimental and control groups. Additionally, the N-Gain test was used to measure the improvement in student outcomes, providing insights into the effectiveness of the teaching intervention using iSpring Suite 11.

RESULTS AND DISCUSSION

Result

MAN 5 Garut is one of the educational institutions under the Ministry of Religious Affairs that plays a significant role in supporting the achievement of national education goals. Initially established as a private Madrasah Aliyah (MA) Al-Junaediyah, it officially became MAN 5 Garut in the 1996/1997 academic year. The school began with only 12 students and limited infrastructure—three classrooms and a semi-permanent office. In 2000, due to internal conflicts with the Al-Junaediyah Foundation, the school temporarily relocated to SMP Negeri 1 Cibatu Garut. With the support of parents, the school later acquired land measuring approximately 3,600 m^2 and received funding to build five new classrooms. From then on, MAN 5 Garut established itself independently and has since shown considerable growth in facilities and educational quality while continuously striving to improve its human resources and infrastructure.

Before implementing the iSpring Suite 11 learning media, student engagement in interest and activity was relatively low in both the experimental and control groups. Regarding interest, the experimental class (XI MIPA 1) had an average score of 32, which falls into the "Very Low" category. In contrast, the control class (XI MIPA 3) scored slightly higher at 43, categorized as "Low." As for activity, the experimental class scored an average of 50, indicating a "Low" level, whereas the control class scored 56, which is categorized as "Medium." These baseline measurements indicate a general lack of enthusiasm and participation among students in Arabic learning before introducing digital learning tools.

After the implementation of iSpring Suite 11 in the experimental class, a significant improvement was observed in both interest and activity levels. Interest scores in the experimental class rose dramatically to an average of 87, which is considered "Very High." At the same time, the control class also improved slightly to an average of 81, categorized as "High." In terms of activity, the experimental class achieved an average score of 91 ("Very High"), showing a substantial increase in student engagement. Meanwhile, the control class reached an average score of 83, maintaining the "Medium" classification. These findings indicate that using interactive digital learning media such as iSpring Suite 11 has a strong positive impact on increasing student interest and participation in Arabic language learning.

Analysis of Interest Outcomes in Experimental Classes and Control Classes using SPSS 26

a. Descriptive Analysis

Table 1. Descriptive Statistics of Pre-Test And Post-Test Scores

Descriptive Statistics	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pre-test Experiment	36	30	20	50	31.61	11.302
Post-test Experiment	36	24	76	100	87.28	4.844
Pre-test Control	36	45	24	69	42.67	11.764
Post-test Control	36	16	76	92	81.42	3.074
Valid N (listwise)	36					

The table displays the descriptive statistics of pre-test and post-test scores for the experimental and control groups, each comprising 36 students. In the experimental group, the pre-test mean score was 31.61 with a standard deviation of 11.302, indicating a relatively

low and varied performance before the intervention. After using iSpring Suite 11, the post-test mean significantly increased to 87.28, with a lower standard deviation of 4.844, showing a notable improvement and consistency in performance. Meanwhile, the control group had a pre-test mean of 42.67 and a standard deviation 11.764. The post-test mean increased to 81.42, and the standard deviation decreased to 3.074, indicating improvement but less impact than the experimental group. The range and minimum-maximum values also reflect this pattern of improvement. The data suggests that the experimental group benefitted more significantly from the digital learning intervention.

b. Normality Test

Table 2. The Results of a Normality Test

Class	Kolmogorov-Smirnova Statistics	Shapiro-Wilk Df
Student interests		
Pre-test Experiment	0.223	36
Post-test Experiment	0.146	36
Pre-test Control	0.134	36
Post-test Control	0.193	36

The table presents the results of a normality test used to assess whether the data from a study on student interests follow a normal distribution. The table shows the Kolmogorov-Smirnov statistics and Shapiro-Wilk degrees of freedom (Df = 36) for four groups: Pre-test Experiment, Post-test Experiment, Pre-test Control, and Post-test Control. The Kolmogorov-Smirnov values range from 0.134 to 0.223, suggesting variation in distributional characteristics across the groups.

The accompanying text explains that the significance value (.sig) for all groups in both the Kolmogorov-Smirnov and Shapiro-Wilk tests was below 0.05. This indicates that the data deviate significantly from a normal distribution. Consequently, the researchers conclude that non-parametric statistical tests are more appropriate for further analysis. Recommended alternatives include the Wilcoxon and Mann-Whitney tests, which do not assume normality. This methodological approach ensures accurate interpretation of the data despite its non-normal nature.

c. Wilcoxon Test / If Data is Abnormal

Table 3. The Results of the Wilcoxon Test

N	Mean Rank	Sum of Ranks
Post-test Experiment - Pre-test Experiment	Negative Ranks	0
	Positive Ranks	36
	Ties	0
	Total	36
Post-test Control - Pre-test Control	Negative Ranks	0
	Positive Ranks	36
	Ties	0
	Total	36

The table displays the results of the Wilcoxon Test, which was used due to the non-normal distribution of the data as previously determined. Table 3 presents the comparison between pre-test and post-test scores for both the experimental and control groups. The analysis includes the number of observations (N), the mean ranks, and the sum of ranks for each condition.

For the experimental group, all 36 participants showed positive ranks when comparing post-test scores to pre-test scores, indicating an increase in measured values after the intervention. There were no negative ranks or ties, and the total number of cases was 36. Similarly, in the control group, all 36 participants also displayed positive ranks from the pre-test to the post-test, with no negative ranks or ties, suggesting an overall increase in scores. This uniform shift toward positive ranks in both groups suggests a statistically significant improvement from pre-test to post-test, as measured by the Wilcoxon signed-rank test, a non-parametric alternative for paired samples.

Table 4. Wilcoxon Signed-Rank Test Statistics for Pre-test and Post-test Comparisons in Experimental and Control Groups

Test Statistics	Post-test Experiment - Pre-test Experiment	Post-test Control - Pre-test Control
Z	-5.234	-5.233
Asymp. Sig. (2-tailed)	0.000	0.000

Based on the results of the Wilcoxon test, the significance value (2-tailed) is 0.000. Since this value is less than 0.05, it can be concluded that "the hypothesis is accepted." In other words, there was a significant difference between post-test and pre-test scores in both groups. In the experimental class, a value of Z (-5,234) with a p-value of 0.000 indicates that the difference between the post-test and pre-test values in the experimental group is statistically significant. Similarly, in the control group, the value of Z (-5.233) with a p-value of 0.000 also showed a significant difference between the post-test and pre-test values. In other words, the differences between the two groups were statistically significant, showing an increase in students' interest in learning Arabic using the I-SPRING SUITE 11 media at MAN 5 Garut.

d. Homogeneity Test

Table 5. Homogeneity of Variance Tests Using Various Estimators for Student Activities

Test of Homogeneity of Variance	Living Statistic	df1	df2	Sig.
Student Interests				
Based on Mean	4.355	1	70	0.041
Based on Median	3.684	1	70	0.059
Based on the Median and with adjusted df	3.684	1	59.099	0.060
Based on trimmed mean	4.428	1	70	0.039

Based on the table, the results of the variance homogeneity test using "Based on Mean" show that the Levene statistical value is 4.355 with a significance value (p-value) of 0.041. Since this value is less than the significance level (0.041 < 0.05), it can be concluded that the data are not homogeneous/not equal in variance, which means there is a significant

difference in variance between the groups tested. Therefore, an alternative method will be used by choosing the Mann-Whitney test.

e. The Mann-Whitney Test

Table 6. Mann-Whitney U Test Results for Interest in Learning

Test Statistics	Interest in Learning
Mann-Whitney U	178.500
Wilcoxon W	844.500
Z	-5.317
Asymp. Sig. (2-tailed)	0.000

Based on the table, the non-parametric (2-tailed) significance of Asymp is calculated. Sig is 0.000. Therefore, it can be concluded that "the hypothesis is accepted." In other words, there was a significant difference in student interest between the experimental and control classes. With this significant difference, it can be said that there is an increase, which means an increase in student interest, especially in learning Arabic using the I-SPRING SUITE 11 learning media at MAN 5 Garut.

Analysis of Activity Results in Experimental Class and Control Class using SPSS 26

a. Descriptive Analysis

Table 7. Descriptive Statistics of Pre-Test and Post-Test Scores

Descriptive Statistics	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pre-test Experiment	36	29	37	66	49.83	7.685
Post-test Experiment	36	21	79	100	89.39	4.245
Pre-test Control	36	37	31	68	55.94	8.760
Post-test Control	36	27	69	96	83.86	5.967
Valid N (listwise)	36					

This table presents the descriptive statistics for the experimental and control groups' pre-test and post-test scores, each consisting of 36 participants. In the experimental group, the pre-test mean score was 49.83, with a standard deviation of 7.685. After the intervention, the post-test mean increased significantly to 89.39, with a lower standard deviation of 4.245, indicating a substantial improvement and greater consistency in scores. In comparison, the control group had a pre-test mean score of 55.94 and a post-test mean of 83.86. Although the control group also showed increased scores, the improvement was less pronounced than in the experimental group. The pre-test standard deviation in the control group was 8.760, decreasing to 5.967 in the post-test, suggesting slightly improved score consistency. The data suggest that the intervention significantly affected the experimental group's performance, leading to higher and more consistent post-test scores.

b. Normality Test

Table 8. The Results of a Normality Test

Class	Kolmogorov-Smirnova Statistics	Shapiro-Wilk Df
Student Activities		
Pre-test Experiment	0.190	36
Post-test Experiment	0.223	36
Pre-test Control	0.143	36
Post-test Control	0.151	36

This table displays the results of a normality test for the experimental and control groups based on student activities using the Kolmogorov-Smirnov and Shapiro-Wilk tests. All groups consist of 36 participants (df = 36). The Kolmogorov-Smirnov statistics for the pre-test and post-test in the experimental group are 0.190 and 0.223, respectively, while the control group scores 0.143 for the pre-test and 0.151 for the post-test. These values suggest potential deviations from normality, particularly in the post-test scores of the experimental group, which shows the highest statistic (0.223). However, the table lacks the p-values necessary to determine statistical significance. Without these values, we cannot conclusively interpret the normality of the data. Nevertheless, these results may indicate that the assumption of normal distribution should be carefully examined before proceeding with parametric tests. If the data deviates from normality, non-parametric statistical methods may be more appropriate.

c. Wilcoxon Test / If Data Is Abnormal

Table 9. The Results of the Wilcoxon Test

N	Mean Rank	Sum of Ranks
Post-test Experiment - Pre-test Experiment	Negative Ranks	0
	Positive Ranks	36
	Ties	0
	Total	36
Post-test Control - Pre-test Control	Negative Ranks	0
	Positive Ranks	36
	Ties	0
	Total	36

The analysis results from the table show a significant increase in student activity from pre-test to post-test in both classes. In the experimental class, no data showed decreased activity from the pre-test to the post-test. On the other hand, all data showed that student activity in the post-test was higher than that of the pre-test, with an average score of 18.50 and a total score of 666.00. In the control class, no data showed decreased activity from the pre-test to the post-test. All data showed increased student activity in the post-test compared to the pre-test, with an average rating of 18.50 and a total rating of 666.00. Therefore, a significant increase in student activity from pre-test to post-test in both classes showed a positive effect of the interventions.

Table 10. Wilcoxon Signed-Rank Test Statistics for Pre-test and Post-test Comparisons in Experimental and Control Groups

Test Statistics	Post-test Experiment - Pre-test Experiment	Post-test Control - Pre-test Control
Z	-5.317	-5.235
Asymp. Sig. (2-tailed)	0.000	0.000

Based on the results of the Wilcoxon test, the significance value (2-tailed) is 0.000. Since this value is less than 0.05, it can be concluded that "the hypothesis is accepted." In other words, there was a significant difference between post-test and pre-test scores in both groups. In the experimental class, the value of Z (-5,317) with a p-value of 0.000 indicates that the difference between the post-test and pre-test values in the experimental group is statistically significant. Similarly, in the control group, the value of Z (-5.235) with a p-value of 0.000 also showed a significant difference between the post-test and pre-test values. In other words, the differences between the two groups are statistically significant, showing increased student activities toward learning Arabic using the I-SPRING SUITE 11 media at MAN 5 Garut.

d. Homogeneity Test

Table 11. Homogeneity of Variance Test Results for Student Activities

Test of Homogeneity of Variance	Living Statistic	df1	df2	Sig.
Student Activities				
Based on Mean	2.953	1	70	0.089
Based on Median	3.531	1	70	0.065
Based on the Median and with adjusted df	3.531	1	66.593	0.065
Based on trimmed mean	2.669	1	70	0.106

Based on the table, the results of the variance homogeneity test using "Based on Mean" show that the statistical value of Levene is 2.953 with a significance value (p-value) of 0.089. Since this value is greater than 0.05 (0.089 > 0.05), it can be concluded that the data are homogeneous/equal variance. Therefore, there is no need to use alternative methods for data analysis.

e. The Mann-Whitney Test

Table 12. Mann-Whitney U Test Results for Interest in Learning

Test Statistics	Interest in Learning
Mann-Whitney U	424.500
Wilcoxon W	844.500
Z	-5.321
Asymp. Sig. (2-tailed)	0.000

Based on the table, the non-parametric (2-tailed) significance of Asymp is calculated. Sig is 0.000. Therefore, it can be concluded that "the hypothesis is accepted." In other words, there was a significant difference in student activity between the experimental and control classes. With this significant difference, it can be said that there is an increase in

student activities, especially in learning Arabic, using the *iSpring Suite* 11 learning media at MAN 5 Garut.

Discussion

The findings of this study reveal a significant improvement in post-test scores and student learning activities following the implementation of the iSpring Suite 11 learning media in the experimental class. This improvement is evidenced by a substantial increase in mean scores from 31.61 to 87.28 and a decrease in the standard deviation from 11.302 to 4.844, indicating more consistent achievement among students. These findings support Mayer's *Cognitive Theory of Multimedia Learning*, which posits that learning is enhanced when information is presented through both verbal and visual channels (Ilmiani et al., 2021). The multimedia and interactive nature of iSpring Suite 11 aligns with this theory by promoting deeper cognitive processing and facilitating better knowledge retention (Fikrotin & Sulaikho, 2021; Taiyeb et al., 2017).

In comparison, the control group also experienced improvement, with mean scores rising from 42.67 to 81.42 and a reduction in standard deviation from 11.764 to 3.074. However, the experimental group showed a more pronounced and consistent increase. This supports Paivio's (1986) *Dual Coding Theory*, which asserts that information is better understood and remembered when encoded through linguistic and visual systems (Almardhiyah et al., 2023). Hence, the superiority of technology-enhanced learning environments becomes evident, particularly in teaching complex subjects such as Arabic.

Normality tests using Kolmogorov-Smirnov and Shapiro-Wilk indicated that data from all groups were not normally distributed, as the significance values were below 0.05. Consequently, non-parametric tests such as Wilcoxon and Mann-Whitney were employed to ensure valid and reliable statistical interpretation. This aligns with Creswell's recommendations for selecting appropriate statistical methods based on data characteristics, thereby ensuring the validity of quantitative research findings (Basyiroh et al., 2024; Syarif et al., 2024; Wulandari et al., 2022).

The Wilcoxon test results showed that all students in both groups experienced improvement from pre-test to post-test, with no negative or tied ranks, indicating a uniform increase. The Z-value of -5.234 and a significance level 0.000 in the experimental class demonstrate a highly significant enhancement. These findings align with Skinner's (1953) *Behaviorist Learning Theory*, which highlights the role of positive reinforcement—such as immediate feedback from interactive media—in strengthening learning behaviours (Ananda et al., 2023; Dinia et al., 2024).

While both groups demonstrated significant improvement, the experimental group exhibited a sharper increase. This can be attributed to the interactive and multimodal features of iSpring Suite 11, which support visual, auditory, and kinesthetic learning. This is consistent with *Constructivist Learning Theory*, particularly Vygotsky's Zone of Proximal Development (ZPD) concept, which emphasizes the importance of tools and mediated learning. The technology served as a scaffold, enabling students to achieve higher levels of understanding through active engagement (Arifah et al., 2025; Nurjanah & Ridlo, 2023).

Levene's test for homogeneity revealed that the variance between the experimental and control groups was not homogeneous ($p = 0.041 < 0.05$), necessitating the Mann-Whitney test. This test revealed a significant difference in learning motivation between the two groups, with a significance value 0.000. These results resonate with Keller's (1987) *ARCS Model of Motivation*, which identifies four essential components to foster motivation—Attention, Relevance,

Confidence, and Satisfaction. The multimedia features of iSpring Suite effectively fulfilled these criteria, thus enhancing student motivation (Fadilah & Sulaikho, 2022).

Regarding student learning activities, the analysis indicated a notable increase in both groups from pre-test to post-test, with no decline observed. The average activity score reached a maximum of 18.50, signifying high engagement levels. This supports the *Engagement Theory* proposed by Kearsley and Shneiderman, which asserts that meaningful learning occurs through active student participation facilitated by technology-enhanced tasks involving collaboration and authentic contexts.

The Wilcoxon test results further confirmed student activity's statistical significance, which yielded Z-values of -5.317 and -5.235 for the experimental and control groups, respectively, with p-values of 0.000. These results support Bonwell and Eison's (1991) *Active Learning Theory*, which emphasizes that students learn more effectively when they are actively involved in the learning process through discussions, simulations, and interactive assessments—features embedded within the digital learning environment provided by iSpring Suite (Paramita & Setiawan, 2022; Sulistyaningrum et al., 2024).

In the context of Arabic language education at MAN 5 Garut, these findings are particularly relevant given the challenges of engaging students in a difficult subject. Using digital media, such as iSpring Suite 11, offers a strategic solution to enhance the effectiveness of foreign language instruction. This is aligned with the *Multiliteracies Framework* proposed by the New London Group, which advocates for integrating multiple modes of communication to accommodate diverse learners in an increasingly globalized and digital learning environment (Akmalia, 2020; Fauyan, 2019).

In conclusion, this study provides robust evidence that integrating interactive digital learning media significantly contributes to improving student learning outcomes, motivation, and engagement. The practical implication is that educators should consider incorporating modern educational technology into curriculum design and classroom practice, especially in subjects like Arabic language learning that benefit from innovative, student-centred instructional approaches. These findings also support the development of *21st Century Skills*, including critical thinking, digital literacy, and lifelong learning.

CONCLUSION

Based on the results of a quasi-experimental study conducted at MAN 5 Garut, the iSpring Suite 11 learning media significantly positively impacted students' interest and activity in learning Arabic. Before the implementation of the media, students' interest in Arabic learning was categorized as "very low," with an average score of 32. In contrast, student activity was rated as "low," with an average score of 50. After the introduction of iSpring Suite 11, there was a dramatic improvement: students' interest rose to a "very high" level with an average score of 87, and student activity increased to a "very high" level with an average of 90.

The results also showed a clear difference in effectiveness between the experimental and control groups. In the experimental class, student interest and activity increased significantly, each with a score of 0.8, falling into the "high" category. Meanwhile, the control class showed more moderate gains, with interest at 0.7 and activity at 0.6, categorized as "moderate." These findings demonstrate that the iSpring Suite 11 media is highly effective in enhancing students' interest and active participation in Arabic language learning.

Future research should explore the long-term impact of using digital tools like iSpring Suite on language learning across different subjects and educational levels. It is also recommended to

investigate how different student learning styles interact with digital media tools to maximize learning outcomes. A mixed-methods approach incorporating qualitative feedback from students could further enrich the understanding of user experience and pedagogical effectiveness. Expanding the study to multiple institutions may also enhance the generalizability of the findings.

AUTHOR CONTRIBUTIONS STATEMENT

[AZN] contributed to the conception and design of the study, conducted the data collection and analysis, and wrote the initial draft of the manuscript. [AS], as the primary supervisor, provided guidance throughout the research process, contributed to interpreting the results, and reviewed and revised the manuscript critically for important intellectual content. [YN], as the advisory lecturer, offered strategic direction for the study, provided insights on the theoretical framework, and assisted in refining the manuscript for publication. All authors have read and approved the final version of the manuscript.

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REFERENCES

Abdul Ghani, M. T., Hamzah, M., Wan Daud, W. A. A., & Muhamad Romli, T. R. (2022). The Impact of Mobile Digital Game in Learning Arabic Language at Tertiary Level. *Contemporary Educational Technology*, *14*(1), 1–18. https://doi.org/10.30935/cedtech/11480

Ainiyah, N., Massi, S., Nuroniyah, W., Bahri, R. B. H., & Zakaria, Z. B. M. (2024). Development of Learning Media with Power Point Application Based on iSpring Suite 11 in Arabic Language Learning. *Jurnal Al Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, *16*(1), 150–165. https://doi.org/10.24042/albayan.v16i1.20699

Akmalia, F. (2020). Pemanfaatan Ispring Suite Quizmaker Untuk Pembuatan Soal-Soal Bahasa Arab. *Tsaqofiya: Jurnal Pendidikan Bahasa Dan Sastra Arab*, *2*(2), 15–29. https://doi.org/10.21154/tsaqofiya.v2i2.38

Albantani, A. M., & Madkur, A. (2019). Teaching Arabic in the era of Industrial Revolution 4.0 in Indonesia: Challenges and opportunities. *ASEAN Journal of Community Engagement*, *3*(2), 12–31. https://doi.org/10.7454/ajce.v3i2.1063

Almardhiyah, A., Maslamah, M., & Qosim, M. N. (2023). Developing the Spelling Material Based on An Android Application Using Ispring Suite Programming to Enhance Motivation Among Female Students at Ma'had Nurah Aldeera Sukabumi. *Alsuna: Journal of Arabic and English Language*, *6*(1), 89–109. https://doi.org/10.31538/alsuna.v6i1.4008

Amaliyah, F., & Hasan, L. M. U. (2025). Integrating Digital Learning Tools into the Arabic Language Curriculum: Solutions and Success. *Journal of Practice Learning and Educational Development*, *5*(1), 22–27. https://doi.org/10.58737/jpled.v5i1.318

Ananda, F., Elida, E., Kasmita, K., & Irfan, D. (2023). Android-Based Learning Media Development with iSpring Suite Application in Pastry Course. *Jurnal Pendidikan Vokasi*, *13*(3), 273–284. https://doi.org/10.21831/jpv.v13i3.66941

Arifah, A. F., Ubaidillah, U., & Muhith, A. (2025). Introducing Android-based Digital Learning Media Assisted by iSpring Suite in Science and Social Studies Learning in Elementary Schools. *Journal of Educational Research and Practice*, *3*(1), 149–166. https://doi.org/10.70376/jerp.v3i1.352

Arifin, Z., Desrani, A., Ritonga, A. W., & Ibrahim, F. M. A. (2023). Arabic Language Learning Approach Using Smart Technology in Higher Education. *Izdihar: Journal of Arabic Language Teaching, Linguistics, and Literature*, *6*(1), 1–12. https://doi.org/10.22219/jiz.v6i1.25011

Basyiroh, U., Musadad, A. A., Muchtarom, M., & bin Selamat, A. Z. (2024). Systematic Review: Android-Based Interactive Learning Media to Enhance Understanding of Islamic Education in Support of SDGs. *Profetika: Jurnal Studi Islam*, *25*(02), 533–546. https://doi.org/10.23917/profetika.v25i02.7877

Dinia, H. R., Lubis, C. Q., Moh. Zawawi, Umi Machmudah, Miftahul Huda, & Muhammad Hauzan Ariq Lubis. (2024). Developing of Ispring Quiz Maker as an Evaluation Media in the Pragmatics Course. *Izdihar: Journal of Arabic Language Teaching, Linguistics, and Literature*, *7*(1), 83–98. https://doi.org/10.22219/jiz.v7i1.31373

Fadilah, Y. W., & Sulaikho, S. (2022). Kelayakan Media Pembelajaran iSpring Suite Berbasis Android pada Mata Pelajaran Nahwu Shorof. *Arabia*, *13*(2), 315-338. https://doi.org/10.21043/arabia.v13i2.10710

Fatimah, D. D. S., Latifah, A., & Haniyah, H. (2022). Implementasi Augmented Reality Sebagai Media Pembelajaran Kata Benda Bahasa Arab pada Siswa Sekolah Dasar Islam Terpadu. *Jurnal Algoritma*, *19*(2), 781–789. https://doi.org/10.33364/algoritma/v.19-2.1209

Fauyan, M. (2019). Developing Interactive Multimedia Through Ispring on Indonesian Language Learning with The Insights of Islamic Values in Madrasah Ibtidaiyah. *Al Ibtida: Jurnal Pendidikan Guru MI*, *6*(2), 177–190. https://doi.org/10.24235/al.ibtida.snj.v6i2.4173 42

Fauziyah, I., & Syafei, I. (2024). Peningkatan Motivasi Siswa dalam Pembelajaran Bahasa Arab Melalui Penerapan Metode Edutainment. *Jurnal Recoms*, *1*(2), 80–94. https://doi.org/10.59548/rc.v1i2.291

Fikrotin, V., & Sulaikho, S. (2021). Kebutuhan Pengembangan Media Pembelajaran iSpring Suite Berbasis Android Pada Mata Pelajaran Morfologi Bahasa Arab. *Ta'lim al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab & Kebahasaaraban*, *5*(2), 193-204. https://doi.org/10.15575/jpba.v5i2.13587

Ilmiani, A. M., Wahdah, N., & Mubarak, M. R. (2021). The application of Albert Bandura's Social Cognitive Theory: A Process in Learning Speaking Skill. *Ta'lim al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab & Kebahasaaraban*, *5*(2), 181–192. https://doi.org/10.15575/jpba.v5i2.12945

Khairanis, R. (2024). Innovation in Arabic Language Learning Methodology: Combining Technology and Interactive Approaches. *As-Sulthan Journal of Education*, *1*(2), 281-293. Retrieved from https://ojssulthan.com/asje/article/view/26/18.

Mahadi, B. S., & Tohe, A. (2023). Aplikasi Android Menggunakan iSpring Suite untuk Mengajarkan Kosakata Bahasa Arab bagi Siswa Kelas IV. *JoLLA Journal of Language Literature and Arts*, *3*(11), 1606–1631. https://doi.org/10.17977/um064v3i112023p1606-1631

Maryani, N., Ardiansyah, A. A., & Hasan, A. M. (2024). Arabic Language Learners as an Example of Their Willingness to Communicate in a Second Language (L2-WTC) Accomplishment. *Jurnal Al Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, *16*(2), 463–479. https://doi.org/10.24042/albayan.v16i2.24312

Musthafa, I., & Hermawan, A. (2018). *Metodologi Penelitian Bahasa Arab: Konsep Dasar Strategi Metode Teknik*. Remaja Rosdakarya.

Nurjanah, L., & Ridlo, A. (2023). Pioneering Interactive Learning: Enhancing Al-Istima'Skills in 10th Grade Madrasah Aliyah with iSpring Suite 9 Educational Media Development. *Language, Technology, and Social Media*, *1*(1), 1–14. https://doi.org/10.70211/ltsm.v1i1.17

Paramita, N. P., & Setiawan, A. (2022). Android-Based Al-'Arabiya Application Using Powerpoint Ispring Presenter as an Innovation in Arabic Language Learning Media: Aplikasi Al-'Arabiya Berbasis Android Menggunakan Powerpoint Ispring Presenter Sebagai Inovasi Media Pembelajaran Bahasa Arab. *Edulab: Majalah Ilmiah Laboratorium Pendidikan*, *7*(2), 185–210. https://doi.org/10.14421/edulab.2022.72.05

Rezi, M., Noor, A. F. M., & Nicholas, T. (2024). Utilization of Gamification in Arabic Language Learning to Increase Student Motivation and Achievement. *Lughawiyah: Journal of Arabic Education and Linguistics*, *6*(1), 1–15. https://doi.org/10.31958/lughawiyah.v6i1.12559

Sulistyaningrum, H., Nuraida, D., Ismail, A., & Andik, M. (2024). The Effectiveness of Use of Power Point-Ispring Interactive Learning Media on Student Creativity. *Journal of Humanities and Social Sciences Studies*, *6*(3), 83–90. https://doi.org/10.32996/jhsss.2024.6.3.9

Syarif, W., Akib, T., & Basse Syukroni Baso. (2024). Pengaruh Media I Spring Suite 11 Terhadap Hasil Belajar Membaca Bahasa Indonesia Kelas IV SD Inpres Kampung Parang Kab. Gowa. *Pragmatik : Jurnal Rumpun Ilmu Bahasa Dan Pendidikan*, *2*(2), 118–125. https://doi.org/10.61132/pragmatik.v1i2.468

Taiyeb, A. M., Suryani, I., & Hasanuddin, W. (2017). The Effectiveness of Using i-Spring Learning Medium to Improve the Activity and Students' Learning Outcomes. *5th SEA-DR (South East Asia Development Research) International Conference 2017 (SEADRIC 2017)*, 34–37. https://doi.org/10.2991/seadric-17.2017.8

Wulandari, A., Alwi, Z., & Ernalida, E. (2022). Ispring: The Needs of Teachers and Students toward the ICT-Based Evaluation Tool. *Journal of Education Research and Evaluation*, *6*(1), 10–18. https://doi.org/10.23887/jere.v6i1.34958

Yaccob, N. S., Abd. Rahman, S. F., Azlan Mohamad, S. N., Abdul Rahim, A. A., Khalilah Abdul Rashid, K., Mohammed Abdulwahab Aldaba, A., Md Yunus, M., & Hashim, H. (2022). Gamifying ESL Classrooms through Gamified Teaching and Learning. *Arab World English Journal*, *Special Issue* (8), 177–191. https://doi.org/10.24093/awej/call8.12