*Syekh Nurjati International Conference on Elementary Education (SICEE)*
*Volume 1, 2023*
*Doi: https://dx.doi.org/10.24235/sicee.v1i0.15001*
*This article is published with Open Access at: https://syekhnurjati.ac.id/jurnal/index.php/sicee/index*

# The Effectiveness of Multimedia Powerpoint Based On iSpring Suit 9 On The Learning Outcomes of IPA Class IV Students MIS Al-Hidayah Kamarang Lebak

Yuriska Dewi Suwarno Putri[1], Arif Zaenal Arifin[2]
[1,2] Universitas Islam Bunga Bangsa Cirebon, Jl. Widarasari III, Sutawinangun, Kec. Kedawung, Kabupaten Cirebon, Jawa Barat
riskaputri4@gmail.com[1] , dzien27@gmail.com[2]

**Abstract**: This study examines the effectiveness of PowerPoint multimedia based on ispringsuit 9 on science learning outcomes of grade IV students of MIS Al-Hidayah Kamarang Lebak in the 2022-2023 school year. This study is motivated by the lack of student understanding of learning and the limitations of learning media during teaching and learning activities, which have an impact on student learning outcomes. This research is a type of quantitative research using pre-experiment design research. Student learning outcomes in science subjects of Class IV Mis Al-Hidayah Kamarang Lebak Cirebon Regency students before using iSpring Suit 9-based PowerPoint Multimedia reached an average score of 44 which was included in the deficient category. Student learning outcomes in science subjects of Class IV Mis Al-Hidayah Kamarang Lebak Cirebon Regency students after using iSpring Suit 9 Based PowerPoint Multimedia reached an average value of 69 which is included in the sufficient category. Based on the Pair 1 output, the sig value (2 tailed) is 0.000 <0.05, it can be concluded that Ha is accepted, meaning that there is a significant difference in learning outcomes before and after applying iSpring Suit 9-based PowerPoint Learning Multimedia at MIS Al-Hidayah. As for based on the T count obtained 5.161, it is greater than the T table value of 2.160 which indicates that Ha is accepted and Ho is rejected. The conclusion of this study is that the application of Powerpoint multimedia based on iSpring suit 9 to the learning outcomes of students.

**Keywords**: Multimedia, iSpring Suite 9, lerning outcomes

## INTRODUCTION

Education is a very critical human need because it is carried out for life in order to prepare human resources for the nation and state. One of the most important elements in efforts to improve the quality of people's lives is through education, besides that, education also plays an important role in the progress of social and economic situations (Zulfa Shoumi, 2019). Education also continues to undergo changes, developments, and improvements in the face of rapid advances that occur in all sectors, including science and technology, which create new demands in all parts of life.

Because it is used to carry out learning activities, the curriculum is the most crucial element in the implementation of education. In curriculum implementation, all tasks given to students are basically learning experiences. According to Sanjaya (Sholekah, 2020) claims that the curriculum is closely related to initiatives that help children develop according to the goals to be achieved, so the curriculum can be seen as covering everything students do both inside and outside the classroom.

In other terms, the curriculum is seen as a set of instructions. This statement is in accordance with Law No.20 on the National Education System (2003) (Undang-Undang Sisdiknas No 20 Tahun 2003, n.d.), according to which the curriculum is a collection of plans

*Doi: https://dx.doi.org/10.24235/sicee.v1i0.15001*
*This article is published with Open Access at: https://syekhnurjati.ac.id/jurnal/index.php/sicee/index*

and arrangements relating to the objectives, resources and learning materials, as well as how they are used to guide learning activities to achieve certain academic goals.

The success of students in understanding the subject matter studied will be largely determined by their learning and learning activities. Students will achieve learning success if they can show that they understand the principles that have been taught. One of the efforts to improve student learning outcomes is through the use of learning multimedia. In schools, learning is a collaborative process involving students, teachers and learning tools. Learning that inspires students and allows them to interact with teachers, other students, and other learning materials is referred to as quality learning.

Along with the development of science and technology, educators will always be emphasized to be able to foster their learning creativity. As a result, teachers must transition to digital media, including multimedia teaching. MuItimedia teaching is one type of technoIogy that can be used as a substitute for traditional teaching methods. Multimedia can help students become more interested in learning. Interactive teaching media according to Warsita is a collection of several media that are packaged (coded) in an integrated and interactive manner to convey certain teaching messages. MuItimedia teaching is a type of technoIogy that can be used as a teaching tool to produce a pleasant learning environment because it combines various aspects such as text, images, and videos to create a pleasant learning environment.

Given the importance of learning media in education, the best way to improve how well students learn is to use learning media as a way to implement learning. Multimedia learning can change the way students think, feel, pay attention and want to learn. As a result, it is very important to build multimedia learning on thematic subjects. Students are expected to be more interested in learning with this media.

Meanwhile, Oemar Hamalik says that learning media are "methods, tools, and techniques used to make it easier for students and teachers to communicate and interact during the teaching and learning process at school". Media is also known as an intermediary tool, useful in the learning process and can help students succeed in school. Teachers will be better able to adapt their use of learning media to current technological advances. Azhar said that learning media is a tool that can be used to help people learn both inside and outside school (Pamela et al., n.d.). Learning will be hampered by the lack of learning media which can reduce student enthusiasm in learning. Students will not be bored or demotivated as a result of the increased variety of teaching approaches. Students can engage in additional learning activities as they listen, do, exhibit, remember and other activities other than the instructor's description.

It is time for educators to build multimedia learning media in this era of technological advancement. Multimedia will help learning by allowing information to be captured using more than one human sense. Furthermore, multimedia can be developed for individualized, non-engagement learning, allowing students to acquire knowledge directly and independently. Android-based applications are one type of interesting media. We all know that humans and technology are highly connected. Even children can play cell phones for hours to enhance their thinking and imagination. So, using technology-based learning videos is very helpful because it will make students more interested in learning the subject.

**1. The Nature of Learning Multimedia**

Etymologically, multimedia comes from two words: multi and media. Multi refers to many things and media refers to any means that can be used to deliver messages and information, such as text, photos, music, or video. Linguistically, "multimedia" refers to the use of various media such as text, images, sound and video to convey messages or information. The concept is still very broad and general.

Combining and integrating various media, such as text, images, sound, animation, video, etc., to achieve a certain goal is called "multimedia" terminologically. In this case,

*Doi: https://dx.doi.org/10.24235/sicee.v1i0.15001*
*This article is published with Open Access at: https://syekhnurjati.ac.id/jurnal/index.php/sicee/index*

two keywords, integrated and synergistic, are used to indicate how multimedia components must be connected to each other to achieve a specific goal. This means that each multimedia element must be digitally processed, transformed, and integrated using a computer or similar technology (Herman Dwi Surjono, 2017). According to (Lestari, 2013) multimedia is an interactive and integrated delivery of information consisting of text, images, sound, video, or animation. Multimedia also refers to a computer-based system that uses various types of content, such as text, audio, video, graphics, animation, and interactivity.

**2. Microsoft PowerPoint**

One of the multimedia-based programs is Microsoft PowerPoint. This software allows you to create effective, professional, and easy slide facilities to enable school educators to use it as a learning tool (Hikmah & Maskar, 2020). Microsoft PowerPoint software can be used to create effective, professional, and easy presentations (Arifin Zain & Pratiwi, 2021).

According to (Listyaningsih & Zulfiati, 2021) PowerPoint media is a computer program used to convey information during the learning process in the form of slides. It can process text, color, sound, video, images, and animation, and can be displayed with presentation tools such as projectors and loudspeakers.

According to Radyana in (Wyn et al., 2021) PowePoint is very good at making presentations because it can handle text, images, colors, displays and animations tailored to the needs of students. The use of powerpoint media can make learning materials more interesting and memorable for students because they are displayed with images and animations.

In the teaching and learning process, the use of PowerPoint learning media is not limited to a projection device or LCD that functions as a tool to display material in the form of PowerPoint. With LCD tools, teaching materials that have been made can be seen clearly by students without distributing books to students. With this media, it will facilitate educators in learning because educators no longer need to rewrite on the blackboard. By connecting the connection cable, all information can be seen directly on the screen.

**3. Ispring Suite 9**

iSpring Suite is a writing toolbox created by Pro Ispring as a creator to make professional e-learning tools and special materials in PowerPoint that can be used alone. It includes interactive quizzes, polls and of course presentations (Dhien Sartika, 2022). Microsoft PowerPoint-based editor or Microsoft PowerPoint Add-in called Ispring suite can be used to create computer courses or e-learning modules using slides. Educators can create a wide variety of audio and video narratives simulating conversations, screen recordings of student engagement with multimedia and much more with the help of iSpring Suite.

iSpring Suite is a tool for producing multimedia-based lessons for teaching and learning. In addition, iSpring suite can also be used in the learning process by combining various elements such as sound, images, or audiovisual as well as with other types of evaluation. In addition, iSpring can convert PowerPoint files into an engaging flash form, which enhances hands-on learning or allows users to use it live and engage directly with the information provided by PowerPoint.

In addition, iSpring Suite is called a "suite" because it is a combination of several applications in one, and iSpring is part of Microsoft Office, so it appears at the top when you open Microsoft Office.

As can be concluded from the explanation above, iSpring Suite 9 is a tool to create HTML-based learning that allows us to convert a PowerPoint presentation file into a Flash

*Doi: https://dx.doi.org/10.24235/sicee.v1i0.15001*
*This article is published with Open Access at: https://syekhnurjati.ac.id/jurnal/index.php/sicee/index*

format and create interesting interactive multimedia-based learning projects such as creating quizzes. Here is the picture of iSpring Suite.

## METHODS

This research was conducted using quantitative research methods. Quantitative research is a type of research that uses data in the form of numbers or numbers (Sugiyono, 2013). This method is also known as the traditional method because it has long been used as a research method. This method is based on the positivist philosophy, so it is called positivism. This method follows scientific principles such as concrete, empirical, objective, measurable, rationalist, and systematic, which makes it scientific. It is also referred to as the discovery method because it can be used to identify and develop new technologies and sciences.

This type of research is Pre-Experimental Designs with One-Group Pretest-Postest Design. A pretest is conducted in this design before treatment (X) is given. By doing so, the results of the treatment can be known more accurately because it can compare it with the situation before treatment (Arikunto, 2010).

## RESULTS, FINDINGS, AND DISCUSSION

### A. Research Results

**Table 1 Description of Pretest-Posttest Data**

| Statistics | | | |
|---|---|---|---|
| | | PRETEST | POSTTEST |
| N | Valid | 15 | 15 |
| | Missing | 0 | 0 |
| Mean | | 44,00 | 69,87 |
| Std. Error of Mean | | 7,224 | 6,366 |
| Median | | 30,00 | 73,00 |
| Mode | | 20 | 32[a] |
| Std. Deviation | | 27,980 | 24,657 |
| Variance | | 782,857 | 607,981 |
| Range | | 90 | 68 |
| Minimum | | 10 | 32 |
| Maximum | | 100 | 100 |
| Sum | | 660 | 1048 |

Based on the table above, the average pretest score is 44 in the low category while the average posttest score is 69 in the moderate category.

*Syekh Nurjati International Conference on Elementary Education (SICEE)*
*Volume 1, 2023*
*Doi: https://dx.doi.org/10.24235/sicee.v1i0.15001*
*This article is published with Open Access at: https://syekhnurjati.ac.id/jurnal/index.php/sicee/index*

1. **Pre-test**

a. Normality Test

This was determined by checking whether the pre-test and post-test findings were normal. The Kolmogrov-Smirnov or Shapiro-Wilk test was used in this study to test for normality. Using the assumption that data is normally distributed if it meets the requirements of a sig value. 0.05, it is used to determine whether the data in this study is normally distributed. The results of the normality test for the Pretest and Posttest groups are shown in the table below to help you understand better:

**Table 2 Normality Test Results**

| Tests of Normality | | | | | | | |
|---|---|---|---|---|---|---|---|
| | CLASS | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
| | | Statistic | df | Sig. | Statistic | df | Sig. |
| RESULTS | PRETEST | ,225 | 15 | ,040 | ,888 | 15 | ,063 |
| | POSTTEST | ,193 | 15 | ,138 | ,902 | 15 | ,101 |
| a. Lilliefors Significance Correction | | | | | | | |

The table mentioned above shows that for each group's pre and post-test data, the Kolmogrov Smirnov and Shapiro Wilk sig values show more than 0.05 which means the data is normal. Since the results of these distributions are normal, the investigation can proceed using parametric statistics.

b. Homogeneity Test

**Table 3 Homogeneity Test Results**

| Test of Homogeneity of Variance | | | | | |
|---|---|---|---|---|---|
| | | Levene Statistic | df1 | df2 | Sig. |
| Result_Learning | Based on Mean | ,186 | 1 | 28 | ,669 |
| | Based on Median | ,046 | 1 | 28 | ,832 |
| | Based on Median and with adjusted df | ,046 | 1 | 22,641 | ,832 |
| | Based on trimmed mean | ,174 | 1 | 28 | ,680 |

Based on the table above, referring to the Base on means value, the significance score obtained is 0.669> 0.05 which indicates that the data is homogeneous.

2. **Hypothesis Test**

*Syekh Nurjati International Conference on Elementary Education (SICEE)*
*Volume 1, 2023*
*Doi: https://dx.doi.org/10.24235/sicee.v1i0.15001*
*This article is published with Open Access at: https://syekhnurjati.ac.id/jurnal/index.php/sicee/index*

a. Paired Sample T Test

For students in grade IV at MIS Al-Hidayah, pre-test and post-test scores were compared using the Paired Sample T Test. The table below displays the estimates for the pretest and posttest hypotheses

**Table 4 Paired Sample T Test**

| Paired Samples Test | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | Pretest - Posttest | -25,867 | 19,412 | 5,012 | -36,617 | -15,116 | 5,161 | 14 | ,000 |

- Based on the Pair 1 output, the sig value (2 tailed) is 0.000 <0.05, it can be concluded that Ha is accepted, meaning that there are significant differences in learning outcomes before and after applying Ispring Suit 9-based PowerPoint Learning Multimedia at MIS Al-Hidayah.
- As for based on the Thitung obtained 5.161, it is greater than the TTabel value of 2.160 which indicates that Ha is accepted.

## B. Discussion

Based on the learning outcomes of fourth grade students of MIS Al-Hidayah Kamarang Lebak through the pretest-posttest method using multimedia powerpoint based on Ispring suit9 through the Kolmogrov test, the significance value on the pretest was 0.040 so that the value was> 0.005 and the significance value on the posttest was 0.138 so that the value was> 0.005.

The results of the homogeneity test data analysis using the Test of Homogeneity of Variance which has a significance value of 0.669> 0.05 means that the data is homogeneous. 46 The results of the hypothesis test data analysis used is the Paired Sample T Test. From the results of hypothesis testing, the significance value or sig (2 tailed) is obtained Based on the Pair 1 output, the sig value (2 tailed) is 0.000 <0.05, it can be concluded that Ha is accepted, meaning that there is a significant difference in learning outcomes before and after applying PowerPoint Learning Multimedia based on Ispring Suit 9 at MIS Al-Hidayah. As for based on the Thitung obtained 5.161 greater than the TTabel value of 2.160 which indicates that Ha is accepted. Based on these results it can be concluded that multimedia powerpoint based on ispring suit 9 is effective in improving the learning outcomes of grade IV students of MIS Al-Hidayah Kamarang Lebak, in other words this hypothesis is accepted. This is in line with what is written by (Janner Simarmata, 2018) in his book entitled Learning Multimedia in 2018 which says that the use of multimedia in learning in schools in general has the benefit of making the

learning process more interesting and interactive, reducing teaching time, improving student quality, and allowing learning to be done anywhere and anytime, making it easier to achieve learning goals.

## CONCLUSIONS

Based on the results of data analysis and discussion, the results of research on "The Effectiveness of PowerPoint Multimedia Based on Ispring Suit 9 on Science Learning Outcomes. Science Learning Outcomes of Class IV Students of Mis Al-Hidayah Kamarang Lebak", then it can be conclusions are drawn as follows:

1. Student learning outcomes in science subjects of Class IV Mis Al-Hidayah Kamarang Lebak Cirebon Regency students before using Multimedia Power Point Based Ispring Suit 9 reached an average value of 44 which is included in the lack category.
2. Student learning outcomes in science subjects of Class IV Mis Al-Hidayah Kamarang Lebak Cirebon Regency students after using Ispring Suit 9-based Multimedia Power Point reached an average value of 44 which is included in the category of less. Using Multimedia Power Point Based on Ispring Suit 9 reached an average value of 69 which is in the sufficient category. Average value of 69 which is included in the sufficient category.
3. Based on the Pair 1 output, the sig value (2 tailed) is obtained at 0.000 <0.05 then it can be concluded that Ha is accepted, meaning that there is a significant difference in learning outcomes learning outcomes before and after applying Multimedia Learning PowerPoint based on Ispring Suit 9 at MIS Al-Hidayah. As for based on T count obtained 5.161 greater than the value of T Table which is 2.160 which indicates that Ha is accepted.

## REFERENCES

Arifin Zain, A., & Pratiwi, W. (2021). Analisis Kebutuhan Pengembangan Media PowerPoint Interaktif Sebagai Media Pembelajaran Tematik Kelas V SD. In *Elementary School* (Vol. 8). https://www.researchgate.net/publication/348278122

Arikunto, S. (2010). *Prosedur Penelitian Suatu Pendekatan Praktik*.

Dhien Sartika, A. (2022). *Pemanfaatan iSpring Suite 9 Dalam Pembelajaran Fisika Di SMAN 1 Gunung Meriah*. *6*(2). https://doi.org/10.22373/crc.v6i2.14211

Herman Dwi Surjono, K. (2017). *Multimedia Pembelajaran Interaktif*.

Hikmah, S. N., & Maskar, S. (2020). Pemanfaatan Aplikasi Microsoft PowerPoint Pada Siswa SMP KEelas VIII Dalam Pembelajaran Koordinat Kartesius. In *Jurnal Ilmiah Matematika Realistik (JI-MR* (Vol. 1, Issue 1). http://jim.teknokrat.ac.id/index.php/pendidikanmatematika/article/view/215/83

Janner Simarmata. (2018). *Multimedia Pembelajaran*.

Lestari, A. S. (2013). *Pembelajaran Multimedia* (Vol. 6, Issue 2). https://ejournal.iainkendari.ac.id/al-tadib/article/view/307

Listyaningsih, A., & Zulfiati, H. M. (2021). Peningkatan Motivasi Belajar menggunakan Media Pembelajaran Berbasis Powerpoint dalam Pembelajaran Daring Tematik pada Siswa

Kelas 3 SD Negeri 3 Bulukerto Kabupaten Wonogiri. *Jurnal Ilmiah Profesi Guru*, *2*(1), 15–20. https://doi.org/10.30738/jipg.vol2.no1.a11290

Pamela, A., Hidah, A., Yermiandhoko, Y., & Pd, M. (n.d.). *Pengembangan Multimedia Interaktif "Si Siska" Berbasis Android Pada Materi Siklus Air Dalam Pembelajaran IPA Kelas V SD*. Retrieved September 11, 2023, from https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/43807

Sholekah, F. F. (2020). Pendidikan Karakter Dalam Kurikulum 2013. *Jurnal Pendidikan Anak Usia Dini*, *1*. http://ejournal.kopertais4.or.id/tapalkuda/index.php/CEJ/article/view/3620/2747

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan RND*.

*Undang-Undang Sisdiknas No 20 Tahun 2003*. (n.d.).

Wyn, N., Asriningsih, N., Sujana, W., Gst, I., Putu, A., & Darmawati, S. (2021). Penerapan Model Discovery Learning Berbantuan Media Powerpoint Meningkatkan Hasil Belajar IPS Siswa SD. *Jurnal Mimbar Ilmu*, *26*(2), 251–259. https://ejournal.undiksha.ac.id/index.php/MI

Zulfa Shoumi Jurusan Desain, A., & Seni Rupa dan Desain, F. (2019). Peran Multimedia Dalam Pendidikan Pada Aplikasi Ruang Guru. In *Seminar Nasional Cendekiawan ke* (Vol. 5).