

The Development of Interactive Learning Media using Ispring Suite 10 for Office Management Lesson at 48 Vocational High School

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Abstract

Edutech is an innovation to help the learning process to be more interactive that can lead to students to be more motivated and actively involved in class. The purpose of this research is to develop interactive media learning for office management lessons using Ispring Suite 10 at 48 Vocational High School. The method used in this research is ADDIE. This research is being reviewed by learning experts, instructional design expert, media expert, one-on-one evaluation, small group evaluation, and field test. The result from learning expert, it got 88% or we can say it very decent. Then for instructional design review got 76% or decent. Media expert review got 100% or very decent. Then for one-to-one evaluation, the students give feedback, e.g., improving the font size, using Gather Town game for learning process, and rechecking each of link in the media to give more good user experience. The small group evaluation got 84,89% or very decent. For field test got 91,47% or very decent. Overall, this research motivates students to get involved in the learning process.

Keyword: Edutech; Ispring Suite 10; Learning media; Learning process

1. Introduction

Nowadays, the development of technology can affect all aspects of human life, especially in the education field. As we know, Education Technology a.k.a. Edutech is an innovation to help the learning process to be more interactive, so it can lead to students' motivation to learn. In 2020, there was Covid-19 that shifted the learning process from offline to online. As a result, the teacher was trying to search for the right method for students to learn. Even though the pandemic in 2023 is already finished, in fact the learning process throughout online can be measured to use because it is aligned with the development of information technology in 21st century.

One of the learning media that can be used for the learning process is Ispring Suite. It relies on PowerPoint, facilitating users in generating various media forms such as slides, videos, multiple-choice quizzes, simulations, multimedia, and interactive PowerPoint presentation for educational purposes. In the education field, this platform is also used by the University of Oxford, Stanford University, University of Cambridge, Massachusetts Institute of Technology, Harvard University, and other universities (iSpring, 2023).

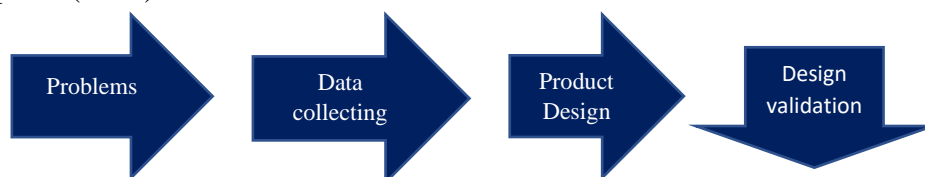
The latest research has already done before about using Ispring Suite 10 as learning media. The research titled "Pengembangan LKPD Kurikulum Merdeka Berbantuan Aplikasi Ispring 10 pada Elemen 4 Kelas X MPLB di SMK PGRI 2 Sidoarjo." The result shows that LKPD is suitable for students' independent learning (Laurentia & Pahlevi, 2023). Another research titled "Pengembangan Media Pembelajaran Mandiri Berbasis Ispring Suite 10 pada Materi Sistem Pernapasan Kelas XI-MIA di SMKA Swasta Methodist 8 Medan" got the result that Ispring Suite 10 is suitable for students' independent learning (Silaban, Sipayung, & Purba, 2022). The research from Russia on proceeding article titled "Using the Ispring Suite Computer Platform in Distance Learning" from Novosibirsk State Technical University, Russia; shows that the using Ispring Suite 9 can be used for distance learning to help online learning at Novosibirsk State Technical University (Kirilov, 2021).

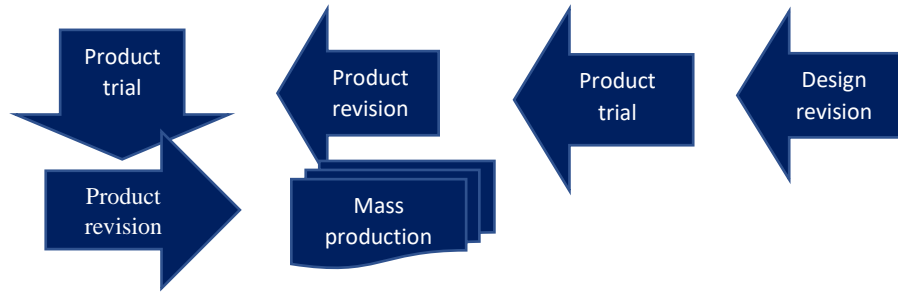
This article is going to focus on how to solve this problem by using Ispring Suite 10 as learning media.

2. Literature Review

2.1 Development of Research and Development

According to Sugiono (2016), Research and Development is a research method that is used for products by examining whether it is applicable to be used in the future (Syavira, 2021). Sudaryono (2016) also said that Research and Development is a method to examine the effectiveness of the products. The flow of Research and Development based on Sugiyono in Budiyo Saputro (2017) as mentioned below:



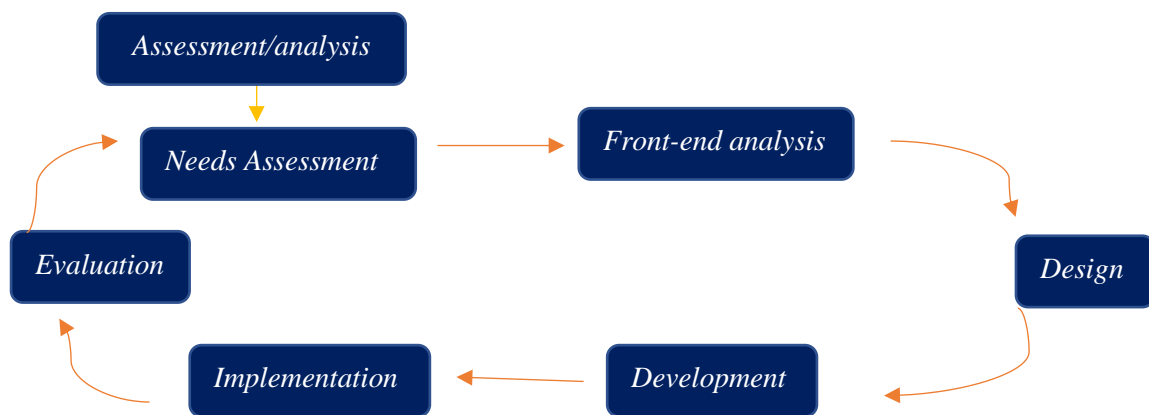


The flow of ADDIE model

2.2 Development of Learning Media

Learning media is a tool to deliver information in the learning process. Learning itself is a communication process between students, teachers, and learning materials. This communication could not go effectively without media to deliver it (Utami & Najwa, 2019). According to Tethool et al (2021), technology make the learning process to be more understandable for the students, so they can learn the learning materials by themselves (Laurentia & Pahlevi, 2023).

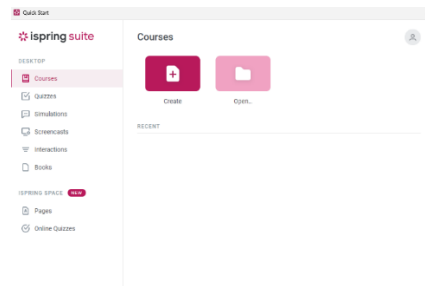
2.3 Instructional Development Model and Multimedia Bases Instructional



Multimedia Development Process

Instructional development is a complex process that needs the right approach to promote it, so it can lead to effective results to attract the students. This model can help the teacher to plan the learning media design. According to Lee dan Owens (2002) said that the instructional design process can use many varieties of media for demonstration (Assidiq & Qashlim, 2015) (LMS SPADA INDONESIA, 2021).

2.4 Ispring Suite 10



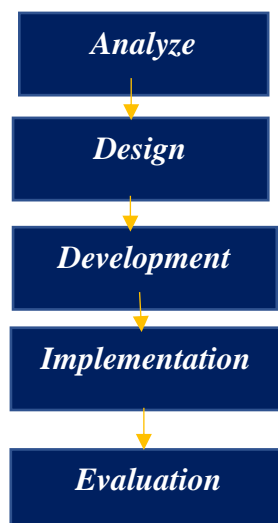
Ispring Suite 10 Platform Display

According to Himmah & Martini (2017), Ispring Suite 10 can be integrated into Microsoft PowerPoint. It gives the easiness for the users, so they do not need advanced skill to use it. Ispring Suite 10 can convert file in ppt format to be flash or swf format. Using flash format, the file in small size can display the amazing animation web (Hanisah, Irhasyuarna, & Yulianda, 2022).

3. Material and Method

The goal of this research is to create an interactive learning media on Office Management Lesson using Ispring Suite 10 at 48 Vocational High School which would be examined its effectiveness as learning media. This research uses the Research and Development method. The research procedure adapts the ADDIE development model that consists of 5 steps, i.e., 1) Analysis, 2) Design, 3) Development, 4) Implementation, and 5) Evaluation.

There are four steps to examine this learning media, i.e., 1) Expert Review, 2) One to One Evaluation, 3) Small Group, and 4) Field Test. This research is held from February 2023 until August 2023 at 48 Vocational High School because it is the same place where the researcher is doing the learning practice a.k.a. Praktek Kegiatan Mengajar (PKM).



Research Procedure

ADDIE development is started with analysis step which involves the identification of the needs of students, teacher, material, and media. From this analysis, Ispring Suite 10 is suitable to support students and teachers. The next step is design which can be like creating the lesson material, creating lesson evaluation, and then publishing it. Next, there is a development step which we will create the instrument for experts' validation. Then, there would be an implementation part that we would run our Ispring Suite 10 media in class. The last, evaluation part which there would be revision from feedback by experts and students.

4. Result

Trials	Results
Expert Review: Lesson Material	88% (Very Decent)
Expert Review: Design Instructional	76% (Decent)
Expert Review: Media	100% (Very Decent)
One-to-one evaluation	Revising font size, using Gather Town for learning media, Rechecking the functional of each links attached on Ispring Suite 10 learning media
Small group evaluation	84,89% (Very Decent)
Field test	91,47% (Very Decent)

4.1 Analyze

The first step of this research is by giving the questionnaire to the 10th grade students majoring in office administration at 48 Vocational High School to know their opinions about learning media that is used in class.

Students	Reason why students choose "less interactive" answer
Student A	The learning media that is used in class is not innovative enough. Moreover, the learning material is already good enough. .
Students B	The lack of media resources to support learning process of students. The hardcopy books from the recent curriculum is not available, so it makes the learning process in class to be less effective.
	Actually the education ministry already releases the E-book version to support the learning process in class. But in fact, some students still get trouble to access it throughout their smartphones, so they prefer to use the hardcopy version than the softcopy version. .
	Too much screen time while accessing the e-book can affect the physical health of the students.

Student C	Some students have trouble to access the learning materials at home cause they do not have laptop.
	Learning media that having video, podcast, voice recording can be another alternative ways for students to relearn the learning materials at home.

4.2 Design

It includes 1) creating the learning material about “Development of Office Management and Business at Industry 4.0 era”. This material is created using PowerPoint slide; 2) creating learning evaluation using Ispring Suite 10; 3) publishing the materials using Ispring Suite 10. After that, the design would be reviewed by learning expert and instructional design expert.

4.2.1 Expert review by lesson material expert

The first review is done by the office management teacher at 48 vocational high school, Mrs. Fithra Julvina S.Pd, and the lecturer from Faculty of Economics Universitas Negeri Jakarta, Mr Maulana Amirul Adha, M.Pd. The purpose of this review is to evaluate whether the lesson material is aligned with what students learn in school.

According to the result of expert review by lesson material experts, Ispring Suite 10 got scores 88% which means this media is very decent. Some feedback from expert reviewers:

- a. Using lesson materials that can be related to the real life
- b. Revising the questions to be type of High Order Thinking Skills (HOTS) questions.
- c. Using instructions in Bahasa
- d. Reducing the amount of game quiz questions to be only 20 questions

4.2.2 Expert Review by Instructional Design Expert

This review is done by Mrs. Nadya Fadillah Fidhyallah, S.Pd., M.Pd as lecturer at Faculty of Economics, Universitas Negeri Jakarta. According to the results, the Ispring Suite 10 media got scores 76% which can be said that it is very decent. Feedback from reviewer, this media is already good.

4.3 Development

The media review is done by Mr. Shandy Aditya, BIB., MPBS as lecturer at Faculty of Economics at Universitas Negeri Jakarta. The result shows that this media got scores 100% which can be said that it is very decent. Moreover, reviewer also gave feedback that this media is already good.

4.4 Implementation

After getting feedback from review by material expert, instructional design expert, and media expert, then the product would be going through the one-to-one evaluation, small group evaluation, field test. It would be done to 10th grade students majoring Office Administration at 48 Vocational High School.

4.4.1 *One to One Evaluation*

This evaluation is done by 3 students that have different characteristics, i.e., low, middle, and high. They would give feedback for the media. According to this evaluation from students ME, FA, and NA, they gave feedback for revising the font size, using Gather Town for learning media, and rechecking the functional of the link attached on learning media.

4.4.2 *Small Group Evaluation*

Small Group Evaluation is done by 6 students that doesn't join the one-to-one evaluation before. This evaluation started by giving the pre-test to the students, and after that post-test. According to the results of this evaluation, the media got scores 84,89% or we can say it very decent for the media.

4.4.3 *Field Test*

The field test is done by 23 students which do not join the one-to-one evaluation and small group evaluation. This test started by giving the pre-test, then post-test. The result shows that the media got 91,47% or very decent for the media.

4.5 Evaluation

Last but not least is the evaluation step to evaluate whether there is a evaluation after the product being implemented in class. There would be feedback for future research for doing the evaluation step to support this Ispring Suite 10 learning media to be effective enough to be support learning process in class.

5. Discussion

Score	Meaning
1	Not very good
2	Not good
3	Good enough
4	Good
5	Very good

Table scoring (Ernawati & Sukardiyono, 2017) being adapted by researcher.

Score in percentage	Meaning
81% - 100	Very decent

61% - 80%	Decent
41% - 60%	Decent enough
21% - 40%	Not decent
<21%	Not very decent

Eligibility Criteria Table (Ernawati & Sukardiyono, 2017)

According to the result of material review by the expert that the Ispring Suite 10 learning media got scores 88% out of 100% meaning very decent. The feedback from material experts, i.e., 1) putting introduction that is related to the real case on society, 2) revising the questions to be HOTS type, 3) using Bahasa as the instruction on the learning media, and 4) cutting the number of questions on the quiz game to be only 20 questions.

Next, the result of instructional design expert review for the Ispring Suite 10 learning media got scoring 76% out of 100% meaning decent. The feedback from instructional design expert is the Ispring Suite 10 learning media is already good.

According to media experts review, the Ispring Suite 10 got scoring 100% out of 100% meaning very decent. The feedback from media expert is that the Ispring Suite 10 learning media is already good.

Next is a one-to-one evaluation with three students (ME, FA, and NA) which are represented in each of the categories, i.e., low, middle, and high. They gave feedback for the Ispring Suite 10 learning media, i.e., 1) revising the font size, 2) using Gather Town in the learning media process, and 3) rechecking all the links in the learning media.

After doing one-to-one evaluation, the researcher did a small group evaluation of 6 students. This evaluation was done in the real condition of the learning process. According to the result of pre-test and post-test from small group evaluations, from 6 students that doing the evaluation, 2 students passed the pre-test with the scoring 100 out of 100 which is above the minimum scoring percentage i.e., 82. The rest of the 4 students did not pass the pre-test because their scores were below the minimum scoring percentage. Furthermore, 4 students passed the post-test, and the rest of it (2 students) did not pass the post-test. It indicates that the use of Ispring Suite 10 learning media can increase the scoring of students. According to the result of a small group evaluation that filled the questionnaire, the total scores are 84,89% meaning very decent.

Finally, field test is done by 17 students. According to the scoring of pre-test and post-test, 9 students passed the pre-test with a scoring of 100 out of 100 which is above the minimum scoring percentage i.e., 82. Meanwhile the other 8 students did not pass the test because their scores were below the minimum scoring percentage. Moreover, 15 students passed the post-test and only 2 students did not pass the post-test. It indicates that the use Ispring Suite 10 learning media can increase the scoring of students. According to questionnaire on the field test, it got 91,47% meaning very decent for the Ispring Suite 10 learning media to be used by the students.

6. Conclusion, Implication, and Recommendation

Researcher develops interactive learning media using Ispring Suite 10 for the office management lesson for 10th grade using Kurikulum Merdeka. This media is created digitally

including material text, audio, video, animation, and evaluation that help students to understand the learning material. Based on the research above, we can conclude that the research result is linear to what Sanjaya (2010:168) said that learning media can increase and attract the students to be more motivated to the learning process.

8. References

- Assidiq, M., & Qashlim, A. (2015). Desain Multimedia Based Learning untuk Media Pembelajaran MYOB Accounting 15. *Jurnal Ilmu Komputer*, 1(2).
- Batubara, F. (2018, Januari-Juni). Desain Instruksional (Kajian terhadap Komponen Utama Strategi Instruksional dan Penyusunannya). *Al-Hadi*, 3(2).
- Ernawati, I., & Sukardiyono, T. (2017, November). Uji Kelayakan Media Pembelajaran Interaktif pada Mata Pelajaran Administrasi Server. *Elinvo (Electronics, Informatics, and Vocational Education)*, 2(2).
- Hanisah, Irhasyuarna, Y., & Yulianda, R. (2022). Pengembangan Media Pembelajaran Interaktif menggunakan Ispring Suite 10 pada Materi Reproduksi Tumbuhan untuk Mengukur Hasil Belajar. *JUPEIS: Jurnal Pendidikan dan Ilmu Sosial*, 1(3).
- iSpring. (2023). *iSpring Customers*. Retrieved from iSpring: https://www.ispringsolutions.com/featured_customers
- Kirilov, Y. (2021). Using the Ispring Suite Computer Platform in Distance Learning. *SHS Web of Conferences*. Novosibirsk: MTDE.
- Laurentia, I., & Pahlevi, T. (2023). Pengembangan LKPD Kurikulum Merdeka Berbantuan Aplikasi Ispring Suite 10 Kelas X di SMK Negeri 2 Sidoarjo. *Jurnal Pendidikan Tambusai*, 7(1).
- Laurentia, I., & Pahlevi, T. (2023). Pengembangan LKPD Kurikulum Merdeka Berbantuan Aplikasi Ispring Suite 10 Kelas X MPLB di SMK Negeri 2 Sidoarjo. *Jurnal Pendidikan Tambusai*, 7(1).
- LMS SPADA INDONESIA. (2021). *MODEL PENGEMBANGAN MULTIMEDIA PEMBELAJARAN INTERAKTIF*. Retrieved from LMS Spada Kemendikbud: https://lmsspada.kemdikbud.go.id/pluginfile.php/79765/mod_resource/content/2/BAB%206%20%28fix%29.pdf
- Silaban, I., Sipayung, M., & Purba, G. (2022). Pengembangan Media Pembelajaran Mandiri Berbasis Ispring Suite 10 pada Materi Sistem Pernapasan Kelas XI-Mia dia SMA Swasta Methodist 8 Medan. *Journal of Comprehensive Science (JCS)*, 1(3).
- Utami, W., & Najwa, L. (2019, Desember). Pelatihan Pembuatan Media Pembelajaran Interaktif dengan Program Adobe Flash bagi Guru SMPLB di SLB Negeri Pembina Prov. NTB. *Abdi Masyarakat*, 1(2).