

Increasing Information Technology Literacy of Students in Sijuk 02 State Elementary School Through PowerPoint Workshop

Novario Jaya Perdana^{1*}, Upie Fitri Nurqalby¹, Willson Steven Zebua¹,
Grasella Aldonia Pangandaheng², Mega Sandra³, Darren Melvin²

¹Faculty of Information Technology, Tarumanagara University, Jakarta, 11440, Indonesia

²Faculty of Psychology, Tarumanagara University, Jakarta, 11440, Indonesia

³Faculty of Fine Arts and Design, Tarumanagara University, Jakarta, 11440, Indonesia

*Correspondence should be addressed to Novario Jaya Perdana; novariojp@fti.untar.ac.id

(Received January 17, 2024; Revised February 19, 2024; Accepted February 27, 2024)

Abstract

Information Technology (IT) literacy is very important and should be taught even in early education. Proper use of IT is needed by the young generations today. Introduction to IT should be done while still in elementary school. However, since the infrastructure of Indonesia is not even among the cities, a glimpse of IT is a privilege enjoyed by students in big cities. Students in smaller cities often face difficulties and tardiness regarding the use of technology. For instance, the students of SD Negeri 02 Sijuk have deficiencies in facilities and infrastructure, which causes a low level of literacy in information technology. Therefore, basic computer skill training was created to introduce the technology to its students. In this training, the students are taught to design and process text and images to create attractive presentations using Microsoft PowerPoint. The students showed very high enthusiasm when the training was carried out. In the end, through this training, the students were successfully introduced to the use of information technology.

Keywords: *community engagement, elementary students, information technology basic knowledge*

How to Cite:

Perdana, N.J., Nurqalby, U.F., Zebua, W.S., Pangandaheng, G.A., Sandra, M., & Melvin, D. (2024). Increasing Information Technology Literacy of Students in Sijuk 02 State Elementary School Through PowerPoint Workshop. *Journal of Innovation and Community Engagement*, 5(2), 72-81.
<https://doi.org/10.28932/ice.v5i2.8211>

© 2024 The Authors. This work is licensed under a Creative Commons Attribution-Non-commercial 4.0 International License.



Introduction

Information technology has become commonplace nowadays. All societal activities have been touched by information technology. Therefore, mastering information technology is important for all levels of society. According to research (Ainley, 2018), grade 8 students in most developed countries already have solid technological skills, as indicated by the students' proficiency in creating simple computer programs. Based on a survey by Indonesia's Ministry of Communication and Information, the Indonesian society's information technology literacy index is currently at 3.45 (Kominfo, 2022). This figure shows that the information technology literacy of Indonesian society is in the medium category. When the COVID-19 pandemic hit, society was required to adapt. Students were also forced to adopt information technology more quickly. The level of information technology penetration in Indonesia is quite good. Based on BPS data in 2022, the level of internet use by the public, especially at school age, namely the age range between 5-24 years, is 76.76%. However, most of the use of this technology is only for personal enjoyment, namely for entertainment purposes (66.51%) and social media (58.19%). Only 50.54% use the internet for online learning (Badan Pusat Statistik, 2022).

Information technology holds various advantages if used correctly and well. Information technology can be a tool for students to achieve the competencies needed in today's digital world. One of the competencies students require is the ability to use and even create technology (Surani, 2019; Khasanah & Herina, 2019). In this case, education plays a significant role in introducing the benefits of information technology to society. Education is an essential means of academic learning. Education has developed over time (Misla & Mawardi, 2020). The roles of education and information technology complement each other. The current need for information technology literacy can be met with education, especially for school-aged children (Hahnel et al., 2016; Gomes et al., 2019; Park et al., 2021).

Increasing information technology literacy for school-aged children can be started by providing training in basic computer use. Gusen & Gusen (2020) listed basic computer skills gathered from numerous references. The skills include basic hardware skills (typing, starting, and shutting down computers), the operations of Windows, word processing, spreadsheets, presentation slide creation, database development and operations, internet and web browser usage, and social media and networking skills. At least three of these skills should be learned by students at an early age.

There has been a lot of information technology training carried out by community service teams, proving that technology training for school-aged children is one strategy to fulfill these conditions. Among them is Upa & Pilu (2021), which provides Microsoft Office training in the Temmalebba Village environment. The service activities were conducted using a lecture method followed by direct practice for the participants. From this service, the results obtained were that the participants gained additional skills related to basic computer use. Another community service was basic training in using Microsoft Office and Paint at Umeanyar 1 Elementary School, Seririt District, Buleleng Regency, Bali Province, held by Indrawan et al. (2022). This training includes students in grades 4, 5, and 6 at SDN 1 Umeanyar School. The service method provided was in the form of intensive training and mentoring to the participants. Participants were trained in basic computer operating skills and using Microsoft Word to create paragraphs, change fonts, and add images. This service succeeded in improving skills and increasing students' enthusiasm.

Rania and Andi (2022) also held a workshop for elementary students on how to use Microsoft Word. The workshop aimed to describe the implementation of ICT learning using Microsoft Word applications. Fourth-grade students attended the workshop. The workshop was successful and was able to improve students' computer literacy. Perdana et al. (2023) used the same method to increase students' knowledge about information technology. This workshop aimed to help students familiarize themselves with the coding environment. The materials taught included website development and data processing. It succeeded in increasing students' skills, especially in information technology.

Based on the reasons mentioned above, the UNTAR community service team collaborated with SD Negeri 02 Sijuk to introduce information technology to students at the school. This school is in Sijuk Village, Sijuk District, Belitung Regency, Bangka Belitung Islands Province. The students taught were grade five students. This workshop aimed to introduce computer usage to the students. The researchers chose Microsoft PowerPoint because of its convenience and power. The advantages of this workshop include not only learning basic knowledge about computer operation but also interactive processing of text and images.

Methods

The method of implementing this community service activity is by observation. Activities began with field studies at community service activity partners, activity preparation, and implementation of the activity, and ended with evaluation, as seen in Figure 1.

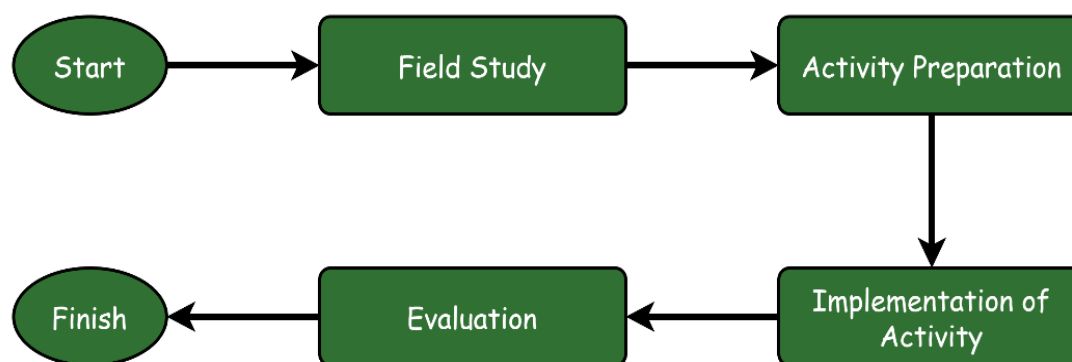


Fig. 1. Stages of implementing community service activities

Field Study

At this stage, the team made observations of conditions among partners and conducted interviews with related parties such as school principals, teachers, and students. After that, the team analyzes based on these observations and interviews. This stage concluded that the students needed a brief introduction to computer use. Furthermore, the skill needed was how to use the computer daily. The team then decided the topic would be "The use of PowerPoint." This is because PowerPoint is a great application to familiarize students with text and image processing on a computer and a means for students to get in front of the class and do a brief public speaking.

Activity Preparation

The next stage was to make preparations. At this stage, the team determines the type of activity and plans the activities they want to carry out. The team prepares the materials to be present during the activities and the other materials and tools needed. The next thing to do was to socialize the activities with partners, including the target subjects, namely grade 5 students at SDN 2 Sijuk. For this stage, the team made a presentation about introducing PowerPoint. There was also an assignment where the students were told to create a simple presentation about themselves.

Implementation of Activities

The next stage after the activity preparation was the implementation of activities. The activities were carried out in one day in the school classroom. The facilitators were the Tarumanagara University students in the UNTAR community service team. They were supervised by the teachers of SDN 2 Sijuk and a supervisor from UNTAR.

Evaluation

The final stage of this community service was an evaluation of the series of activities conducted. At this stage, the team conducted a series of interviews with the target subjects, which were the students. The questions asked were regarding the smooth running of the activities, the materials presented, and the facilitator's assessment.

Results and Discussions

This community service activity received a positive response from the academic community at SDN 2 Sijuk. The school management approved this activity by providing special space and time allocation. In addition, there were positive responses from the students who were the target subjects of this service activity.

Based on the field study results, the researchers found several problems related to mastery of information technology, including the unequal distribution of students' knowledge regarding the benefits of mastering information technology, especially computers. Students were also unfamiliar with simple software, such as simple text-processing applications usually used on computers. Therefore, the UNTAR community service team decided to provide students with training in using Microsoft Office applications. After the activity objectives were determined, the team prepared training materials. The training material chosen was an introduction to Microsoft PowerPoint because this application can be used for various purposes and is very easy to use. Some of the material included is how to create attractive slides, use images and text effectively, and convey messages clearly and interestingly through presentations.

The activity was carried out in one day and involved 12 students from grade 5. The activity was held in the form of training. The researchers invited students to learn and understand the basic concepts of using information technology for presentations and the skills that can be developed using Microsoft PowerPoint. Students participating in this activity were arranged

into groups of 3, and each group was given a laptop. Two UNTAR students facilitated the training, one from the Faculty of Information Technology and the other from the Faculty of Psychology. One of the facilitators explained material regarding Microsoft PowerPoint, while the other was tasked with accompanying the students/participants if they experienced difficulties during the activity.

At the start of the training, the facilitator introduced students to the importance of understanding digital presentation applications, especially Microsoft PowerPoint. The facilitator explains the basic concepts and features in Microsoft PowerPoint (Figure 2). Examples that are interesting and relevant to students were provided to attract attention to the subject. After that, students were allowed to practice directly using Microsoft PowerPoint. Students were told to create simple presentation slides. Enthusiastically, the students involved themselves by experimenting with slide layouts, adding images, and writing text that matched the message they wanted to convey (Figure 3). At the final session of the training, the facilitator asked participants to present the presentation slides they had made (Figure 4), which created an excellent opportunity for the students to conduct a brief public speaking.



Fig. 2. The facilitator provides training materials to students



Fig. 3. Students practice making slides based on the material presented



Fig. 4. Students present the slides they have created

During the training, participants seemed very enthusiastic about paying attention to the facilitator's explanations and putting into practice what had been conveyed by the facilitators. Based on the results of interviews with students/participants, many positive responses were obtained regarding the implementation of the activities. Some responses from participants are shown below.

"I really like learning PowerPoint! So that I could understand how to make cool presentations."

(AA, class 5, April 1, 2023).

"Since I don't have a computer at home, this activity allows me to learn basic computer skills. I want to learn more computer skills."

(SA, grade 5, April 1, 2023).

The evaluation results show that this PowerPoint training helped participants improve their technological literacy. Some participants said they had never used the Microsoft PowerPoint application before, and some did not even have a computer at home. So, the material presented is entirely novel to the participants. However, this did not make the participants less enthusiastic about studying the material. On the contrary, the participants were very eager and wanted to learn more. These findings aligned with other community services done. This community service has successfully introduced one of the basic skills mentioned by Gusen and Gusen (2020): presentation skills. It includes text manipulations, image processing, slide creation, and how to present the slides in front of audiences.

Based on the evaluation, further activities are needed as a mentoring process for the participants. Apart from that, there is also a need for other training sessions to introduce and train students about the benefits and other operations of computers. Therefore, the team decided to create a Microsoft PowerPoint learning pocketbook. This pocketbook contains all material on computer operations and word and image processing using Microsoft PowerPoint. The team has donated the pocketbook to teachers at SDN 2 Sijuk so that students who want to learn how to use Microsoft PowerPoint can read it.

Conclusion

Training activities have been carried out by the UNTAR community service team for students at SDN 2 Sijuk. The training was about creating a presentation using PowerPoint. During the training, the facilitator introduced students/participants to using the Microsoft PowerPoint application as basic information technology knowledge. Participants were given a basic tutorial on creating a simple presentation consisting of slide layouts, adding images, and writing text. Based on the evaluation results, this activity went well and was received very well by the participants. This material was well received by the participants, who were grade 5 elementary

school students. Furthermore, a pocketbook was also produced so that participants could study further.

Acknowledgements

The team implementing community service at Tarumanagara University would like to thank the Institute for Research and Community Service at Tarumanagara University (LPPM UNTAR) for providing the accommodation during the community service implemented. We also would like to thank the entire academic community of SD Negeri 2 Sijuk, Belitung for the support during our stay at Belitung. We also would like to thank Mrs. Denrich Suryadi, M.Psi., Psikolog and Mrs. Dr. Dra. Fransisca Iriani Roesmala Dewi, M.SI., for giving us pointers and supervision.

References

- Ainley, J. (2018). Students and Their Computer Literacy: Evidence and Curriculum Implications. In J. Voogt, G. Knezek, R. Christensen, & K.-W. Lai (Eds.), *Second Handbook of Information Technology in Primary and Secondary Education*, (pp. 69–88). Springer International Publishing. https://doi.org/10.1007/978-3-319-71054-9_4
- Badan Pusat Statistik. (2022). *Statistik Pendidikan 2022*. Badan Pusat Statistik. <https://www.bps.go.id/id/publication/2022/11/25/a80bdf8c85bc28a4e6566661/statistik-pendidikan-2022.html>
- Fajriyah, Zulfi, R., & Prastowo, A. (2022). Implementasi Pembelajaran TIK Dengan Penggunaan Microsoft Word Untuk Kemampuan Literasi Digital Siswa Kelas IV SD Islam Terpadu. *Jurnal Ilmiah Mandala Education*, 8(1), 577-584. <https://doi.org/10.58258/jime.v8i1.2727>
- Gomes, C. A., Gomes, H., Rego, B., Sousa, B., Loureiro, M., & Rocha, P. (2019). Smart City Kids Lab: Creative Computing in Primary School. *2019 International Symposium on Computers in Education (SIIE)*, 1–6. <https://doi.org/10.1109/SIIE48397.2019.8970130>
- Gusen, J. N., & Gusen, N. (2020). Computer Skills: Projects and Challenges. *American Journal of Humanities and Social Sciences Research*, 4(6), 135–144.
- Hahnel, C., Goldhammer, F., Naumann, J., & Kröhne, U. (2016). Effects of Linear Reading, Basic Computer Skills, Evaluating Online Information, and Navigation on Reading Digital Text. *Computers in Human Behavior*, 55, 486–500. <https://doi.org/10.1016/j.chb.2015.09.042>

- Indrawan, G. B., Sari, G. A. G. M., Putri, K. U. D., Putri, D. P. H., & Dewi, L. J. E. (2022). Pelatihan Dasar Penggunaan Aplikasi Microsoft Office dan Paint di Sekolah Dasar Negeri 1 Umeanyar. *WIDYA LAKSANA*, *11*(1), 76-84. <https://doi.org/10.23887/jwl.v11i1.34066>
- Khasanah, U., & Herina, H. (2019). Membangun Karakter Siswa Melalui Literasi Digital Dalam Menghadapi Pendidikan Abad 21 (Revolusi Industri 4.0). *Prosiding Seminar Nasional Program Pascasarjana Universitas PGRI Palembang*. <https://jurnal.univpgri-palembang.ac.id/index.php/Prosidingpps/article/view/2662>
- Kominfo. (2022). *Status Literasi Digital Indonesia 2022*. <https://cdn1.katadata.co.id/media/microsites/litdik/ReportSurveiStatusLiterasiDigitalIndonesia2022.pdf>
- Misla, M., & Mawardi, M. (2020). Efektifitas PBL dan Problem Solving Siswa SD Ditinjau dari Kemampuan Berpikir Kritis. *Jurnal Ilmiah Sekolah Dasar*, *4*(1), 60-65. <https://doi.org/10.23887/jisd.v4i1.24279>
- Perdana, N., Suwardy, R., & Gavrilla, L. (2023). Peningkatan Literasi Teknologi Informasi Siswa Sekolah Menengah Atas Melalui Pelatihan Pembangunan Aplikasi Berbasis Internet. *Jurnal Mandala Pengabdian Masyarakat*, *4*(2), 322–329.
- Surani, D. (2019). Studi Literatur: Peran Teknolog Pendidikan Dalam Pendidikan 4.0. *Prosiding Seminar Nasional Pendidikan FKIP*, *2*(1), 456-469.
- Upa, R., & Pilu, R. (2021). Pelatihan dan Pengenalan Dasar-Dasar Komputer bagi Siswa Sekolah Dasar di Lingkungan Kelurahan Temmalebba. *Madaniya*, *2*(4). <https://madaniya.pustaka.my.id/journals/contents/article/view/104>