Journal of Innovation and Community Engagement (ICE) **e-ISSN: 2776-0421**
Vol. 07, No. 02, (May, 2026) **https://doi.org/10.28932/ice.v7i2.14987**

Digital Transformation Based on Touching Heart, Teaching Mind, and Transforming Life at SD Katolik 15 St. Laurentius Manado

Lianly Rompis[1*], Julie Rante[1], Kristian Dame[1], Evi Kasiahe[2]
[1]Faculty of Engineering Universitas Katolik De La Salle Manado, Manado, 95253, Indonesia
[2]Faculty of Educational Science, Universitas Katolik De La Salle Manado, Manado, 95253, Indonesia

[*]Correspondence should be addressed to Lianly Rompis; lrompis@unikadelasalle.ac.id

(Received February 26, 2026; Revised March 14, 2026; Accepted April 21, 2026)

Abstract

Education is essential for humans to develop into meaningful, educated individuals. Education in Indonesia should play the right role in improving human resources. The best approach is to introduce science and technology in early childhood because, at this age, children still need guidance to understand and process information through reading. SD Katolik 15 St. Laurentius in Manado is a school with a strategic location that serves around 90 elementary students. This school has good potential to develop human resources and the learning process, with an adequate number of students and teachers, a well-built facility, and a spacious yard. To promote proper education for elementary students at SD Katolik 15 St. Laurentius in Manado, a team—comprising lecturers from the Electrical Engineering Study Program, lecturers from the PGSD (Elementary School Education for Teachers) Study Program at De La Salle Catholic University Manado, electrical engineering alumni, and students—was committed to conducting community service. The community service aimed to apply digital transformation based on Touching Heart, Teaching Mind, and Transforming Life through teaching on series and parallel circuits, a workshop on using the Canva application to create teaching materials in PowerPoint, and information flyers.

***Keywords**: digital learning, transformation, workshop*

How to Cite:
Rompis, L., Rante, J., Dame, K., & Kasiahe, E. (2026). Digital transformation based on Touching Heart, Teaching Mind, and Transforming Life at SD Katolik 15 St. Laurentius Manado. *Journal of Innovation and Community Engagement, 7*(2), 126-136.
https://doi.org/10.28932/ice.v7i2.14987

© 2026 The Authors. This work is licensed under a Creative Commons Attribution-Non-commercial 4.0 International License.

Introduction

Since the COVID-19 pandemic, digital transformation has been advancing. The digital gap is a crucial component of the information gap because of the different opportunities it presents for creating and processing information, including learning new technologies (Fuadiy et al., 2025; Suharto, 2024). Due to this importance, the community service team, since 2020, has already conducted several visits and community service activities with the school.

The school SD Katolik 15 St. Laurentius Manado is located in a strategic area and has around 90 elementary students. This school has strong potential for human resource development and improvement of the learning process, with an adequate number of students and teachers, well-built facilities, and a spacious yard.

Knowing that learning should be supported by information technology availability that can bring meaning, transfer knowledge, and create someone behavior or character (Risnawati et al., 2025), also in line with De La Salle Catholic University's vision and mission, Electrical Engineering Study Program conducted a community service: digital transformation based on *Touching Heart, Teaching Mind, and Transforming Life*, to help the school management to organize better education to elementary students, while keep maintaining the already good current education system, and following the policies which already have been written by the school (Muskanial et al., 2021).

The activity aims to develop human resources in elementary schools and universities, including teachers, students, and lecturers. Furthermore, it aims to expand scientific knowledge, with lecturers and students as transmitters of knowledge, and teachers and students as recipients. This activity would bring about a meaningful, positive digital transformation for elementary school teachers and students, thereby creating a sustainable cycle that future generations can build on to strengthen the Indonesian nation. The educational process is crucial and essential for humans to continue developing into complete individuals. Education in Indonesia must play a role in improving human resources. The best way is to introduce science and technology to children from an early age, as at this age, children's ability to comprehend information through reading still requires guidance and direction. Their ability to think and to develop a culture of literacy still needs improvement (Choiriyah et al., 2023).

This learning process must be continuously developed and sustained through appropriate learning media that support student learning. Selecting appropriate learning materials can help students understand the material presented and provide real-life experiences (Wulandari et al., 2023; Kurniah et al., 2023). The impact of the COVID-19 outbreak has changed the learning process, forcing teachers and students to shift to distance learning using information technology.

Teachers must improve their online teaching and learning skills by attending workshops, coaching, and seminars, while students must become accustomed to studying more at home and using smartphone applications (Saifuddin & Putra, 2024; Napratilora et al., 2022). Digital transformation has become crucial since then and continues to evolve, alongside the development of artificial intelligence (AI).

The use of information technology, particularly artificial intelligence, in education can positively impact teachers and students. Generally, teachers have a strong desire to use AI but little experience with it (Galindo-Domínguez et al., 2024). This digital divide is a crucial component in creating the information gap, primarily due to differences in opportunities to generate knowledge, utilize information, and use new technologies (Sydorenko et al., 2024).

Methods

The methods we used for this community service activity consist of 2 (two) procedures: teaching series and parallel circuits using media and a PowerPoint presentation (for the students), and giving a Canva workshop (for the teachers).

The community service was organized in a team of Electrical Engineering lecturers, a PGSD lecturer, and Electrical Engineering students from De La Salle Catholic University, from August until December 2025. It was expected that this community service would help extend the lecturers' and students' soft and hard skills.

The school students participated in an interactive activity to deepen their understanding of series and parallel circuits. They were organized into groups of 5 or 6 pupils and followed the instructions from the university students and lecturers of the service team.

A brief workshop was given to the elementary school teacher, with the help of the university students, who explained how to use the Canva application for PowerPoint presentations and information flyers. It aimed to assist teachers in providing better digital media for their pupils, using information technology.

Principally, because the aim of the activity is fully community service, the team generally used their perspectives from the comparison of before and after the activities, and gave observation statements for data collection and evaluation.

Results and Discussions

The community service team contacted the school principal, Mr. Johanis Lensun, and sent an official letter. After approval, the team began their first program in August 2025 with a teaching series and a parallel circuit for elementary students.

The team came to school on Thursday, 21 August 2025. The principal and the teachers welcomed the team. Then the team was guided to the classroom that had already been prepared by the school management. Around 25 students have already gathered there, standing by to attend the lecture on series and parallel circuits. At first, the students quietly listened to the team's introduction and the PowerPoint presentation (Figures 1 and Figure 2), and then they were given media to watch, discuss, and learn from, using the learning media left at the school after the community service (Figure 3). To make the atmosphere livelier, the students were organized to sing a song and play a light sport, led by a colleague, Ms. Evi (Figure 4).

The community service continued on the second day, on Friday, 19 September 2025, when the university students came to school and gave a brief workshop on using the Canva application for PowerPoint presentations and information flyers. This workshop was specially designed for elementary school teachers. There were 7 (seven) teachers at the workshop. Figure 5 was the guidance sheet. Figure 6 shows documentation of the workshop activity conducted. At the end of the workshop, the team gave a canvas drawing as a souvenir for the school (Figure 7).

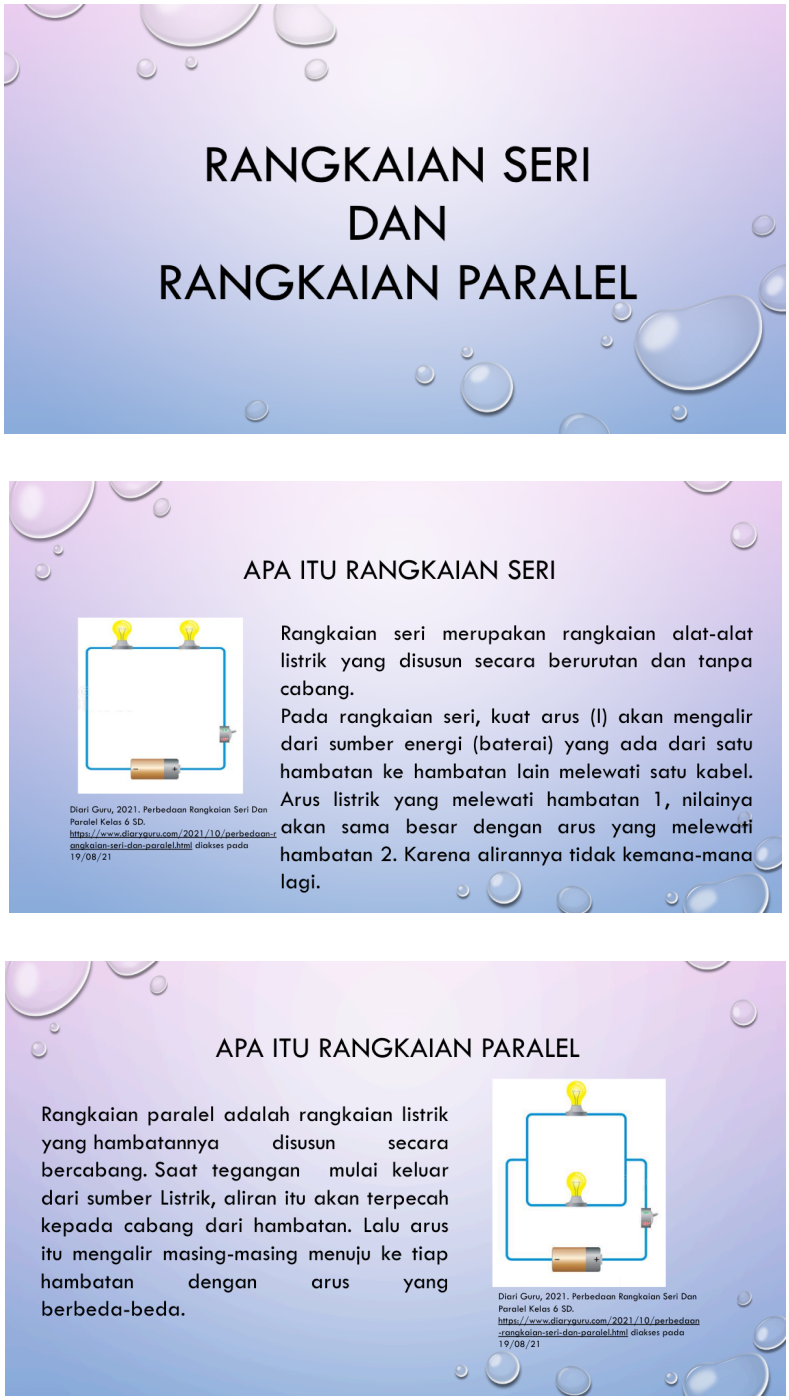


Fig. 1. Slides of presentation about series and parallel circuits

Fig. 2. The school students were guided by Mr. Kristian Dame, assisted by the university alumni and students

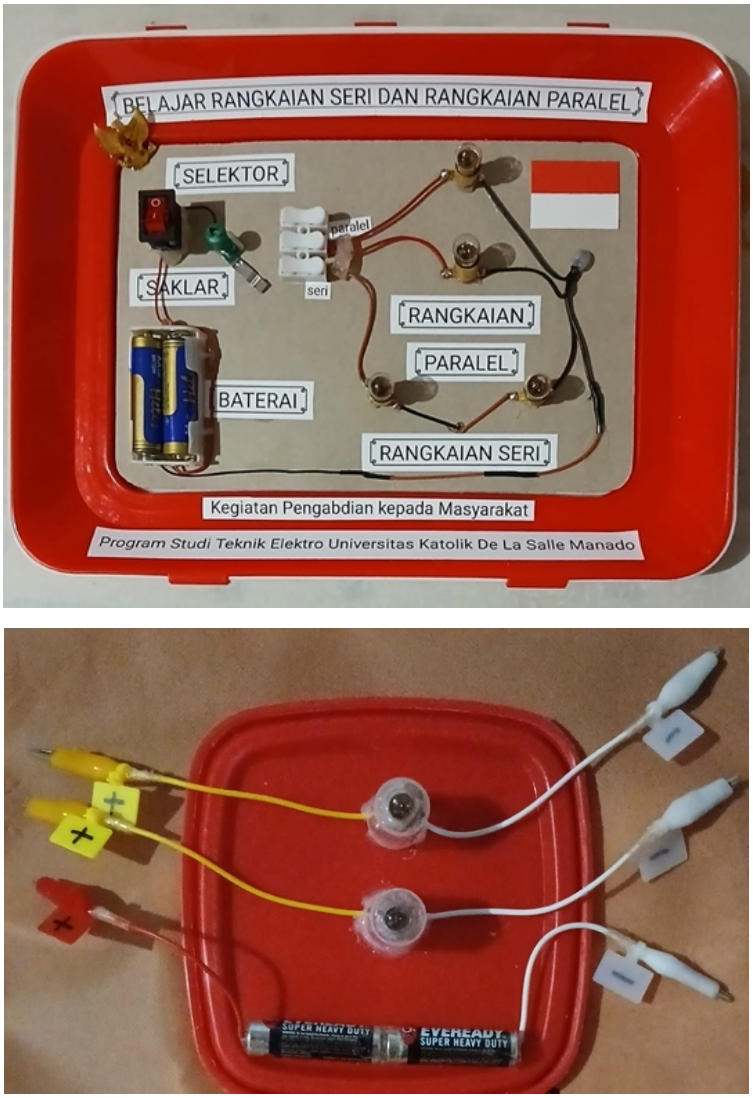
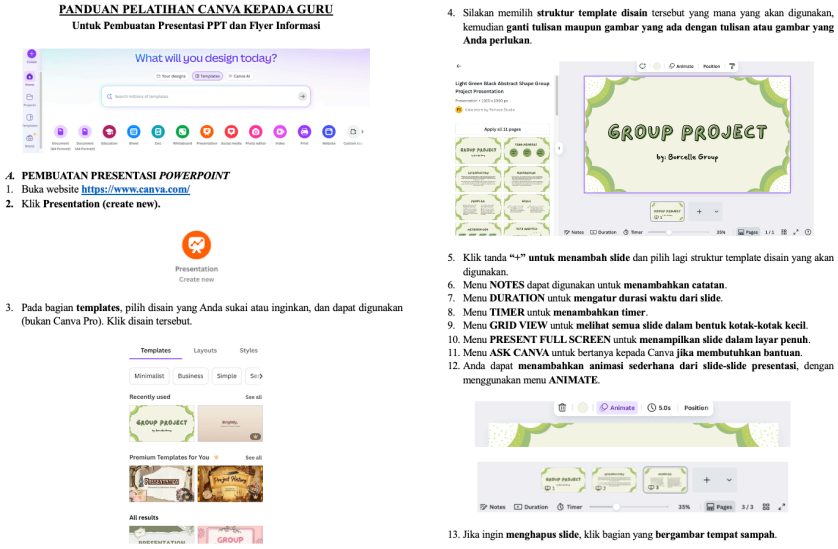


Fig. 3. The media kit used for series and parallel circuit learning

Fig. 4. The activities of singing a song and 'jogging' by Ms. Evi



PANDUAN PELATIHAN CANVA KEPADA GURU

Untuk Pembuatan Presentasi PPT dan Flyer Informasi

A.* PEMBUATAN PRESENTASI *POWERPOINT

1. Buka website **https://www.canva.com/**
2. Klik **Presentation (create new).**

3. Pada bagian **templates**, pilih disain yang Anda sukai atau inginkan, dan dapat digunakan (bukan Canva Pro). Klik disain tersebut.

4. Silakan memilih **struktur template disain** tersebut yang mana yang akan digunakan, kemudian **ganti tulisan maupun gambar yang ada dengan tulisan atau gambar yang Anda perlukan**.

5. Klik tanda **"+" untuk menambah slide** dan pilih lagi struktur template disain yang akan digunakan.
6. Menu **NOTES** dapat digunakan untuk **menambahkan catatan**.
7. Menu **DURATION** untuk **mengatur durasi waktu dari slide**.
8. Menu **TIMER** untuk **menambahkan timer**.
9. Menu **GRID VIEW** untuk **melihat semua slide dalam bentuk kotak-kotak kecil**.
10. Menu **PRESENT FULL SCREEN** untuk **menampilkan slide dalam layar penuh**.
11. Menu **ASK CANVA** untuk bertanya kepada Canva **jika membutuhkan bantuan**.
12. Anda dapat **menambahkan animasi sederhana dari slide-slide presentasi**, dengan menggunakan menu **ANIMATE**.

13. Jika ingin **menghapus slide**, klik bagian yang **bergambar tempat sampah**.

Fig. 5. Guidance sheet for Canva workshop (the instructions)

Fig. 6. Canva workshop for the elementary school teachers

Fig. 7. Giving a meaningful souvenir as the team's thanks for the school

Based on observations during activities, an evaluation was carried out to derive a conclusion. A comparison method and observation statements were evaluated and given as shown in Table 1.

Table. 1. Observation statements as the outcome for a good conclusion

No.	Before the activity	After the activity	Observation statements
1	Student gained knowledge from sharing by teacher, using whiteboard.	Student gained knowledge from the team, using PowerPoint presentation.	Improvement in learning process, the combination created service learning and creativity of the students.
2	Student learned from a battery and lamps.	Student learned from a learning media kit.	This taught students how to made groups and study interactively, gain additional skills.
3	Teacher individually learn Canva to make presentations.	Teacher gained more skills and knowledge by following a brief workshop.	New experience of learning for teachers, and also new experience of the university students in public speaking and teaching.
The observations gave positive outcome as the results of the community service			

Conclusion

The community service activity held at SD Katolik 15 St. Laurentius Manado by a community service team of Electrical Engineering lecturers, PGSD lecturers, and the alumni and students of De La Salle Catholic University was well-organized. The SD Katolik 15 St. Laurentius school students learned to design series and parallel circuits by observing, watching, and

experimenting. The school teachers learned to design PowerPoint presentations and information flyers, using the Canva application. From the team's perspective, the students and teachers felt satisfied and helpful with the activities and gained more knowledge. In the future, as part of a long-term partnership with SD Katolik 15 St. Laurentius Manado, the team got a suggestion that, hopefully, more students will get involved in designing digital electronic circuits, and can keep up with the constant evolution of technology. Additionally, a few applications can help teachers improve their teaching skills.

Acknowledgements

We thank our alumnus, Rico Bulandala, for the great assistance in helping transform the series and parallel materials for the students. Also, our students, Kezia Ambalao for creating the material in PowerPoint, Yeus Murib for helping the lecturers to prepare the learning media, Marselus Lexyban and Kurnia Felle for helping the lecturers in explaining the media to the students, and Claudio Taogan for the precious time to give a workshop to the teachers.

References

Choiriyah., Widiawati, D. P., & Emiliana, W. (2023). The role of literacy in increasing children's reading interest in early childhood. *Indonesian Journal of Early Childhood Education Studies*, *12*(2), 191– 203. https://doi.org/10.15294/ijeces.v12i2.73749

Fuadiy, M. R., Rozi, M. A. F., Arafah, N. N., Kamal, L., & Sunoko, A. (2025). Mapping the digital transformation of education in Indonesia from 2012 to early 2025: A bibliometric analysis of Scopus-indexed publications. *Journal of Educational Research and Practice*, *3*(2), 276–306. https://doi.org/10.70376/jerp.v3i2.390

Galindo-Domínguez, H., Delgado, N., Campo, L., & Losada, D. (2024). Relationship between teachers' digital competence and attitudes towards artificial intelligence in education. *International Journal of Educational Research*, *126*. https://doi.org/10.1016/j.ijer.2024.102381

Kurniah, N., Agustriana, N., & Sapri, J. (2023). Integration of scientific literacy and technology in early childhood learning design. *Indonesian Journal of Early Childhood Education Studies (IJECES)*, *12*(2), 204 –210. https://doi.org/10.15294/ijeces.v12i2.75634

Muskanial, R., & Zulela M. S. (2021). Realita transformasi digital pendidikan di sekolah dasar selama pandemi Covid-19. *Jurnal Pendidikan Dasar Nusantara*, *6*(2), 155-165. https://doi.org/10.29407/jpdn.v6i2.15298

Napratilora, M., Mardiah., Arjuni, W., & Khoirin, K. (2022). The impact of COVID-19 on

the education field and teachers as agents of change. *Berumpun: International Journal of Social, Politics, and Humanities, 5*(2), 116–27. https://doi.org/10.33019/berumpun.v5i2.82

Risnawati, Y., Hendra, M. ., Lestari, N. C., Apriliyani, E. S., Arsyad, M., & Efrina, G. (2025). Learning transformation in the digital era: A literature review on innovations in teaching methods and media. *TOFEDU: The Future of Education Journal*, *4*(6). 2034-2039. https://journal.tofedu.or.id/index.php/journal/article/view/742

Saifuddin, M. F., & Putra, L. D. (2024). Digital literacy in elementary school: A systematic literature review. *Gagasan Pendidikan Indonesia*, *5*(2), 86–99.

Suharto. (2024). Challenges and opportunities of digital transformation in strategy management. *International Journal of Science and Society*, *6*(1), 620-630. https://doi.org/10.54783/ijsoc.v6i1.1050

Sydorenko, V. V., Akhnovska, I. O., Smirnov, S. V., Verbovskyi, I. A., Melnychuk, O. V. (2024). Improvement of higher education: How to bridge the digital divide during the transformation? *Journal of Education and Learning (EduLearn)*, *18*(3), 1001–1014. https://doi.org/10.11591/edulearn.v18i3.21078

Wulandari, A. P., Salsabila, A. A., Cahyani, K., Nurazizah, T. S., & Ulfiah, Z. (2023). Pentingnya media pembelajaran dalam proses belajar mengajar. *Journal of Education*, *5*(2), 3928 – 3936. https://doi.org/10.31004/joe.v5i2.1074