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ADVANCES IN SOCIAL HUMANITIES RESEARCH

Design of the Experimental Mini Course Program of Raden Dewi Sartika's Thought-Based Design at Dewi Sartika School Bandung

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Abstract
Sekolah Dewi Sartika Bandung is a historical educational institution that was originally named Sakola Kautamaan Istri and was established to provide access to education for women. Over time, this school has experienced a decline in popularity due to regulations and competition from other educational institutions. This research aims to design an experimental mini-course program based on the thinking of Raden Dewi Sartika to restore the school's identity and address global issues such as gender equality and environmental pollution. The program is designed using a design thinking approach through the stages of empathy, define, ideate, prototype, and test. Data collection techniques are carried out through observation, interviews, and literature studies. The design results include the concept of a program design based on the values of women's independence and empowerment, teaching materials, module content, and a simple business model to support the sustainability of the program. This program is aimed at strengthening the school's image as a local value-based and socially relevant institution, as well as contributing to the Sustainable Development Goals (SDGs) with a creative and applicative approach. This research is expected to serve as an educational strategy that is adaptive to contemporary challenges and useful for strengthening students' character through the heritage of educational cultural values.

Keywords: *Raden Dewi Sartika, Sustainable Development Goals (SDGs), Mini Course Design, Experimental Design, Design Thinking*

Introduction

Dewi Sartika Bandung School is one of the schools with a long history as a special school for girls, established in 1904 when patriarchal culture was still widely practiced. Indonesian women before the 20th century experienced significant discrimination from the men around them due to the prevailing strong patriarchal culture in Indonesia and the misperceptions of women (Fikri et al., 2015; Ikmal Abdallah Syakur et al., 2023; Komariyah & Sumiyatun, 2023; Mustoip, 2023; Rohman, 2019). Moreover, there was a persistent belief that women only needed to be educated enough to be ready as servants to their husbands (Daryono, 2008; Morgan, 2019; Mustopa & Kadarisman, 2019; Sulistiani & Lutfatulatifah, 2020). *Dewi Sartika* School was originally named *Sakola Istri* or *Sakola Kautamaan Istri*, founded by Dewi Sartika and two other teachers, her cousins Mrs. Poerwa and Mrs. Oewid. *Sakola Kautamaan Istri* pioneered efforts to empower women so they would possess adequate abilities not only in domestic affairs but also in

ethics, intellectual pursuits, and mentality, as recommended by Dewi Sartika in the school's educational concept. Dewi Sartika proposed *cageur, bageur, smart, wanter* as learning goals at the Women's Virtue School. This educational concept is implemented in the teaching and learning methods applied at the school (Dessy Maulida, 2021; Kwon, 2022; Pawlowski & Scholta, 2023; Tasca & Tessone, 2017).

However, over time, changes in regulations regarding special schools for women and high competition from other educational institutions led to a decline in student enrollment. The school then changed its status to a public-private school managed by a foundation, accepting male students and children with special needs, becoming one of the inclusion schools in Bandung.

Despite being an inclusive school, it faces challenges in maintaining its identity and philosophical foundation. Based on interview results with the school, the original values instilled by Dewi Sartika are no longer explicitly integrated into learning practices. Instead, the school adopted the contemporary Sundanese philosophy of *Cageur, Bageur, Bener, Pinter, Tur Singer*, which is more general in nature and does not directly refer to the history of its founders.

Global challenges such as gender equality, education for children with special needs, and environmental pollution are also pressing issues that educational institutions need to address through creative and relevant approaches. One way to respond to these challenges is to reintegrate local values into innovative learning systems.

This research aims to design an experimental mini-course program based on the values of Dewi Sartika's thought, as well as to support the Sustainable Development Goals (SDGs), especially SDG 5 (gender equality), SDG 12 (responsible consumption and production), and SDG 14 (*life below water*) related to plastic waste issues. The program is designed not only to revive local values but also to strengthen the school's identity through a women's skills, creativity, and empowerment-based educational approach.

The formulation of the problems in this study is: (1) How to prepare an effective and interesting mini-course program to increase public awareness and reintroduce Raden Dewi Sartika's thoughts in the modern era and global issues regarding plastic waste? (2) How can the mini-course program be adapted to global issues, such as plastic waste management, to increase the relevance of Dewi Sartika's educational values in the modern era? (3) How to design a program that is relevant to global issues in the modern era using Dewi Sartika's educational values to restore values and introduce the school to a wider audience?

This research is expected to provide an alternative solution that is adaptive to changing times and able to restore the school's characteristics based on local cultural values. In addition, the resulting programs are also expected to contribute to creative, contextual, and socially impactful educational practices for students, especially in character education and environmental awareness.

Research Methods

The research method for designing this experimental mini-course program was qualitative, with data collected through interviews, observations, and literature studies, combined with the design thinking process. Interviews were conducted with two key groups: school leaders, including the Principal and members of the school foundation, and the Co-Founder of the Bandung Good Guide community. The first interview revealed that the school had experienced a decline in student numbers and a loss of identity following curriculum changes aligned with the national curriculum. The second interview indicated that Bandung Good Guide aimed to help the school gain recognition and improve its performance.

Design thinking is a problem-solving method involving a series of stages: empathize, define, ideate, prototype, and test (Vikas et al., 2022). The process begins with understanding the problem, exploring potential solutions, iterating through prototyping and testing, and finally implementing the solution. In this study, a mini-course class was conducted during the testing stage to evaluate the pre-designed materials, which focused on plastic waste, particularly used plastic bags. The program's success was measured using usability testing methods and a Likert scale.

Results and Discussion

From the results of the distribution of questionnaires for the testing stage, five respondents who participated were 80% aged 18 to 23 years old and the other 20% were aged 24 to 29 years. The five respondents entered the target audience, namely, women, Gen Z and had an interest in sustainable or environmentally friendly movements.

1. Participant Satisfaction:

In the satisfaction of the participants of the mini course, an average score of 4.6 was obtained from a scale of 1-5. Most respondents felt that this class provided a fun, informative and easy experience to follow.

2. Material Effectiveness:

The effectiveness of the material presented was obtained with an average score of 4.4 on a scale of 1-5. The score shows that the majority of respondents feel that the techniques taught are easy to understand and apply. Some respondents proposed adding material size standardization to make the practice easier for beginners. Respondents also assessed that the material taught was relevant to the issue of the Sustainable Development Goals (SDGs) in managing waste and also sustainable innovation.

3. Class Duration and Structure

In the duration and structure of the class, an average score of 4.2 was obtained on a scale of 1-5. The duration and structure of the class are considered sufficient to learn the basic techniques of the classes held.

Table 1. Likert Scale Respondent Questionnaire Results

No	Question	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5	Total Questions and Scores
1.	How do you feel after taking an Experimental Design class?	4	4	4	5	5	22
2.	What do you think about the duration of this class? Is it too short, too long, or is it enough?	4	5	3	5	5	22
3.	Is upcycle with fusing techniques easy to follow?	4	4	5	5	5	23
4.	Is the material taught effective and clear for you?	4	5	4	5	5	23
5.	After taking this class, do you feel confident enough to try this technique independently?	3	3	4	5	5	20
6.	Do you think this technique is useful in your life?	4	3	4	5	5	21
7.	Are you interested in learning a lot about Experimental Design with heat techniques?	5	4	4	5	5	23
8.	In your opinion, do the results of the activity have the potential to become business opportunities?	4	4	5	5	5	23
9.	Are you interested in building a business from the techniques	4	3	3	5	5	20

No	Question	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5	Total Questions and Scores
	you have learned in this class?						
10.	Do you think this class is relevant to the world issues (SDGs) that we are currently facing?	5	5	4	5	5	24
11.	Do you think this class can help solve the world issues (SDGs) that we are currently facing?	5	5	4	5	5	24
	Total Overall Score of the Questionnaire						**245**

4. Feedback

From the response column, the respondent assessed that this design experimental mini course program was interesting and easy to follow, one of the respondents gave advice on the effectiveness of the material during the implementation of the class.

After the mini course program activities are completed, it can be concluded that this program received positive feedback from the five contributors. The results of the questionnaire with a likert scale were then recalculated to get the total percentage using the formula T x Pn with a result of 89.09% which was included in the category of Very Agree/Good/Like (SS) from the following scale index:

a. Strongly Agree/Good/Like (SS): 80% - 100%
b. Agree(s): 60% - 79%
c. Skepticism (RG): 40% - 59%
d. Disagree (TS): 20% - 39%
e. Strongly Disagree (STS): 0% - 19%

Respondents felt that the material was relevant, easy to apply and also had a positive impact on the understanding of global issues of the SDGs that were applied. This program shows great potential to be developed more widely as an educational effort based on global issues and creative innovations that has the basis of the thought of a female emancipation figure, namely Raden Dewi Sartika.

This research resulted in a design of a mini course program based on an experimental design that combines Raden Dewi Sartika's educational values with global issues, especially environmental issues and gender equality. The results of the discussion

of the three existing problem formulations are described through five stages of design thinking. The following is the presentation of the discussion:

1. Empathize

The empathize stage in this design is carried out by means of direct observation and interviews with the Dewi Sartika School and Bandung Good Guide to find out information about the school. In addition to direct observation and interviews, information is also sought through literature studies. The information obtained is collected and shaped into 360 data.

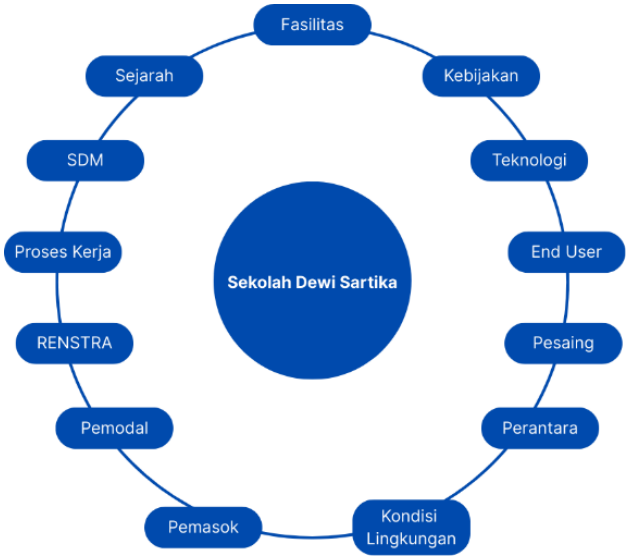

Figure 1. 360 Data
Source: Personal Data

2. Define

In the process of defining, each data that has been obtained is processed using SWOT, PEST and 5 Why's Method techniques. Based on the first two stages of design thinking, it was found that the root of the main problem was the weak identity and identity of Dewi Sartika School which lacked in implementing Dewi Sartika values, thereby reducing the main value of the school. This problem is related to lack of funds, inadequate promotion, and inadequate facilities and human resources, which have an impact on the low quality of educational services and reduced attractiveness of schools in the eyes of prospective students and the general public.

3. Ideate

In the design ideate process, it starts from the selection of concepts that have been considered after knowing information and having data about the Dewi Sartika school. In this process, a research framework was formed that aimed to form the results of the concept design.

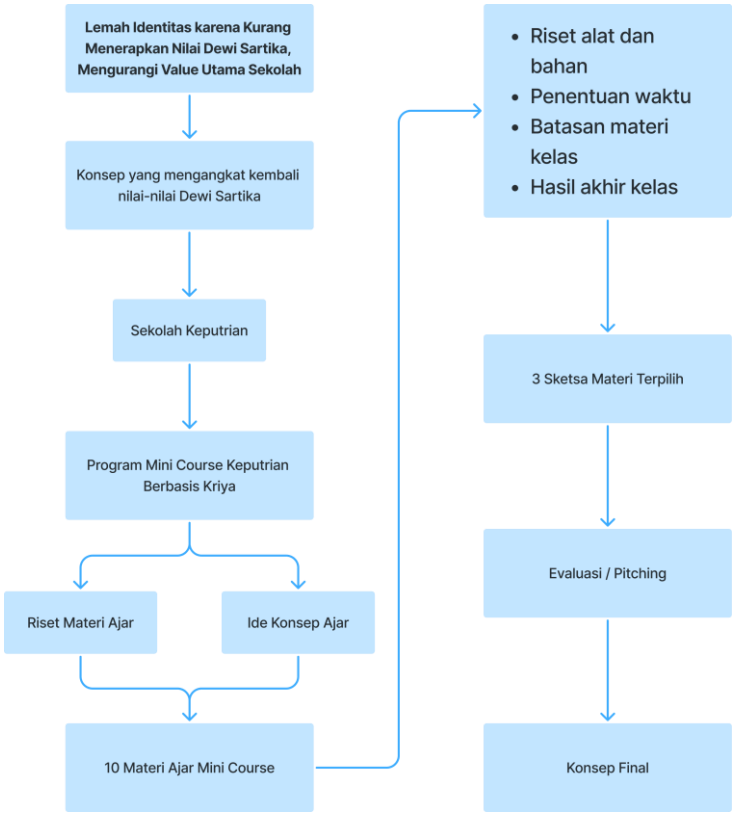

Figure 2. Research Concept Framework
Source: Personal Data

The main problem faced by Dewi Sartika School is the weak identity and identity of the school due to the lack of application of the values of Raden Dewi Sartika's thought, which has an impact on decreasing school values in the eyes of the community and reducing the number of registrants. In addition to being less known, this school also faces competition with other educational institutions in the vicinity. Based on interviews, before becoming a public private school, Dewi Sartika School had been part of the Kepandaian Putri Welfare School (SKKP) which provided education on household skills such as cooking, taking care of babies, managing finances, sewing, and embroidery. However, since the change in the national curriculum in 1979, the girls' classes are no longer running. In response to this condition, the values of Dewi Sartika's thought were again raised as the basis for designing a craft-based mini course inspired by subjects at the Istri Kautamaan School. Mini courses, according to LinoDas, are a condensed version of traditional courses that focus on specific skills and can be completed in 30–120 minutes, outside of regular class hours. The topic of the mini course is selected based on the availability of teaching materials and tools, then the flow of activities, material limitations, and expected class results is arranged.

4. Sketch and Evaluation

At this stage, 10 concept sketches were made which were then carried out a scoring system to determine the 3 types of activities that have the most potential to be practiced directly in a mini course at Dewi Sartika school.

SKOR	Kriteria	Menjahit	Ikat Celup	Batik Cap	Batik Tulis	Menyulam	Merajut	Makrame	Crochet	Eco Print	Experimental Textile
1 : Sangat sulit 2 : Sulit 3 : Biasa 4 : Mudah 5 : Sangat mudah	Ketersediaan Bahan	5	4	4	5	5	5	5	5	3	5
1 : Sangat Mahal 2 : Mahal 3 : Biasa 4 : Murah 5 : Sangat Murah	Biaya Penyediaan	5	3	1	1	4	4	4	4	2	4
1 : Sangat sulit 2 : Sulit 3 : Biasa 4 : Mudah 5 : Sangat mudah	Tingkat Kesulitan	3	3	4	3	2	3	4	3	5	5
1 : Sangat tidak efektif 2 : Kurang efektif 3 : Biasa 4 : Efektif 5 : Sangat efektif	Potensi (industri) Output Berguna Menjadi Bisnis	2	2	2	4	4	2	3	2	2	4
1 : Sangat tidak sesuai 2 : tidak sesuai 3 : Biasa 4 : sesuai 5 : Sangat sesuai	Kesesuaian Value Dewi Sartika (Saat ini)	3	3	4	5	4	4	1	4	3	5
1 : Sangat tidak menyenangkan 2 : tidak menyenangkan 3 : Biasa 4 : menyenangkan 5 : Sangat menyenangkan	Menyenangkan untuk dikuti atau tidak	2	3	4	5	3	3	3	3	3	5
1 : Sangat lama 2 : Lama 3 : Biasa 4 : Ringkas 5 : Sangat ringkas	Durasi Pengerjaan	4	4	4	3	2	3	4	3	3	4
Hasil		24	22	25	26	24	24	24	24	21	32

Figure 3. Teaching Material Concept Scoring Table

Source: Personal Data

Of the ten activities designed, three potential activities were selected, namely batik stamp, written batik, and experimental design. These three concepts were then evaluated together with the school and Bandung Good Guide through separate online interviews, to discuss the teaching material, class duration, output, and advantages of each activity. The results of the evaluation concluded that the experimental concept of design was the most suitable to be applied in schools.

Experimental design according to Hall (2011) is an approach in the design process that emphasizes creative exploration, innovation, and the use of experimental tools to respond to design challenges strategically. Although the term "experiment" is often used in industrial design, its role is rarely discussed in depth. In practice, design experiments combine rational processes based on technical data and intuitive and abstract approaches, such as brainstorming, free associations, to de Bono's six hats method. This approach aims to encourage the creation of new solutions beyond the limits of the market, technology, or user expectations, while maintaining originality. Experiments in design are also not always scientifically controlled, but instead rely on the unexpected to come up with innovative combinations and new discoveries through a balance between creation and thinking. According to the Royal College of Art from the website 2022.rca.ac.uk explains that design experimentation is a practice in the fields of art, design, science, and storytelling, which is based on challenged and reshaped ideas about what experience and interaction can do. The XD path focuses on intersections and multiplication – different methods, modes, materials, and perspectives. From the two explanations of design experimentation, it can be concluded that design experimentation is a process that combines creativity and methodology. This way of designing combines imagination with

real data to find innovative solutions and create original designs. Experimental design uses a variety of freer experimental tools, in order to allow designers to create more innovative results.

This mini course aims to teach plastic waste processing into functional works or inspiration for business ideas, with reference to skills subjects at Sakola Kautamaan Istri. This treatment was chosen because plastic waste is a serious problem for environmental pollution, especially for soil pollution. Plastic materials are organic materials that cannot be broken down by bacteria (Qomariah, 2020; Chyntia et al., 2023). And from data obtained through the Ministry of Environment and Forestry (KLHK) through opendata.bandung.go.id, in 2023 in Bandung there will be approximately 268.83 m^3 of plastic waste or equivalent to 8 tons per day. Meanwhile, data from data.go.id in 2024 in June, plastic waste in the city of Bandung reached 1 ton. In this program, plastic waste processing is part of upcycle activities. Upcycling is the practice of creating products that come from waste or unwanted goods, or adapting existing products or goods in a certain way to add value to the goods. The goal is to reduce waste in the environment and increase the life of the resources used. Upcycling itself is carried out by turning the desired item into a higher quality product without having to recycle. With upcycling, you are invited to be creative in turning the product into something more useful (Risnasuci, 2022).

The activity lasted one to two hours and included the use of fusing techniques in making plastic plates, as well as small coin purses, with material in the form of explanations of techniques, work processes, and how to make works. The fusing technique is a technique of heating plastic to combine several sheets of plastic together. The plastic that can be used for this technique is a thermoplastic type of plastic, which is easily melted due to heat. The plastic fusing process is very simple and uses easy-to-get equipment. Through the fusing technique, we can also maximize the strength of the plastic, so that it can be used for a longer period of time. In addition, it can also maximize the function of plastic, can also be creative in making new products (Gumulya, 2019).

This concept also applies Raden Dewi Sartika's thoughts on women's independence, as well as supporting the SDGs 12 and 14 movement through the concept of sustainable design. The selection of this concept is based on its suitability with the current conditions of the school and environment, as well as the ease of obtaining materials and tools.

5. Prototype

Prototypes are carried out after the ideation stage which includes concept design, sketching and evaluation. In the prototype stage, a final concept will be made that includes the flowchart of the mini course experimental design program, a business model canvas (BMC) which includes business to customer (B2C) and business to business (B2B) and the content of the module book to help teach the experimental design mini course program and independently.

a. Flowchart

Figure 4 Final Flowchart of Design Experimental Mini Course Program
Source: Personal Data

The design experimental skills mini course program begins with the formulation of the concept idea of the teaching material, which is followed by research and planning regarding the form of activities to be carried out. After the concept was determined, a search was carried out for materials and tools such as cracker bags, cutters, scissors, irons, parchment paper, embroidery thread, and mattress needles. The next stage is the promotion of activities and the opening of participant registration. After registration closes, the two-hour class begins with an introduction and explanation session of the theme by the tutor, followed by the distribution of modules and an introduction to materials and tools. Participants then get directions on the techniques and procedures of the activity before starting the practice independently. The practice begins with sorting and cutting the plastic, arranging the pieces as desired, then covering them with parchment paper and performing the fusing technique using a hot iron to produce a flat plastic sheet. These sheets are then folded and ironed again to hold the sides together to hold them together, and then sewn on the right and left sides to make a small, strong, aesthetically pleasing purse. After the work is completed, the session is closed with a question and answer, satisfaction survey, and documentation before the class is declared finished.

b. Business Model Canvas (BMC)

The business model of the Mini Course Experimental Design program is designed in two approaches, namely business to customer (B2C) and business to business (B2B). The B2C approach is aimed directly at individuals, particularly adolescents and women aged 13–40 who are interested in craft arts, sustainable design, and environmental issues. The B2C strategy includes promotion through social media and the school's website, with affordable registration fee schemes, discounts for students, and the sale of modules as additional materials. Meanwhile, the B2B approach targets educational institutions, the arts community, the government, and institutions engaged in the field of environment and gender equality. The strategy includes sending cooperation proposals, providing thematic class packages, a subscription system, and special discounts for institutions with a large number of participants. B2B also opens up sponsorship opportunities, where partner institutions can support activities as donors and gain brand exposure in the implementation of classes. Both approaches are designed to ensure the sustainability of the program while expanding the reach of the social, educational, and environmental impacts of the program.

c. Contents of the Module Book

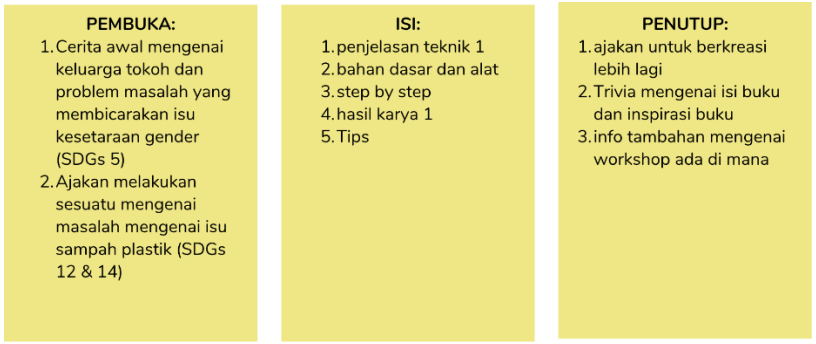

Figure 5 Contents of the Teaching Module Book
Source: Personal Data

The content of the module book designed by other designers is made in the form of a picture comic that tells the character's family and problems regarding the issue of gender equality and an invitation to do something about the issue of plastic waste, then the book has an explanation of techniques, basic materials and tools, procedures, works and tips, and a conclusion containing an invitation to create, Trivia about the content and inspiration of the book as well as additional information about workshops from this program activities were carried out. This module is made for self-use that can be traded without having to come to class.

6. Testing

Testing was conducted on five respondents who were in accordance with the target audience, namely women, Gen Z (1997-2012), and had an interest in sustainable or environmentally friendly movements. Testing is carried out to validate the suitability of running the program that has been designed. The testing process will be carried out on December 28, 2024. The method used in this process is usability testing, the respondents take classes that have been designed for the class path, teaching materials and also the final result. Usability testing is a measure of a characteristic that refers to how a user can learn and use a system or product to achieve goals and satisfaction with its use (Kurniawan & Yuamita, 2023). The following is the process of usability testing of the design experimental mini course program that has been carried out:

a. The process begins by introducing the theme of the designed program, at this stage the respondent listens to an explanatory presentation from the instructor using power point media.
b. The next process is to distribute modules to respondents before respondents choose the plastic waste they want to use and cut the plastic as well as the arrangement on the plastic sheets they have made.

Figure 6 Class Processes (1,2,3,4) & Class Modules (5)
Source: Personal Data

c. The next process is for respondents to carry out fusing techniques using irons on the results of their design arrangement.

Figure 7 Fusing / Hot Press Process
Source: Personal Data

d. After the slabs have been formed, the respondents then proceed to sew the outside to unite the slabs together.

Figure 8 Stitching Process & Design Finalization
Source: Personal Data

e. The respondents successfully completed an experimental design to make small wallets using crackle plastic waste with a fusing technique.

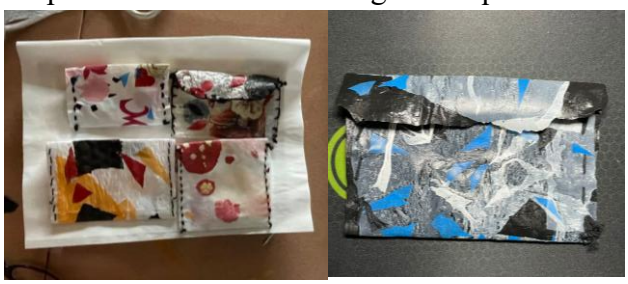

Figure 9 Design Experimental Mini Course Program Results
Source: Personal Data

f. After the learning process of the material is completed, respondents are asked to fill out a google form as an assessment process. The questionnaire distributed uses a likert scale to find out the opinions, satisfaction and feedback from existing respondents.

Conclusion

The design experimental mini-course program was developed to restore Sekolah *Dewi Sartika*'s identity as a historic educational institution rooted in local values and focused on empowering women to live independently. By adapting Raden Dewi Sartika's philosophy through practical skills and addressing global issues like plastic waste management, the program reinforces women's independence and empowerment while providing innovative, contextual learning strategies. The results indicate that this approach effectively supports the school's sustainability vision and increases its relevance in the modern era. Future research could explore the long-term impact of such programs on student outcomes and community engagement, as well as their adaptability to other cultural and educational settings.

REFERENCES

Chyntia, E., Zahara, A., Maisyarah, S. P., Herlina, H., & Khiarunnisa, K. (2023). Model pengembangan ekonomi kreatif dengan pemanfaatan limbah rumah tangga plastik kresek pada Gampong Paloh Lada Kabupaten Aceh Utara. *Lumbung Inovasi: Jurnal Pengabdian kepada Masyarakat*, *2*(3), 803–813.

Daryono, Y. (2008). R. Dewi Sartika sang perintis. In Yayasan Awika & PT. Grafitri Budi Utami (*Vol. 2*, *Issue 2*).

Dessy Maulida, R. (2021). Bloom's taxonomy in viewing Sakola Kautamaan Istri's educational conception (A historical cultural study of Sundanese women empowerment concept in 1904). *JOMANTARA: Indonesian Journal of Art and Culture*, *1*(2), 87. https://doi.org/10.23969/jijac.v1i2.5984

Fikri, L. K., Wibisana, W., & Rahmat, M. (2015). Perkembangan Pendidikan Agama Islam (PAI) di Sekolah Dasar tahun 1945–1966. *Tarbawy: Indonesian Journal of Islamic Education*, *2*(2). https://doi.org/10.17509/t.v2i2.3454

Gumulya, D. (2019). Teknik fusing pada daur ulang limbah kantong plastik dan implementasinya pada desain produk. *Idealog: Ide dan Dialog Desain Indonesia*, *4*(1), 13–22.

Hall, A. (2011). Experimental design: Design experimentation. *Design Issues*, *27*(2), 17–26. https://doi.org/10.1162/DESI_a_00079

Ikmal Abdallah Syakur, Rifdah Wafda Esa, Nia Suryani, Septiana Dwi Damayanti, Rahmadhani Istiqomah, & Sophia Najmii Akmal. (2023). Perjuangan Dewi Sartika dalam pendidikan di Kabupaten Bandung tahun 1904–1947. *Jurnal Ilmiah Pendidikan Kebudayaan dan Agama*, *2*(1). https://doi.org/10.59024/jipa.v2i1.484

Jumlah produksi sampah menurut jenisnya di Kota Bandung. (2024, May 27). *Lingkungan Hidup. Open Data Kota Bandung*. https://opendata.bandung.go.id/dataset/jumlah-produksi-sampah-menurut-jenisnya-di-kota-bandung

Komariyah, K., & Sumiyatun, S. (2023). Perkembangan pendidikan Sekolah Kautamaan Istri di Bandung tahun 1904–1947. *Swarnadwipa*, *6*(1). https://doi.org/10.24127/sd.v6i1.2725

Kurniawan, D., & Yuamita, F. (2023). Usability testing penggunaan menu Kartu Hasil Studi di website Sistem Informasi Akademik Universitas Teknologi Yogyakarta. *Jurnal Teknologi dan Manajemen Industri Terapan (JTMIT)*, *2*(1), 41–52.

Kwon, J. (2022). Educational games and Bloom's taxonomy. *Journal of Korea Game Society*, *22*(6), 33–42. https://doi.org/10.7583/jkgs.2022.22.6.33

Morgan. (2019). Riwayat hidup Raden Dewi Sartika. *Journal of Chemical Information and Modeling*, *53*(9). *(Note: Journal name appears mismatched—verify if this is a placeholder or correct source)*

Mustoip, S. (2023). Analisis penilaian perkembangan dan pendidikan karakter di Kurikulum Merdeka Sekolah Dasar. *PANDU: Jurnal Pendidikan Anak dan Pendidikan Umum*, *1*(3). https://doi.org/10.59966/pandu.v1i3.470

Mustopa, N. A. S., & Kadarisman, A. (2019). Perancangan buku ilustrasi pahlawan wanita Priangan Dewi Sartika. *E-Proceeding of Art & Design*, *6*(2).

Pawlowski, C., & Scholta, H. (2023). A taxonomy for proactive public services. *Government Information Quarterly*, *40*(1). https://doi.org/10.1016/j.giq.2022.101780

Risnasuci, M. (2022, October 25). Pengertian upcycling dan manfaatnya bagi lingkungan. *Daya*. https://www.daya.id/kesehatan/tips-info/lingkungan-sehat/pengertian-upcycling-dan-manfaatnya-bagi-lingkungan

Rohman, F. (2019). Perkembangan pendidikan agama di sekolah sejak Indonesia merdeka. *Tazkiya: Jurnal Pendidikan Islam*, *8*(1).

Royal College of Art. (2022). *Information experience design: Experimental Design MA*. https://2022.rca.ac.uk/programmes/information-experience-design-experimental-design-ma/

Sulistiani, Y., & Lutfatulatifah, L. (2020). Konsep pendidikan bagi perempuan menurut Dewi Sartika. *Equalita: Jurnal Studi Gender dan Anak*, *2*(2). https://doi.org/10.24235/equalita.v2i2.7036

Tasca, P., & Tessone, C. J. (2017). Taxonomy of blockchain technologies: Principles of identification and classification. *arXiv Preprint*, arXiv:1708.04872. https://arxiv.org/abs/1708.04872

Vikas, T. N., Vinay, C. T., Heggadathy, H. A., Shaikh, R. N., & Vidya, M. (2022). Design thinking: A review paper. *International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)*, 405–411.

What is a mini course? Benefits & examples. (2023, October 19). *E-Learning. LinoDash*. https://www.linodash.com/what-is-a-mini-course/