



Research article

Investigating the Role of Digital and Traditional Comics Creation for Promoting Autonomous Learning and SDG Awareness in Design Education

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Abstract:

This research paper examines how the creation of both traditional and digital comics can promote an understanding of the Sustainable Development Goals (SDGs) and learner autonomy among 25 students in the Bachelor of Design course 'Communication Skills'. Instead of addressing subjective and random issues, students were asked to create comics on SDGs, which would widen their awareness and attention towards key issues around them. Utilising a mixed-methods classroom intervention, the research unfolded in two distinct phases: a scaffolding phase where students were introduced to comic methodology and correlated creative work with chosen SDGs together before engaging in an application phase, producing digital or hand-drawn comics independently. The quantitative analysis of the pre-post survey responses of the students showed significant improvements in their SDG awareness and learner autonomy by 65% and 46%, respectively. Qualitative data, collected through interviews, observations, and a comprehensive viva, reiterated the same, answering the research questions positively on enhancing SDG awareness and learner autonomy through digital and traditional comics creation tasks.

Keywords: Traditional and digital comics, Sustainable Development Goals, SDG awareness, learner autonomy, mixed-methods classroom intervention.

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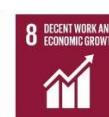
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1. Introduction

In the modern world, where visual communication and digital connectivity are becoming increasingly prominent, new and innovative teaching methods are needed to engage students and deepen their understanding of complex issues (Brown, 2023; Raje & Swarnalakshmi, 2025). Comics, a visual narrative with an added textual element, offer an engaging way to enhance learning performance, especially in design education, where creativity and expression are highly valued. The originality of the current study lies in its structured approach that guided students to design comics focused on SDGs, rather than allowing the usual freedom of choosing topics that often remain irrelevant or trivial. This guided approach is a straightforward strategy devised by the authors to raise awareness of global issues and foster a sense of ownership in the learning process, motivating students to experiment with and utilise both traditional and digital AI-based tools in creating their comics. These practices align with the new paradigm of education that emphasises learners' autonomy, which involves self-direction and increased responsibility throughout the learning journey, critical for developing competent problem solvers (Deci & Ryan, 2000).

The use of comics in education is slowly moving beyond the stereotyping it achieved of being synonymous with entertainment, to establish itself as a viable instructional tool (Cary, 2004; Knowles, 1975). It has also been shown that using comics is a very efficient way of increasing the levels of student motivation and knowledge retention (Blanchette, 2011). Comics are a form of visual media; thus, they are especially useful to various learners, such as students with second language English (enabling them to benefit through contextual clues aiding comprehension) (Brown, 2023). Besides, comic creation process enables students to develop a sense of self-empowerment and enables them to apply course learning content in a personal and meaningful way (Manning-Lewis, 2011).

The priority given to Sustainable Development Goals (SDGs) is essential in modern education as it helps students develop the skills to solve problems using the knowledge they have and innovate to make a change in the world (Raje & M. Arjunan, 2026). Teaching SDGs will make the students think critically about matters related to environmental sustainability, social justice, and economic equity (United Nations, 2015). With their potential to exhibit complicated stories with universal messages in a relatable manner, comics can be used as an effective resource when it comes to increasing awareness and encouraging students to learn more about these vital international causes.

Moreover, there is a recent boom in artificial intelligence (AI), which provides efficient ways to support the creation of comics. The AI tools have the potential to simplify the creative process so that students can tend to content creation and storytelling with relatively higher efficiency and clarity when representing their knowledge (Perera et al., 2023; Sarpparaje, 2022). Nonetheless, one should also take into account the worth of the conventional comic-making techniques that help to achieve the depth of creativity and individuality in the arts. Here, the study aims to draw parallels and differences between the two methods in terms of how well it can raise awareness of SDGs and encourage independent study.

To explain the interaction between creating comics, learner autonomy, and awareness of SDGs, the research will apply a mixed-methods classroom intervention divided into two phases. During the scaffolding stage, students will be introduced to the basics of comic creation and will be directed to choose particular SDGs to correspond to their work of creativity. This directive will help to create relevance and purpose in their comic creation

assignment. The following application stage ensures that students have the space to individually create their comics, either on a digital platform or manually, hence further cementing their knowledge about the selected SDGs in a medium that triggers the creative side of their personality as well as self-awareness. Although the integration of comics and SDGs in education might have its benefits, there is still a lack of knowledge in how these two elements can be efficiently combined to support not only subject-related tasks but also general awareness of world problems. Moreover, the differences between traditional and AI-based practices related to comic creation and their effect on the level of student learning and engagement with SDGs have not been comprehensively addressed in design education.

To address these gaps, this study will attempt to respond to the following research questions:

1. How does the process of creating comics, both through traditional and AI-enhanced methods, impact students' awareness and understanding of Sustainable Development Goals?
2. How does comic creation foster learner autonomy in design students?
3. What are the benefits and challenges of traditional and AI-enhanced comic creations in promoting SDG awareness and learner autonomy?

Finally, the research will make a significant contribution to the research area in the field of design studies and sustainable pedagogical practice, as it will provide evidence of the method which is effective to increase student engagement and foster learner autonomy.

2. Literature Review

The literature highlights the importance of comics creation as an effective pedagogical framework to improve engagement, thinking, and agency in the educational process, especially in the area of design that addresses the Sustainable Development Goals (SDGs). This synthesis review evaluates the main research on the multimodal advantages of comics, their use in sustainability education, the importance of AI and digital technology, and their effects on learner autonomy, as well as presents gaps unique to Design education.

Comics apply the dual coding theory, which combines images and words to enhance memory and understanding of difficult concepts such as SDGs (McCloud, 2019). McCloud (2019) highlights the ease of processing the abstract concept with the help of sequential imagery. It is an effective method to use with all learners, especially non-native speakers of English, as it gives contextual guidance (Brown, 2023).

Research shows that comics are more effective in SDG awareness than traditional ones because they communicate inter-environmental, inter-social, and inter-economic problems (Rodriguez and Chen, 2021). Comic-based sessions were observed to ensure systemic SDG knowledge with cause-and-effect relationships (Rodriguez and Chen, 2021). Likewise, Choo (2020) emphasizes multimodal narratives in arts education built on SDGs.

New AI technologies make comics more democratic, removing technical limitations and enabling writers to focus on storytelling (Nerantz et al., 2023; Perera et al., 2023). Nerantz et al. (2023) observe the contribution of AI to creative education but warn against the use of technology assistance at the expense of deep learning (p. 22). Garcia and Liu (2023) demonstrate that data can be integrated using digital platforms to provide real sustainability representations (p. 460).

Comic creation encourages self-directed learning through open-ended tasks that bolster intrinsic motivation and goal-setting, as reported by Williams and Patel (2020); Lu et al. (2022), and Mayer (2021). According to Williams and Patel (2020), 'there is an increase in autonomy because of personalized content relationships' (p. 13). Teamwork will also facilitate negotiation, reflecting the SDG teamwork requirements (Kim and Anderson, 2021). Although there is strong evidence, there are still gaps: not many studies have compared traditional and digital/AI comics with SDG awareness, and in design education in particular. This paper deals with this by comparing the two methods in a systematic intervention.

3. Methodology

The research was based on a mixed-methods classroom intervention (Creswell & Plano Clark, 2017) to investigate how the design of comics, both digital and traditional, can facilitate the creation of SDGs awareness and promote learner autonomy among design students. The respondents were 25 first-year B.Design students pursuing the 'Communication Skills' course in the odd semester 2024-2025 at Thiagarajar College of Engineering. The study was conducted in two key stages: a scaffolding stage that involved introducing comic creation techniques and relating them to the chosen SDGs, and a stage of application, where students should create their own comics. The Institutional Review Board gave ethical approval, and informed consent was obtained from all the participants.

Phase 1: Scaffolding Phase

In the scaffolding phase, students were taught the ins and outs of comic creation, which contributed to their understanding and creation of Comics explaining the SDGs. Inputs Shared:

- Techniques of Storytelling
- Character and dialogue development
- Panel layout, both using hands and with digital tools like ComicsMaker AI, Pixton, Canva Comic Strip Maker, and Storyboard That
- A discussion of the 17 United Nations SDGs, including guided brainstorming about how a comic can be relevant to the specific SDG, to internalize the process of creating a comic

Students created short comics as sample ones, either traditional or digital, based on their choice of one of the SDGs. Teachers gave individualized feedback to facilitate technical skill development and encourage group problem-solving skills among students.

Phase 2: Application Phase

In this phase, students were encouraged to create a full-length comic (8–10 panels) based on an SDG of their choice. They were given an absolute space to choose:

1. The SDG-based theme,
2. The creative mode—traditional or digital/AI-enhanced,
3. The narrative style and character set.

Production of comics took four weeks, featuring regular peer feedback sessions. The final comics were compiled for class exhibitions, peer review, and instructor evaluation. Table 1 below summarises the application phase process adapted for SDG-focused comic creation.

Week	Focus/Activity	Explanation/Outcome
<i>Week 1</i>	Introduction to Comics & SDGs	Orientation on comic creation; overview of SDGs; brainstorming relevant themes
<i>Week 2</i>	Tools & Techniques (Digital & Traditional)	Hands-on demos: Pixton, ComicsMaker AI, hand-drawing basics; selection of preferred medium
<i>Week 3</i>	Storyboarding & Theme Selection	Students developed storyboards mapping comics to specific SDGs
<i>Week 4</i>	Comic Drafting (Solo/Collaborative)	Students created sample comic drafts, integrating SDG topics and applying chosen techniques
<i>Week 5</i>	Peer Review & Feedback	Peer and instructor feedback sessions were conducted to refine narratives, visuals, and message clarity
<i>Week 6</i>	Final Comic Production	Students finalised comics (digital or traditional), addressing prior feedback and ensuring SDG message alignment
<i>Week 7</i>	Presentation & Reflection	Students presented comics, articulated creative decisions, and reflected on impacts on SDG understanding and autonomy
<i>Week 8</i>	Compilation & Exhibition	All comics compiled and (optionally) exhibited to the whole class to maximise awareness and engagement

Data Collection

Four primary data sources were used:

- Pre- and Post-Intervention Surveys measuring SDG awareness and learner autonomy.
- Semi-structured interviews exploring student experiences, tool preferences, and perceived learning impact.
- Observation Logs documenting engagement, collaboration, and creative problem-solving during both phases.
- Project Artefacts, including final comics, drafts, and storyboards, accompanied by student spoken and written reflections.

Data Analysis

Quantitative survey data were analyzed to find the percentage change in SDG awareness and learner autonomy. Qualitative data from interviews, reflections, and observations were analyzed thematically using NVivo. Triangulation across data sources helped improve validity.

Table 2 summarises the key dimensions and analysis modes.

Dimension	Data Source	Analysis Method	Key Insights Targeted
Change in SDG Awareness	Pre- and post-intervention survey items; written reflections	Descriptive statistics (percentage change), thematic coding of qualitative responses for depth of conceptual understanding	Depth and clarity of SDG knowledge via comic creation
Learner Autonomy Development	Survey responses; interview transcripts	Comparative analysis of pre/post self-assessment; thematic coding for indicators such as self-direction, decision-making, and problem-solving	Shifts in self-regulation, motivation, and goal-setting
Engagement with Traditional vs Digital Modes	Interview transcripts; observation notes	Cross-case analysis comparing tool preference, perceived ease, and creative satisfaction	Preferences, collaboration, and impact on autonomy
Narrative Quality & SDG Representation	Final comics (digital & traditional); presentation transcripts	Rubric-based content analysis for narrative coherence, visual impact, and SDG message alignment	Coverage and diversity of SDGs addressed

Sample summary of comic creation outcomes:

- Of 25 comics created: 7 focused on SDG 5 (Gender Equality), 6 on SDG 10 (Reduced Inequalities), 5 on SDG 4 (Quality Education), 4 on SDG 13 (Climate Action), and 3 on SDG 3 (Good Health and Well-Being).
- Both digital and traditional methods provided similar insights into student autonomy and understanding of the SDGs. Digital tools allowed for quick prototyping, while traditional methods encouraged deep individual reflection.

<p>Breaking Barriers (Pixton) - SDG 10</p>	<p>Learn for Life - SDG 4</p>
<p>Empowered Girls (AI platform) - SDG 5</p>	<p>A World Without Hunger - SDG 2</p>

4. Findings

The data from this mixed-methods investigation are presented according to the three core research questions framed for the study:

RQ1. How does the process of creating comics, both through traditional and AI-enhanced methods, impact students' awareness and understanding of Sustainable Development Goals?

Quantitative and qualitative evidence demonstrate that both digital and traditional comic creation significantly enhance students' SDG awareness:

- Pre- and post-intervention survey data (refer to Annexure 1 for the pre and post-intervention study questionnaire) revealed substantial gains in students' understanding of the Sustainable Development Goals. Table 4 shows that SDG awareness increased by

65%, with notable growth in the ability to connect global goals to relatable narratives. Engagement with sustainability-related issues also rose sharply (52% increase), suggesting that comic creation fostered not only factual knowledge but also personal investment in sustainability themes.

Table 4 - Quantitative Results – Pre- and Post-Intervention Survey Scores

Indicator	Pre-Intervention Avg. Score	Post-Intervention Avg. Score	% Increase
SDG Awareness (Likert 1–5)	2.6	4.3	65%
Engagement with Sustainability Issues	2.9	4.4	52%

- Qualitative reflections revealed that students developed clearer, more personal insights into SDG themes through the comic creation process, as captured in thematic coding and reflection analysis presented in Table 5.

Table 5 - Thematic Coding: Frequency of Reference by SDG in Student Comics

<i>SDG Theme</i>	Number of Comics	% of Total Comics	Indicative Codes	Sample Student Excerpt
<i>SDG 5: Gender Equality</i>	7	28%	gender bias, empowerment	"My comic about gender aimed to show girls as leaders."
<i>SDG 10: Reduced Inequalities</i>	6	24%	inclusion, discrimination	"Working on inequality made me see bias in daily life."
<i>SDG 4: Quality Education</i>	5	20%	access, learning diversity	"Education is a right; my story showed challenges kids face."
<i>SDG 13: Climate Action</i>	4	16%	climate, responsibility	"Drawing about climate made me think about my footprint."
<i>SDG 3: Good Health and Well-being</i>	3	12%	wellness, health access	"I realized health includes mental and physical parts."
<i>SDG 12: Responsible Consumption</i>	1	4%	waste, sustainability	"Being plastic free was a theme I saw everywhere."

<i>SDG 11: Sustainable Cities</i>	1	4%	safety, urban life	"My comic on safe streets is about everyday challenges."
<i>SDG 2: Zero Hunger</i>	1	4%	nutrition, food access	"Hunger is not just far away; it's real in my city."

Note: Some comics addressed more than one SDG, further expanding thematic reach

RQ2. How does comic creation foster learner autonomy in design students?

Learner autonomy appeared to be the core benefit of this comic creation process, as shown in the following thematic analysis (as recorded in Table 6) of student interviews, reflective writings, and observations (using NVivo). The most important reasons cited are:

- Permission to choose the SDG theme, narrative style, and mode of production;
- Problem-solving during the creation process;
- Autonomous research to ensure SDG focus;
- Peer review and collaborative feedback.

Table 6 - Qualitative Themes and Sample Student Excerpts

Theme	Frequency %	Sample Excerpts
Ownership of Learning	82%	"The fact that I selected my own SDG topic made me feel responsible towards what I was trying to say."
Deep SDG Connection	79%	"Sketching about gender equality made me think about real-life cases in my own surroundings"
Creative Engagement	74%	"The ability to create characters of my own choice made me feel motivated during the process."
Collaboration & Peer Learning	68%	"Peer review allowed me to notice that there were some gaps in my story and adjust the visuals accordingly."
Tool Mastery & Skill Development	65%	"AI tools supported a lot like a personal assistant- I was able to pay more attention to the plot."

RQ3. What are the benefits and challenges of traditional and AI-enhanced comic creations in promoting SDG awareness and learner autonomy?

The comparative study of AI-assisted and traditionally created comics generated interesting insights, as in Table 7.

Table 7 – An analysis revealing distinct strengths and trade-offs between the two different methods of comics creation:

Dimension	Digital/AI-Enhanced Comics	Traditional Comics
Tool Proficiency	Fast improvement in ICT/AI skillset	Enhancement of drawing/manual creation skills
Creative Control	Limited by software presets	Complete artistic autonomy
Emotional Engagement	Quick iteration, but feeling impersonal	Deeper personal and emotional investment
SDG Understanding	Visualization support is strong	Conceptualization/internalization is strong
Time/Effort	Rapid prototyping and feedback loops	More time investment, process-oriented
Collaboration	Digital tools streamlined teamwork	Traditional methods fostered negotiation

- Students who utilized the digital tools of Comics Maker AI, Pixton, and Canva Comic Strip Maker claimed that their digital literacy increased by an average of 3.1 to 4.5 (45% increase).
- Students who used traditional methods were more creative in their originality and showed greater emotional depth in peer and faculty assessment.

The qualitative feedback of the students regarding their experiences with each approach is summarized in the following table 8:

Table 8 - Comparative Student Reflection Excerpts of AI-Enhanced and Traditional Comic Creation

Category	AI-Enhanced Comics	Traditional Comics
Ease of Use	"AI made it easy to create backgrounds and characters quickly; I could focus on the story."	"Hand-drawing took more time, but I felt more connected to my work."
Creative Control	"Sometimes the AI's preset styles didn't match what I imagined."	"I had control over every detail, which allowed me to express my unique style."
SDG Understanding	"The AI helped me visualize complex SDG concepts clearly."	"Researching and drawing each panel helped me internalize the SDG principles."
Time Investment	"AI saved me time to create, and I had more space to improve my script."	"It was time-consuming, but the result felt more personal and rewarding."
Skill Development	"I gained ICT and AI literacy that I can apply in future design projects."	"I improved my drawing, inking, and visual storytelling skills."

5. Conclusion

The paper offers evidence that a combination of traditional and AI-enhanced comic creation could become an effective method for raising awareness and knowledge of the Sustainable Development Goals (SDGs) and fostering learner autonomy in design education. The two-stage intervention was structured into scaffolding and self-directed application phases. These enabled students to acquire technical and narrative capabilities, relate creative work to particular SDGs and reflective, purposeful storytelling.

The results indicated that SDG awareness and learner autonomy improved by 65 percent and 46 percent respectively, due to comic creation. Other enhancements were made in interest in sustainability matters and in ICT competency. Such findings align with the earlier studies, including those by McCloud (2019), Rodriguez and Chen (2021), Jacobs (2007), and Choo (2020) that underline the effectiveness of comics in improving comprehension. The process was also consistent with the previous research by Williams and Patel (2020), Kim and Anderson (2021), and Sarpparaje (2016) that were dedicated to the importance of creative projects in self-direction, teamwork, and intrinsic motivation development. The comparative analysis revealed that AI-enhanced tools were faster in production, faster in visualization, and developed digital literacy, whereas traditional hand-drawn tools stimulated more control over the artistic process, richness of emotions, and originality, as demonstrated by Mayer (2021) and Lu et al. (2022). These strengths complement each other and imply that a hybrid solution can be used to maximize educational outcomes and align the choice of tools with a particular learning objective, according to Sousanis (2015) and Jenkins et al. (2016).

Summing up, the current study provides answers to its research questions demonstrating that (1) both types of comic creation can effectively achieve the SDG awareness and understanding, (2) the process allows educators to promote learner autonomy as it implies creative freedom and self-directed inquiry, and (3) each of the mediums has its own benefits that can be effectively combined, as it has been described by Holec (1981) and Deci and Ryan (2000). Through the integration of imaginative visual arts and the Sustainable Development Goals (SDGs) learning experience, this approach equips students to be updated, self-sufficient, and socially responsible designers capable of changing complicated real-world problems. Since institutions strive to meet the SDGs and redefine education in the 21st century, approaches that combine creativity, technology, and critical thinking, including the one examined in the proposed study, are not only topical but also necessary, as evidenced by UNESCO (2020) and Sarpparaje (2016).

While these outcomes are promising, it is essential to recognise that no educational intervention operates in isolation from contextual and methodological constraints. The value of these findings will be better understood when considered alongside the study's limitations, which highlight areas for methodological refinement and guide directions for future research.

6. Limitations of the Study

Although study results indicate the pedagogical potential of both conventional and AI-affirmed comic production in awakening Sustainable Development Goals (SDG) consciousness and learner agency, some limitations should be addressed.

First, the small sample size ($n=25$) and the single-institutions setting of the study determine the low applicability of findings to other fields, educational grades, and cultural

environments (Creswell & Plano Clark, 2017). The findings can be related to the peculiarities of the learning environment, resources, and the teaching approach peculiar to the Bachelor of Design programme.

Second, the duration of the intervention period of eight weeks might not have been enough to determine the long-term retention of SDG awareness or the long-standing learner autonomy (Williams & Patel, 2020). This might have a more significant effect in the long-term or when there is no systematic scaffolding of learners.

Third, despite the use of both digital and traditional comic-creating methods in the research, the self-selection of the mode of creation could have added bias since students were likely to favor the medium that suited them best in terms of capabilities or their comfort zone (Nerantz et al., 2023). The fact that this preference placement discourages controlled causal inferences regarding the intrinsically superior method means that it has a disadvantage. Besides, the assessment rubrics will also need to be updated to give an evaluation of the AI-supported comic production to ensure that the true strengths and weaknesses can be determined.

Fourth, although it was easy to create prototypes and visualise them with tools like Pixton and ComicsMaker AI, all of them have pre-determined styles and limitations in visual editing, which posed a potential threat to creative originality (Lu et al., 2022). In contrast, the traditional techniques, albeit more personal, were more time-consuming and may restrict the range of narrative that might be developed.

Lastly, the study used self-reported measures of certain autonomy indicators that could experience bias due to social desirability (Deci & Ryan, 2000). In future research, objective metrics of performance or external expert ratings can be used as supplementary to subjective perceptions.

7. Future Scope of the Study

There is so much room for future research that can be and should be done in this field. First, multi-institutional and cross-disciplinary research may improve the generalisability of results, particularly in cases of STEM, the humanities, and vocational training, where visual narrative can meet a variety of needs (Garcia & Liu, 2023).

Second, longitudinal research is required to determine whether the results that exist on the positive impact on the dimension of SDG awareness and the autonomy of learners are maintained over the long term, even outside the systematic classroom setting (Rodriguez & Chen, 2021). Incorporation of follow-up observations for six months or one year subsequent to the intervention may provide more valuable information on long-term impact.

Third, the future literature could also embrace controlled experimental designs to decrease the self-selection by randomly assigning experimental participants to the traditional or AI-augmented comic creation modes (Nerantz et al., 2023). These designs would assist in demystifying causal relations between learning outcomes and creation mode.

Fourth, given the emergence of generative AI tools, it might be worth investigating going forward about hybrid creative workflows involving both AI-driven prototyping and subsequent manual polish to achieve the right balance between efficiency and artwork

originality (Perera et al., 2023). The role of these combined methods in cognitive engagement, creativity, and critical thinking would be interesting to study.

Finally, interdisciplinary collaboration, including the inclusion of environmental science majors and social science students to develop SDG-oriented comics, can broaden the session topics and enhance the reality of the stories (Kim and Anderson, 2021). Such collaborations may also show the cross-sectional associations required in the actual world to address the problems of global sustainability (UNESCO, 2020; Sarpparaje et al., 2018).

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Annexure I

Pre- and Post-Intervention Survey Questionnaire

Instructions:

Please indicate the extent to which you agree with each of the following statements.

Scale:

1 – Strongly Disagree

4 – Agree

2 – Disagree

5 – Strongly Agree

3 – Neutral

Section A: SDG Awareness

1. I am familiar with the United Nations' Sustainable Development Goals (SDGs).
2. I can name at least three SDGs and explain their significance.
3. I understand how global issues like climate change, gender inequality, and food security connect with the SDGs.
4. I feel confident discussing SDG-related topics in class or peer discussions.
5. I believe it is important to integrate SDGs into my academic learning and projects.

Section B: Learner Autonomy

6. I prefer taking responsibility for how I approach and complete creative assignments.
7. I feel confident making independent decisions during project work.
8. I actively seek additional resources and knowledge beyond what is provided in class.
9. I enjoy planning, managing, and evaluating my own learning process.
10. I feel more motivated when I have creative freedom in academic tasks.

Section C: AI & Digital Tool Proficiency

11. I am comfortable using digital tools (e.g., Canva, Pixton, Storyboard That) for creative expression.
12. I can efficiently use AI-powered platforms to design or create digital content.
13. I can troubleshoot basic issues while using digital or AI-based design tools.
14. I understand how to adapt technology tools to fit the needs of my creative project.
15. I feel confident integrating multiple digital tools into a single project.

Section D: Engagement with Sustainability Issues

16. I care about sustainability and global challenges such as pollution, clean water, and climate change.
17. I try to reflect sustainability themes in my creative or academic work.
18. I feel emotionally invested in the idea of building a better, more sustainable future.
19. I am more likely to notice sustainability problems in real life after learning about the SDGs.
20. I would like to take part in future projects focused on sustainability and social justice.