



Students' Creativity, Originality, and Use of Generative AI in Irish Art, Design, and Technology Education



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Abstract

The introduction of large language models to creative and technical education has exacerbated the discussion around their impact on student creativity and cognitive growth. Although productivity improvements have been in the spotlight of many studies, there has been less emphasis on the impact of continued algorithmic support on creative confidence and student work uniqueness. This paper fills this gap by conducting a quantitative survey on 100 undergraduate and postgraduate participants from two Irish institutions, Dún Laoghaire Institute of Art, Design and Technology (IADT) and Atlantic Technological University (ATU), representing varying disciplinary backgrounds. The group consisted of 31 female participants and 69 male participants, stratified to reflect disciplinary variance. The survey investigated trends in generative AI utilization, attitudes towards creative self-efficacy, and student perceptions of originality and ideational similarity. Results show a high degree of ambivalence. There was broad support among participants to use ChatGPT to increase efficiency in time, facilitate idea generation, and explain concepts; nevertheless, most complained of a lack of confidence and work becoming more generic. It is important to note that 68.0% said that their ideas were more similar to those of other users and 71.0% thought that even what they considered as original ideas showed similarities with regular AI-generated work. These findings suggest that AI-aided writing has pedagogic benefits but also implies cognitive reliance, standardisation, and absence of intellectual originality in areas that place emphasis on originality. The research contributes to concerns regarding cognitive offloading and the necessity of educational systems that do not compromise independent thought.

Key Words

ChatGPT, Large Language Models, Creative Cognition, Intellectual Homogenisation, Higher Education Policy, Generative Artificial Intelligence, Cognitive Delegation, IADT, Atlantic Technological University

Introduction

One of the most significant-and-thus-far-fastest technological changes in modern academic practice is the use case of large language models in higher education (Youcefi et al., 2023). Learners are starting to habitually apply tools

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like ChatGPT to brainstorming, summarising, composing and revising academic tasks. Their use has led to intense speculation regarding the future impact on how students learn, especially in areas where originality, creativity and personal expression are key to school performance. These questions are particularly acute in art, design, and technology education, two areas of the two institutions that this research proposes the study. To a certain number of researchers, the generative AI can provide students with helpful scaffolding to facilitate the development of ideas and break through the obstacles to expression (Doshi & Hauser, 2024; Fisher et al., 2025; Mei et al., 2025). To others, it has the threat of cognitive dependency, which reduces the variety of ideas that students produce and homogenises the originality of their work (Anderson et al., 2024; Moon et al., 2025; Zhou et al., 2026). This conflict is the context of this current research.

The current state of higher education in Ireland reflects diverse institutions with distinct pedagogical priorities and student populations (Irfan et al., 2023). Dún Laoghaire Institute of Art, Design and Technology focuses on creative arts, media, and technology, emphasising originality and creative voice. Atlantic Technological University is a wide applicant educational institution in engineering, business and sciences. Irish technological university actively incorporates academic rigour and industry-oriented education with a wide range of students with various perceptions and interpretations of generative AI.

Traditionally, creativity is used in the context of educational research as the possibility to develop new but contextually appropriate ideas or products (Sternberg & Lubart, 1999; Runco & Jaeger, 2012). Generative AI systems that arbitrate production by matching probabilistically-paired patterns make this definition complex. Amabile (1982) provides the componential theory of creativity that separates domain-based knowledge, processes associated with creativity, and intrinsic motivation. The tools used in work that is aided by AI might smooth out or enhance fluency without the need to foster innovative thinking, reflective risks or intellect, most notably in art, design and technology, where the process is just as important as the results.

Recent empirical research points to AI-mediated dynamics of creativity. Creative tasks can be more effectively achieved with the help of generative AI though at the cost of idea diversity. Stories that were assisted by AI were better rated but more similar in nature (Doshi & Hauser, 2024). Likewise, large language model productions were more likely to cluster compared to the productions of conventional creativity procedures (Moon et al., 2025). Moreover, certain short-term gains might not continue following AI withdrawal whereas the homogeneity effects might still persist (Zhou et al., 2026). These results indicate that short-term efficiencies can be at the expense of using slower cognitive and creative development.

However, controlled experiments do not fully capture real educational contexts. Students typically engage with AI under assessment pressures, time constraints, and varying digital confidence. Tensions between support and dependency, efficiency and originality, are more visible in such settings. Therefore, this study shifts focus to everyday experience by surveying 100 undergraduate and postgraduate students at IADT and ATU, examining ChatGPT use, its impact on creative thinking and self-efficacy, and perceptions of ideational convergence (Irfan et al., 2025).

The paper does not make the assumption that ChatGPT is always beneficial or harmful to creativity. Rather, it is interested in knowing how students themselves solve the advantages and disadvantages of algorithmic assistance when working in their own academic assignments. This way, it hopes to add to a more context-sensitive and complex view of the connection between generative AI and student creativity, and shape the pedagogic and policy reactions that uphold the intellectual values that higher education is supposed to develop.

The study also provides insight on whether the concerns of originality, ownership, and convergence of ideas are framed by disciplinary location in addition to the technology itself through its attention to the students in specialised creative institutions and a multi-disciplinary technological university.

Literature Review

Creativity, Originality, and the Challenge of Algorithmic Mediation

Whether creative work is done in an age of algorithmic aid has rekindled debates on the history of the psychology of creativity and authorship. Traditional definitions, focusing on novelty and usefulness (Sternberg & Lubart, 1999; Runco & Jaeger, 2012) can be of value, but get slippery when the author is not the sole creator of the ideas he/she shares. It is especially applicable here in the manner in which the distinction between psychological and historical creativity separates between the novelty of a particular idea to the individual and novelty of a given idea to the wider culture. An AI-generated suggestion can be mature and feel like a piece of creative writing to a student. In contrast, that same suggestion may be highly familiar across a population of users, offering little historical or disciplinary originality. This distinction matters for higher education because academic and creative work is evaluated not only for technical competence but also for independence, critical engagement, and contribution to scholarly or artistic conversation.

Creativity in education is perceived as a skill acquired via experience, criticism and internalisation of disciplinary expectations (Amabile, 1982). Teresa Amabile determines three critical elements, namely domain-relevant skills, creativity-relevant process, and intrinsic task motivation. Generative AI can both aid domain knowledge and lower the cognitive load which can be used to think on a higher order. But it can impair processes of creativity-relevant forms by reducing the idea-generation and refinement processes of iteration, and influence motivation of a task by changing the sense of ownership, interest, and intellectual investment in their work (Mei et al., 2025).

Recent research on Irish higher education underscores the same apprehensions. Irfan et al. noted that students themselves prioritize efficiency, and ease of use and indicated dependence, lack of critical thinking, and uncertainty regarding its authorization (Irfan et al., 2023a). This is also accompanied by optimism and anxiety among students, who are afraid that their intellectual development will be damaged (Irfan et al., 2023). These results point to possible educational implications of generative AI, which go beyond the quality of the output to encompass process, perception, and the changing student-tool relationship.

Another issue is the authorship and intellectual ownership. The agency of the students in generating and supporting ideas is a measure of originality in higher education (Kusano et al., 2016). AI-produced ideas make it more ambiguous where the supportive and creative processes merge, which challenges the idea of ownership, responsibility, and agency in work that has been influenced by the algorithms, particularly in the sphere where individual judgement is important (Katsenou et al., 2025).

Mechanisms of Influence: Cognitive Offloading, Anchoring, and Standardisation

Generative AI can potentially affect the creative thinking process in a variety of hypothetical ways. The former is cognitive offloading, which is being more prone to decrease mental strain by depending on external assistance (Chirayath et al., 2025). This can be useful during the writing process and in a creative process: cognitive load that is conserved by instruments that hone the mind can allow students to focus upon a higher state of concern like conceptual sense or aesthetic judgments. Yet, continual outsourcing of cognitive labour could also undermine the processes of creative development. By simply habitualizing ideation to AI, students might miss the chance to practice thinking of, testing, and refining ideas independently as they do themselves. This can result in them losing creative self-efficacy (Irfan et al., 2023b). The current research does not presume that offloading is the cause of cognitive deterioration but acknowledges that the balance of support and development is sensitive and context-specific.

The second mechanism is anchoring. The output of a language model can confine the selection of alternatives that a user will then contemplate when a language model offers an initial response as a phrase, a structure, or a concept. The AI can reduce the space of potential ideas by providing a likely starting point that is hard to leave. Timely encouragement techniques and critical analysis could help reduce this impact; when students blindly accept AI outputs, anchoring reduces ideational diversity (Irfan & Murray, 2023a; Irfan & Murray, 2023b).

The third mechanism works at the collective level, where students using similar AI systems converge, leading to homogenisation or standardisation. AI-assisted outputs are more similar and less diverse than human-generated ideas (Doshi & Hauser, 2024; Moon et al., 2025), with effects persisting over time (Zhou et al., 2026), reducing intellectual diversity.

Empirical Evidence: Gains, Losses, and the Student Experience

Empirical research on generative AI in the educational domain has been expanding at a rapid pace yet it is still disjointed. The benefits are highlighted by some studies. Fisher et al. (2025), in a randomised controlled trial, found that ChatGPT enhanced business students' creative performance, particularly for less confident writers. According to Mei et al. (2025), AI support increased the quality and fluency of creative writing products but decreased the feeling of experience and originality of the students. The same findings regarding positive and negative impacts on individual creativity and negative impacts on collective diversity were presented by Doshi and Hauser (2024).

Other research focuses on student experience. At the University of Limerick, students admired AI efficiency but reported over-reliance and loss of autonomy (Irfan et al., 2023b; Irfan et al., 2023). Varying AI literacy may lead to blind approval of generic outputs, showing impacts depend on pedagogy and awareness (Bacha et al., 2026).

The current work expands on this literature with two approaches that put the creative practice at the center of the research (IADT), and the multi-campus technological university approach used in the ATU but covering a wide spectrum of applied disciplines (ATU). The experience and meaning-making process of generative AI by students in such contexts can be different than patterns seen in more traditional university contexts. The research, thus, adds to a more discriminative perception of the role of AI in Irish higher education.

Pedagogy, Policy, and the Conditions for Creative Development

One of the recurring ideas in the literature is that educational impacts of AI do not rely on the technology per se but on the circumstances of its utilization. Irfan et al., (2023c) suggest that the official policy should not only focus on misconduct and integrity but also those of pedagogy, staff development and the environment of critical engagement. The policy framework on generative AI offered by the O'Sullivan et al. (2025) is based on this point of view, as it focuses on human control, AI literacy, data control, and integration of AI in teaching and learning in a manner that does not diminish academic integrity and intellectual growth.

Pedagogically, attention should shift from viewing generative AI as only a productivity tool to an object of reflection. Irfan and Murray (2023a, 2023b) highlight prompt writing, intentionality, assessment, and adaptability to ensure AI enhances rather than substitutes student evaluation. Bacha et al. (2026) argue in favor of formal AI literacy as it would lessen blind use and facilitate reflection. Engagement is also molded by disciplinary context (Qu et al., 2024). In creative domains, originality and voice are prioritized and in technical settings AI is seen as the means of efficiency and solving problems (Li et al., 2025), shaping attitudes towards creativity, reliance, and ownership.

The current paper finds itself in the context of this larger discussion. It does not seek to judge the goodness or badness of AI to creativity, but to learn how students themselves perceive the tensions AI brings to their academic

activities. Learning by listening to the student perceptions, it aims to inform the responses of pedagogical and policy-making that are sensitive to the actual conditions of learning in the Irish art, design, technology, and applied education.

Gaps in the Literature and Research Questions

Although the body of research has been increasing, there are still a number of gaps. To start with, the current literature body concentrates on general attitudes or usability or ethical issues instead of creativity and ideational convergence as a research problem (Melker et al., 2025; Irfan et al., 2023a; Irfan et al., 2023b). Second, although valuable, experimental literature on the topic of homogenisation tends to focus on short-term and tightly controlled activities that might not correspond to the long-term and regular application of AI in real-life academic settings. Third, the research on specialised creative institutions with a mission or on the technological university sector in Ireland is limited.

The current research that fills in these gaps includes three related fields: tendencies in using ChatGPT among students at IADT and ATU, self-reported impact on creative ideas and creative self-efficacy, and perceived indicators of ideational convergence. The investigation is facilitated by three research questions:

RQ1: What are the patterns of ChatGPT usage among university students at IADT and ATU, including frequency of use, typical applications, and perceived benefits?

RQ2: How do students perceive ChatGPT's influence on their creative thinking processes, including effects on idea generation, originality, and creative self-efficacy?

RQ3: What evidence exists for perceived homogenisation in students' ideational patterns, including observed similarity to peers' ideas and difficulty generating original concepts independently?

Methodology

Research Design

The context used in this study was a cross-sectional survey, aiming at analyzing how students use ChatGPT to approach academic assignments, their perceptions about the impact of this application on creative thinking and creative self-efficacy, and whether students notice the existence of similarity and convergence in ideas and written presentations. The chosen survey design was the size of the sample since it was decided to reveal the daily practice of students in the usual life situation rather than their behaviour in a laboratory environment. The research hence concentrated on self-reports of experiences and perceptions as opposed to direct measurement of creative performance.

Sample and Sampling Strategy

The population of study included undergraduate and postgraduate students of two institutions of higher learning in Ireland; the Dún Laoghaire Institute of Art, Design and Technology (IADT) and Atlantic Technological University (ATU). A stratified quota method was adopted to also provide variations in terms of institutions, field of study and level of study.

There were 100 students in the sample, 50 of them each were selected in one of the institutions. There were 31 female and 69 male respondents out of the entire sample. The age of the participants was between 18 and 40 years old with an average age of 23.1 with a standard deviation of 3.4. The sample at IADT consisted of students representing the creative and technological interest of the institution: Creative Arts and Media (n = 18), Design and Visual Communication (n = 14), Film and Media (n = 10), and Technology and Psychology (n = 8). Students at ATU were recruited to a variety of disciplines on its various campuses: Engineering and Computing (n = 14), Business and Management (n = 12), Health and Social Sciences (n = 10), Humanities and Creative Arts (n = 8),

and Science and Technology (n = 6). The sample was comprised of students of varying levels of study, starting with first year undergraduate students up to taught postgraduate level students.

The recruiting of all participants was done in October and November 2025 by distributing emails to the institutions, student societies via social media, and recruiting stands in the campus. A token reward was provided as a reward to the time needed to fill in the survey.

Instrument Development

The measurement was conducted with a structured questionnaire developed online to measure the data. This instrument was developed based on the current studies on how students use generative AI, AI literacy, creative self-efficacy, and worry about originality, dependency, and similarity of work assistance in AI. The list of items was guided by the literature reviewed in the previous sections and the objectives of the given study, which was narrowed down to creative thinking perceptions, independent ideation, and convergence in student work.

In order to reinforce content validity, the draft questionnaire was examined by four academic colleagues who have experience in educational technology, research on creativity, survey design and policy of higher education. Their feedback added modifications in wordings, order and clarity of items. The revised version was further pilot tested on 12 university students that were not included in the final sample. Refinement of the wording was done with pilot feedback so as to make the responses clear.

Survey Structure and Measures

The last questionnaire comprised of six parts. The questionnaire comprised the following questions, which conveyed demographic data; age, gender, institution, discipline, and level of study in the first part. The second patterns of use of ChatGPT analyzed, such as frequency, common tasks, and estimated weekly use. The third one dealt with perceived benefits, such as assistance in generating ideas, saving time, mastering a challenging one, and being sure about getting down to academic work. The fourth one specialized in creative thinking and creative self-efficacy in perceived originality, confidence in the ability to independently produce ideas, and the perspectives of intellectual ownership. The fifth one was a perceived convergence, where the participants were questioned on whether the idea or written work was coming closer to statements or work done by other students utilizing ChatGPT. The last section prompted short, open-ended thoughts about perceived impacts of ChatGPT on the thinking and writing of the participants.

Five-point Likert scale of strongly disagree to strongly agree was used to measure most attitudinal items. The ordered response categories involved frequency items, and frequency items were used where task-use questions allowed options more than one choice.

Data Collection Procedures

In November and December 2025, the data collection was done through Qualtrics. The participants were given the questionnaire by a study link sent out during recruitment. An information sheet detailing the purpose of conducting the study, that it was a voluntary exercise and that the data would be anonymised and aggregated in reporting was given to each participant before the survey itself. Prior participation was done through electronic consent.

Measures were put in place to minimize the chances of having duplication of responses by disseminating the survey using controlled access routes. Ethical permission to proceed with the research was given by appropriate research ethics committees at the involved institutions.

Data Analysis

The analysis of quantitative data was done in SPSS version 29. Participant characteristics, patterns of ChatGPT use and levels of agreement with the survey items were summarized using descriptive statistics. Where possible, means and standard deviations of Likert-scale items were computed and percentage distributions reported to facilitate the interpretation. In the case of a few items, response categories were broken down to higher levels of agreement to make the findings more comprehensible.

The analysis of the inferential kind was exploratory. Gender-based differences were analyzed by using independent-samples t-tests and one-way analysis of variance was applied to determine the differences in responses between institutions and disciplinary groups. In statistically significant disciplinary differences, Tukey post hoc tests were taken to compare the pairwise differences.

Thematic analysis was done to examine responses to the open-ended items to further interpret the survey results. The analysis was conducted according to the steps described by Braun and Clarke (2006), familiarisation, initial coding, theme development, review and refinement. These qualitative reactions were not seen as a qualitative dataset in its own right. They were instead employed to put patterns identified in the survey in perspective and shed light on them.

Methodological Limitations

A number of constraints are to be mentioned. First, causal inference cannot be made when considering the cross-sectional design. The research captures reported experiences and perceptions at one time and is not able to determine whether originality and creativity are altered due to the use of ChatGPT or not. Second, the analysis is based on self-reports. The views that were formed by the participants about creative, dependent or similarity of ideation might not reflect on the actual performance. Third, the sample was not intended to be statistically representative, although being the students of two different institutions and the variety of disciplinary areas. Fourth, there might be recall bias or social desirability bias in responses, particularly with respect to making independent decisions, originality, and use of AI tools.

The results must however be taken as a report of student perceptions and reported practices and not an actual test of measurable cognitive change.

Findings

Patterns of ChatGPT Use

Use of ChatGPT was widespread across the sample. Of the 100 participants, 96 reported using ChatGPT at least once, and 88 reported using it in the previous month. The reported frequency of academic use varied. Twenty-four participants reported daily use, 34 reported using it several times a week, 24 reported weekly use, and 18 reported rare or no use. Because the final category combines infrequent use with non-use, it should not be interpreted as indicating non-use alone.

Participants reported an average of 4.9 hours of ChatGPT use per week ($SD = 4.1$), with responses ranging from 0 to 22 hours. No statistically significant gender differences were found for usage frequency, $t(98) = 0.76$, $p = .45$, or weekly hours of use, $t(98) = 0.94$, $p = .35$. Differences across disciplinary groups were significant, $F(9,90) = 2.12$, $p < .05$, with Engineering and Computing students at ATU reporting the highest average weekly use ($M = 6.5$ hours). Creative Arts students at IADT reported the lowest ($M = 3.2$ hours). No statistically significant differences were observed across institutions, $t(98) = 1.21$, $p = .23$.

Table 1

Reported Uses of ChatGPT by Task Type (N = 100, Multiple Responses Allowed)

Task type	n	%
Academic uses		
Explaining concepts	78	78.0
Brainstorming ideas	76	76.0
Summarising readings	72	72.0
Drafting written assignments	68	68.0
Checking grammar and style	64	64.0
Generating research questions	58	58.0
Coding	44	44.0
Translating texts	40	40.0
Non-academic uses		
Learning personal interests	58	58.0
Planning and organisation	52	52.0
Creative projects	48	48.0
Personal writing	42	42.0
Entertainment	36	36.0

The most commonly reported uses were explaining concepts, brainstorming ideas, and summarising readings. This suggests that students used ChatGPT mainly as a support tool for understanding and starting tasks, rather than solely for highly specialised functions.

Perceived Benefits of ChatGPT

Participants reported strong practical benefits from ChatGPT use. The highest levels of agreement were recorded for time-saving, support for idea generation, and help with understanding difficult concepts. Lower agreement was observed for the statement that ChatGPT provides original and creative ideas. This pattern suggests that students largely viewed the tool as useful and efficient, but not always as a source of originality in itself.

Table 2

Perceived Benefits of ChatGPT (N = 100)

Item	Mean	SD	Agree/Strongly agree n	Agree/Strongly agree %
Using ChatGPT helps me generate more ideas than I could on my own	4.3	0.8	86	86.0
Using ChatGPT improves the quality of my academic work	4.1	0.9	78	78.0
Using ChatGPT saves me time on academic tasks	4.5	0.7	92	92.0
Using ChatGPT helps me overcome writer’s block or creative blocks	4.2	0.8	84	84.0
Using ChatGPT helps me understand complex concepts more easily	4.3	0.8	86	86.0
Using ChatGPT improves my confidence in tackling challenging assignments	3.9	1.0	70	70.0
The ideas ChatGPT provides are generally original and creative	3.7	1.1	62	62.0
I can usually improve upon ChatGPT’s suggestions to make them my own	4.0	0.9	76	76.0

A statistically significant gender difference was found for perceptions of originality. Male participants rated ChatGPT’s ideas as more original on average (M = 4.0, SD = 0.9) than female participants (M = 3.5, SD = 1.1),

$t(98) = 2.61, p < .01$. This result concerns perceived originality rather than any direct assessment of originality in student work.

Creativity, Ownership, and Independent Thinking

The answers on the creativity and independent thinking were more versatile than the ones on the usefulness and efficiency. Only a little more than 50% of the respondents stated that they felt that they were really engaged in creative thinking when working with ChatGPT. Simultaneously, significant shares stated that they struggled to come up with ideas without it and were worried that using the tool could make them less creative, and unclear about whether they felt the work with AI assistance was entirely theirs.

Table 3
ChatGPT and Perceived Creative Processes (N = 100)

Item	Mean	SD	Agree/Strongly agree n	Agree/Strongly agree %
When I use ChatGPT, I feel I am genuinely engaged in creative thinking	3.4	1.2	54	54.0
Since I started using ChatGPT regularly, I find it harder to generate ideas without it	3.8	1.1	64	64.0
I worry that relying on ChatGPT is making me less creative overall	3.6	1.2	60	60.0
When I try to be creative on my own, my ideas often resemble what ChatGPT would generate	3.5	1.1	58	58.0
I have noticed that my ideas are becoming more similar to those of my classmates who also use ChatGPT	3.9	1.0	68	68.0
Sometimes I think an idea is my own, then realise ChatGPT suggested something similar earlier	4.0	0.9	71	71.0
I feel a sense of ownership over work I produce with ChatGPT assistance	3.2	1.2	44	44.0
I am confident in my ability to be creative without using AI tools	3.4	1.1	52	52.0
Using ChatGPT has changed how I think about my own creativity	3.8	1.0	64	64.0
I would describe my relationship with ChatGPT as collaborative rather than dependent	3.5	1.1	56	56.0

These results indicate that participants often distinguished between using ChatGPT effectively and experiencing that use as fully creative or fully owned. The strongest agreement was recorded for the view that an apparently original idea might later prove similar to a previous AI suggestion, and for the perception that ideas were becoming more similar among users. By contrast, fewer than half of participants reported a strong sense of ownership over AI-assisted work.

Table 4
Gender Differences in Selected Creativity-related Perceptions

Item	Male M (SD)	Female M (SD)	t	p
I feel a sense of ownership over the work I produce with ChatGPT assistance	3.5 (1.2)	3.0 (1.1)	2.34	< .05
I am confident in my ability to be creative without using AI tools	3.6 (1.1)	3.2 (1.0)	2.42	< .05
The ideas ChatGPT provides are generally original and creative	4.0 (0.9)	3.5 (1.1)	2.61	< .01

Male participants reported higher levels of perceived ownership, greater confidence in unaided creativity, and more positive evaluations of the originality of ChatGPT’s ideas.

Table 5
Confidence in Unaided Creativity by Disciplinary Area (Selected Groups)

Discipline	Mean	SD
IADT Creative Arts and Media	3.0	1.1
IADT Design and Visual Communication	3.1	1.0
ATU Humanities and Creative Arts	3.3	1.1
ATU Business and Management	3.4	1.0
ATU Engineering and Computing	3.7	1.1

ANOVA across all groups: $F(9,90) = 2.48, p < .05$

Post hoc Tukey comparisons indicated statistically significant differences between IADT Creative Arts and Media and ATU Engineering and Computing ($p < .05$). Students in creative disciplines reported lower confidence in their ability to be creative without AI tools than students in engineering and computing.

Perceived Similarity and Convergence

Participants frequently reported that ChatGPT tends to generate similar responses across users and that sustained use may contribute to greater similarity in ideas and written work. These responses are consistent with the broader pattern shown in Table 3, in which many participants also reported a growing similarity between their own ideas and those of other ChatGPT users.

Table 6
Reported Observations of Similarity and Convergence (N = 100)

Item	Most relevant response category	n	%
Have you ever noticed that ChatGPT tends to give similar responses to different people asking similar questions?	Often/Very often	74	74.0
Have you ever discussed ChatGPT use with classmates and discovered you received nearly identical suggestions?	Often/Very often	64	64.0
Do you feel that your ideas have become more similar to those of peers who also use ChatGPT?	Slightly/Much more similar	68	68.0
Have you ever submitted an idea you thought was original, only to discover it was a common ChatGPT suggestion?	Several times/Frequently	56	56.0
In your observation, do students who use ChatGPT heavily tend to produce work that looks similar to each other?	Slightly/Much more similar	72	72.0
Have you ever deliberately avoided using ChatGPT because you wanted your work to be more original?	Often/Always	38	38.0

Table 7
Agreement with the statement: “If everyone uses ChatGPT, everyone’s ideas will start to look the same” (N = 100)

Response	n	%
Strongly disagree	4	4.0
Disagree	6	6.0
Neutral	14	14.0
Agree	40	40.0
Strongly agree	36	36.0

Overall, 76 participants (76.0 per cent) selected either agree or strongly agree with the statement that widespread use of ChatGPT would make students' ideas look more similar. At the same time, only 38 participants (38.0 per cent) reported often or always avoiding ChatGPT to preserve originality. This suggests that awareness of possible convergence did not consistently lead to avoidance of the tool.

Open-Ended Responses

The open-ended responses provided some background to the results of the survey. There were four recurrent themes: the conflict between being efficient and independent in mind, the role of AI recommendations on subsequent ideation, decreased belief in self-directed creativity, and the sense of similarity between student work.

ChatGPT was useful to many participants in their initial phases of work, with some mentioning that they felt unsure how to get started, or had a hard concept that they needed clarified. Meanwhile, some of the answers indicated that preliminary AI recommendations would influence the evolution of subsequent thought. According to one IADT student: It helps to come up with some ideas to start with, but I have a difficulty in abandoning the first idea; it slightly predetermines a path to follow, which is difficult to get off. Issues of ownership continued to come up, with some participants expressing the feeling that despite extensive rewriting, a strong sense that the end idea was their own did not always emerge. One ATU student commented: I think the main idea is being copied by the AI and when I edit it, I do not know whether it is mine or not.

Other reactions were directed at similarity among student work, and the respondents defined AI-assisted work as skillful but generic. A different IADT student wrote: "I have encountered classmates whose projects clearly used ChatGPT, and the projects have the same aesthetic, the same type of wording, the same format. It is just that we all are using the same template. Such remarks fail to present direct evidence on the cognitive change. They however back up the quantitative results by demonstrating that a number of students had a dualistic perception of how they have utilized ChatGPT, acknowledging its usefulness and its potential threat to originality, ownership, and intellectual uniqueness.

Discussion

Interpreting the Findings: A Story of Ambivalence

The results of this study describe a picture of ambivalence. On the one hand, IADT and ATU students have adopted ChatGPT as an effective way to maneuver through the challenges of academic and creative tasks. They appreciate it because of its effectiveness, ability to produce ideas and handiness in explaining intricate concepts. These are not trivial benefits. In a context where students face increasing time pressures and the transition to university-level creative and academic work can be daunting, the availability of a tool that lowers the barrier to engagement is understandably appealing. The widespread adoption of ChatGPT, evident in the fact that 96 per cent of participants had used it at least once and 88 per cent within the last month, reflects a genuine pedagogical affordance that institutions cannot afford to ignore.

Students who praise ChatGPT's utility also report concerns central to higher education, especially in creative and applied disciplines (Almeshal 2026). A majority find it harder to generate ideas without the tool, worry about becoming less creative, and notice their ideas becoming more similar to peers who also use ChatGPT. Under 50 percent believe there is strong ownership of work generated with AI, and some admit what they thought was original became more a reflection of general AI-generated recommendations. These results imply ChatGPT use is not an uncomplicated gain, but a trade-off of convenience and reliance, help and compromise.

Of special interest are the high perceived similarity and convergence levels. More than two-thirds of respondents said that they felt that their ideas were getting closer to those of peers who use ChatGPT, and 71

percent had found themselves having the disturbing experience of discovering that the idea they thought was unique actually was a generic output of artificial intelligence. These views are in accordance with the experimental data about the homogenisation (Doshi & Hauser, 2024; Moon et al., 2025; Zhou et al., 2026) and refer these to the whole student experience. They assure that the fears of the standardising impact of generative AI are not abstract or a mere experimental thought-through; they affect students and are expressed by them.

But the results also present an inquisitive dissociation. Though three out of four participants said that extensive use of ChatGPT would make all ideas of the people seem alike, just 38% said that they frequently or always use the tool to make sure that their ideas are outstanding. Such an awareness-action disjuncture points to the fact that the pressing needs of the academic present, time, and grading requirements and the urge to accomplish work competently can be overwhelming longer-term interests of originality and uniqueness. It also raises the issue of pedagogical intervention to assist students in negotiating this tension not by banning the use of AI but by setting up a place and a time where critical interaction and autonomous thought are appreciated and exercised.

The disciplinary discrepancies that are witnessed stands out especially in this research. The confidence of the students enrolled at IADT in unaided creativity was the lowest, whereas students studying engineering and computing were the highest at ATU. This could be indicative of the disparages in the discipline over originality and procedural competence or in the perceived creativity across disciplines and its practice. It can also indicate variations in the accessibility of AI literacy resources specific to a discipline or the level of incorporation of AI tools into curriculum. In creative fields where original voice creation is a core concept to focus on, AI threat to originality may be especially sharp. This observation highlights the relevance of context-specific AI interventions to education, and it recommends that schools with particular missions might need to come up with bespoke pedagogical reactions.

Relating Findings to Theory and Prior Research

The results echo with various theoretical viewpoints as explained in the literature review. Especially instrumental is the notion of cognitive offloading. The use of ChatGPT by the participants to ideate, draft and clarify their concepts forms a cognitive delegation which makes academic and creative work less urgent. However, the claimed challenge of creating ideas without the tool and lower confidence in the ability to create things without an aid can indicate that there is a cost of the offloading. The educational capabilities of AI, as Irfan et al. (2023a) put it, do not lie in its general presence but in its usage. When delegation is habitual and uncritical, the cognition processes on which the development of creative capabilities is built can be undermined.

The results also favor the idea of anchoring. The open-ended remarks of the respondents regarding being locked in by the initial suggestions made by ChatGPT, or unable to get outside the first output, demonstrate how the suggestions offered by the algorithm can limit instead of expanding the arena of potential suggestions by the algorithm. It corresponds to the focus in triggering the literature on the necessity of intentionality and critical appraisal (Irfan & Murray, 2023a; Irfan & Murray, 2023b). In case students are not challenged to interpret AI outputs, the tool might not serve as a scaffold to independent thinking but replace it.

The results also add to the literature that is proliferating on homogenisation. Whereas experimental studies have been able to report converging results in AI-assisted results in a controlled environment (Doshi & Hauser, 2024; Moon et al., 2025), the given study demonstrates that students themselves are able to perceive and describe convergence in their respective academic settings. The sense that the work generated using ChatGPT is being "genericized" or flattened is not just an issue that a researcher is worried about but a reality experience among a significant group of students. Besides, the observation that the work of many students is perceived to be similar, yet they still use AI help is indicative of a system-wide issue: each student may find the support of AI a beneficial

factor, whereas when many students seek AI assistance, the overall effect might be a reduction in intellectual and creative diversity.

Theoretical Implications: Beyond Output to Process and Perception

There are a number of theoretical implications of the study. First, it indicates that the connection between AI and creativity could not be considered in the context of the quality of output only. Those who were involved in this study differentiated between being able to create competent work, and saying they were thinking creatively when they were doing it. This difference is reminiscent of the focus on relevant processes to creativity and intrinsic motivation in Amabile (1982). It further proposes, that despite being useful, the product-centred definition of creativity can be deficient in reflecting changes in the circumstances of development of creative endeavour, a change of ownership, confidence and intellectual agency that are paramount to learning.

Second, the results affirm an understanding that AI is more of a socio-technical practice here than neutral. The impact of ChatGPT within the context of this research was not homogenous; it was different depending on gender, study, and, not the least, ways in which students perceived and connected with this tool. This unpredictability is supportive of the significance of paying attention to the contexts of application, the aims of implementing AI, and the fundamental conscious that students apply to dealings with algorithmic systems. It also conforms to the AI literacy call in the literature which extends beyond technical proficiency to include critical judging and reflective adjustment (Bacha et al., 2026; Irfan, 2025).

Third, the research proposes that perceived homogenisation may be educationally important in the contexts where the objective measures of textual similarity have not been determined. The perceptions and expectations that their work is becoming less original may affect student behavior in taking creative risks and feeling of ownership of their ideas as well as being motivated to create unique arguments or artistic work. Theorizing AI and creativity in the future ought to be vulnerable to the results of the outputs of research and it should also consider the subjective experience of creativity, authorship and distinctiveness in the learning settings.

Practical Implications: Teaching, Assessment, and Institutional Response

The results have implications in practice to teaching, assessment and institutional policy. To teach, the findings imply that AI literacy consists more than technical skills with prompts. Students will require instructions on when to apply AI and when to postpone its application, as well as how to maintain space to generate autonomous thoughts. The methods of instruction that distinguish brainstorming, drafting, revision and reflection on a task might make students more aware of which aspects of a task AI backs and which remain at the discretion of the student. Organized tasks that entail linking AI-created results with personal thoughts, following the course of the idea evolution, and explaining the rationalities of thoughtful creative decisions might make AI use more critical and reflective. These are the methods that are in line with the advice on timely writing and critical analysis evolved by Irfan and Murray (2023a, 2023b).

In assessment, the results create a problem concerning the evaluation of what is being assessed when the students hand in AI-assisted work. When students themselves show confusion in defining criteria of ownership and originality, it may be that the design of the assessment methods is not sufficient based on the polished final products. The integration of process-based evaluation (reflective commentaries, annotated drafts or oral defences) might give a better image of the intellectual and creative involvement of students and help to maintain the worth of independent thinking. It does not imply the denial of the AI-assisted work but rather the establishment of the environment where AI utilization is transparent and students are supposed to show the critical approach towards the results they create.

In the case of institutions, the implications of the findings are that policy should focus on more than misconduct or permissibility. Students require viable advice that accepts usefulness and also the constraints of ChatGPT. Such policy frameworks that integrate academic integrity advice and encouragement of critical engagement, authorship, and independent thinking have a better chance of succeeding compared to those that tend to be narrow at the concept of prohibition or detection (Irfan, 2025). The policy framework of the O'Sullivan et al. (2025), which focuses on human supervising, AI literacy, and incorporating AI in teaching and learning in a way that does not undermine intellectual maturing, can serve as the starting point. Specialised institutions with a special creative purpose like IADT might have to work towards some more specific solutions that are based on a particular premium on originality and individual voice.

Limitations and Directions for Future Research

The results are to be considered according to some limitations. The cross-sectional research design does not allow the causation. The research only captures the reported experiences at one time and is unable to determine whether or not the use of ChatGPT leads to alterations in creativity or originality. Since self-reported data is used, it is possible that the perception of a person as creative, dependent, similar, and so on, does not reflect on actual performance. The sample being heterogeneous in terms of two institutions and various fields was not intended to be statistically representative of the broader Irish student population. It is also possible that responses were impacted by recall bias or social desirability bias, especially in terms of originality and independent thinking.

These limitations could be overcome by future studies in a number of manners. There might be longitudinal studies that would monitor the shift in perceptions of students and their practices and creative abilities, as well as changes in the perceptions of students during some time interval, to help to determine the immediate adaptation of the students and the longer effects of their development. Experimental research into whether perceived convergence is related to quantifiable similarity in creative outputs might involve experimental studies that combine survey data with textual or visual interpretation. As well, research examining the functions of disciplinary culture, prior familiarity with digital, and prompting ability to influence AI use would be desired. Comparative work in alternative AI systems and across various types of higher education institutions may be useful in elucidating whether the trends identified in this instance are unique to ChatGPT or indicative of more general aspects of the implementation of large language models in education.

Lastly, further studies ought to focus on the pedagogical and policy solutions that could allow students to overcome the tensions established in this paper. How can students utilize AI in a manner that does not replace their own creative and intellectual growth or development? What types of guidance, scaffolding, or institutional support can facilitate this? What should assessment practices redesign to maintain the value of independent thought, and to adapt to the realities of AI-use? These are pressing questions, ones requiring both empirical and practical testing.

Conclusion

This study examined how students at Dún Laoghaire Institute of Art, Design and Technology (IADT) and Atlantic Technological University (ATU) use ChatGPT and their understanding of its effects on idea generation, originality, ownership, and similarity in academic and creative work. The findings show that ChatGPT is widely used and strongly valued for practical reasons. Participants reported that it saved time, supported the development of ideas, and helped them engage with difficult concepts. These benefits help explain why the tool has become part of routine academic practice.

At the same time, the results point to a more complicated pattern. Many participants reported uncertainty about the originality of AI-assisted ideas, lower confidence in generating ideas without support, and a sense that

work produced with ChatGPT may be becoming more similar across users. Fewer than half reported a strong sense of ownership over work completed with ChatGPT assistance. These findings do not show that ChatGPT directly or permanently reduces creativity. They do, however, indicate that students experience a tension between the tool's immediate usefulness and their desire to retain independence, distinctiveness, and authorship in their academic and creative work. This tension is consistent with broader work in higher education that presents generative AI as both a support mechanism and a challenge to established assumptions about creativity, authorship, and learning (Irfan et al., 2023a.; Irfan et al., 2023b; Irfan et al., 2023c).

The main contribution of the study lies in showing that this tension is visible not only in theoretical debate or experimental research, but also in students' own accounts of everyday university use, and that it takes particular forms in disciplines where originality and personal voice are highly valued. The question for higher education is how such tools can be integrated to support learning without reducing opportunities for independent thought and original judgment. A considered response to generative AI, therefore, requires more than either enthusiasm or prohibition. It requires pedagogical approaches, assessment practices, and institutional guidance that recognise both the value and the limits of algorithmic support. The challenge is not to remove AI from higher education altogether. Still, to ensure that its use does not displace the forms of thinking through which students develop confidence in ideas they can genuinely claim as their own. In creative and applied disciplines, where the cultivation of a distinctive intellectual and artistic voice is central, this challenge takes on particular urgency. The students who participated in this study are navigating the demands of academic and creative work in a context where algorithmic assistance is both a resource and a risk. How educators, institutions, and policymakers respond will shape not only the quality of their learning but also the kinds of thinkers and creators they become.

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