

INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)





TEACHING CREATIVITY IN ART AND DESIGN STUDIO CLASSES: A SYSTEMATIC LITERATURE REVIEW

Muhammad Hisyam Zakaria^{1*}, Nasaie Zainuddin², Asliza Aris³

- Department of Fashion Design, Faculty of Arts and Design, Universiti Teknologi MARA, Malaysia Email: mdhisyam@uitm.edu.my
- Department of Fashion Design, Faculty of Arts and Design, Universiti Teknologi MARA, Malaysia Email: nasaie@uitm.edu.my
- Department of Fashion Design, Faculty of Arts and Design, Universiti Teknologi MARA, Malaysia Email: arisasliza@uitm.edu.my
- * Corresponding Author

Article Info:

Article history:

Received date: 17.07.2025 Revised date: 10.08.2025 Accepted date: 17.09.2025 Published date: 10.10.2025

To cite this document:

Zakaria, M. H., Zainuddin, N., & Aris, A. (2025). Teaching Creativity in Art and Design Studio Classes: A Systematic Literature Review. *International Journal of Education, Psychology and Counseling, 10* (60), 332-338.

DOI: 10.35631/IJEPC.1060023

This work is licensed under CC BY 4.0



Abstract:

Creativity is widely regarded as a core graduate attribute in art and design education, yet its teaching and assessment within studio-based learning remain complex and contested. This study conducts a systematic literature review of empirical research published between 2000 and 2025 to examine how creativity is conceptualized, taught, and evaluated in art and design studio contexts. Using structured search strategies and defined inclusion criteria, the review identifies four dominant pedagogical approaches: interdisciplinary collaboration to broaden perspectives, scaffolded learning to nurture creative autonomy, design thinking and problem-based learning to stimulate divergent and convergent thinking, and critique sessions to foster reflective practice. Findings highlight the persistent tension between structured guidance and open-ended exploration, underscoring the need for balanced pedagogical strategies that support both innovation and institutional accountability. Significant gaps remain in cross-institutional studies and in understanding online or hybrid studio models. The review offers evidence-based insights for educators, curriculum designers, and policymakers seeking to enhance creativity in studio pedagogy while preserving its distinctive culture.

Keywords:

Creativity Pedagogy, Art and Design Education, Studio-Based Learning, Design Thinking, Problem-Based Learning

Introduction

Many people believe that creativity is a fundamental skill in the twenty first century, necessary for both individual expression and problem solving and innovation in work settings (Runco & Jaeger, 2012; OECD, 2019). The development of creativity is essential to curricular objectives and graduate qualities in higher education, especially in art and design fields (Sawyer, 2017). In these domains, the studio model which emphasizes mentorship, reflective critique, and iterative making continues to be the most popular instructional framework (Schön, 1983; Hetland et al., 2013). This methodology encourages both conceptual risk taking and technical competence by immersing students in real world, project-based learning settings that mimic professional practice (Shreeve, 2012).

Though it is a commonly acknowledged consequence, teaching and evaluating creativity in studio settings may be challenging and contentious. Researchers have observed conflicts between encouraging unrestricted inquiry and fulfilling accreditation or institutional criteria (Hall & Thomson, 2017). Additionally, the literature shows a variety of approaches, each informed by a different understanding of what creativity means, from collaborative, interdisciplinary initiatives to scaffolded skill development (García & James, 2020). Existing research on teaching creativity in art and design studios is dispersed across disciplines, geographical locations, and theoretical viewpoints, despite its educational significance (Sawyer, 2017).

A chance to synthesize these various studies, find recurring themes, and draw attention to knowledge gaps is provided by a systematic literature review (SLR). This review attempts to improve knowledge of how creativity is conceived, taught, and evaluated in art and design studio programs by combining empirical data from various contexts. Teachers, curriculum developers, and legislators looking to foster creativity in higher education while maintaining the unique culture of studio-based learning will find value in the findings.

Literature Review

There are four points will be discussed in Literature Review which is Creativity in Higher Education, The Studio Model as a Pedagogical Framework, Approaches to Teaching Creativity in Studios, Challenges in Teaching and Assessing Creativity

Creativity in Higher Education

It is well accepted that creativity is a crucial graduate quality and a necessary ability for negotiating challenging, quickly evolving work situations (OECD, 2019; Runco & Jaeger, 2012). Creativity is recognized in higher education not just for its inventive and economic potential but also for its role in social transformation, cultural advancement, and personal development (Jackson, 2006). Art and design programs prioritize creativity in their pedagogical and curriculum frameworks, although many other fields seek to foster creative thinking (Sawyer, 2017).

The Studio Model as a Pedagogical Framework

For more than a century, the studio model has dominated art and design education (Schön, 1983; Hetland et al., 2013). It entails iterative cycles of creation, criticism, and revision, frequently in a practice-based and collaborative setting. With the help of one on one or small group mentoring, students work on real world projects that mimic professional practice (Shreeve, 2012). According to Hall and Thomson (2017), the studio encourages

experimentation and views failure and risk-taking as essential components of the creative process. But its learner-centred, open-ended approach can also make formal assessment and standards difficult (García & James, 2020).

Approaches to Teaching Creativity in Studios

A variety of methods for encouraging creativity in studio settings are described in the literature currently in publication. One popular strategy is the use of design thinking techniques and problem-based learning (PBL), which promote both divergent and convergent thinking during the creative process (Goldschmidt, 2014). Another is cross disciplinary collaborative learning, which gives students access to a range of viewpoints and creative processes that enhance problem solving and idea development (Loyens & Rikers, 2011). Another popular approach is scaffolded learning, which provides detailed instructions that progressively transfer accountability from the teacher to the student, encouraging self-reliance and self-directed learning (Hmelo-Silver et al., 2007). Furthermore, critique sessions continue to be a key component of studio pedagogy, offering organised chances for tutor and peer criticism that foster introspection, critical thinking, and the development of original ideas (Blair, 2006).

There is still no standard framework for teaching creativity in art and design studios, despite these tactics. Methods frequently differ based on the ideologies of educators, the resources that are accessible, and the institutional culture (Sawyer, 2017).

Challenges in Teaching and Assessing Creativity

Evaluation of creativity is one of the most contentious topics in literature. Higher education increasingly requires quantifiable results for accountability and quality assurance, despite the fact that creativity is frequently characterized as subjective and context dependent (Jackson, 2006; Hall & Thomson, 2017). When grading rubrics stress technical proficiency above conceptual creativity, this tension might lead to a reduction in creative possibilities (García & James, 2020). Furthermore, the COVID-19 epidemic has expedited the transition towards online and blended learning, which has created additional difficulties in simulating the immersive and interactive qualities of real studio environments (Xiao Fei et al., 2025).

Gaps in Literature

Even though there is a lot of research on creativity and studio pedagogy, it is frequently dispersed across several academic fields, concentrates on a single institution, or lacks theoretical foundations (Sawyer, 2017). There aren't many systematic assessments that synthesize empirical data and pinpoint broad themes in the way creativity is taught in art and design studios. Closing this gap is essential to creating research-based teaching methods that meet the needs of modern education while maintaining the unique studio learning culture.

Methodology

To find, assess, and synthesize the body of empirical research on the teaching of creativity in art and design studio classes, this study uses a systematic literature review (SLR) methodology. In order to minimize bias and improve replicability, the SLR technique was chosen to guarantee a thorough and open procedure for gathering and evaluating literature (Tranfield et al., 2003; Siddaway et al., 2019).

Research Question

Three main research questions serve as the review's compass. It first aims to investigate the conceptualization of creativity in the pedagogy of art and design studios. Second, it examines the teaching strategies employed to foster creativity in studio contexts. Lastly, it explores the difficulties and limitations in the literature around teaching creativity in studio settings.

Search Strategy

To find both education focused and design focused work, a thorough search was done across a number of scholarly databases, including Scopus, Web of Science, ERIC, and Google Scholar. Boolean operators like "creativity" or "creative thinking" and "art and design" or "studio teaching" or "studio pedagogy" and "higher education" or "university" were coupled with keywords in the search queries. To represent current teaching approaches, the search was restricted to peer-reviewed journal publications published between 2000 and 2025. Included were only English-language studies.

Inclusion and Exclusion Criteria

Studies that studied the teaching of creativity explicitly in studio-based courses, presented empirical findings using qualitative, quantitative, or mixed methodologies approaches, and concentrated on higher education contexts within art and design disciplines were included in the review. On the other hand, research that focused only on K–12 education or informal learning environments, examined creativity in non-studio settings like lecture-based classes, or was merely theoretical without empirical support was disqualified. The literature chosen was guaranteed to be closely related to the research topic thanks to this inclusion and exclusion procedure (Petticrew & Roberts, 2006).

Screening Process

The search yielded an initial set of studies which were imported into EndNote for reference management. Duplicates were removed, and a two-stage screening process was applied is first on title and abstract screening to remove irrelevant studies. Second is full text review to assess eligibility against the inclusion criteria. Two independent reviewers participated in the screening process, with disagreements resolved through discussion to reduce selection bias (Kitchenham & Charters, 2007).

Data Extraction and Analysis

To gather data on study parameters (authors, year, country, and context), creativity definitions, teaching methodologies, evaluation techniques, and reported difficulties, a structured data extraction form was created. To synthesise findings and detect recurrent themes in the literature, thematic analysis was used (Braun & Clarke, 2006). In accordance with the research questions, the extracted themes were further categorised into conceptual groups, including instructional techniques, learning outcomes, and assessment procedures.

Finding and Discussion

The results of the systematic review showed that a combination of open-ended experiential learning opportunities and structured pedagogical tactics facilitates the teaching of creativity in art and design studio programs. Design thinking and problem-based learning (PBL) have become prominent paradigms in the literature, fostering both convergent problem-solving and divergent idea production (Goldschmidt, 2014; Dorst, 2011). These approaches foster the

critical evaluation abilities required for honing design concepts in addition to encouraging students to pursue a variety of creative avenues.

The significance of interdisciplinary and collaborative learning was another important discovery. Research has shown that introducing students to classmates with varying specialisations encourages idea sharing, which produces more creative results (Loyens & Rikers, 2011; Adams et al., 2016). These cooperative settings are similar to those seen in professional creative sectors, where the ability to work as a team and negotiate is crucial.

Additionally, it was discovered that scaffolded learning was successful in fostering the growth of creative autonomy. Students gain confidence in using creative solutions on their own when instructional help is gradually reduced (Hmelo-Silver et al., 2007; McLellan & Nicholl, 2011). Constructivist ideas, which contend that creativity thrives when students are stretched just a bit above their existing capacities, are consistent with this gradual release of responsibility.

The review also emphasised how important critique sessions are as a fundamental teaching tool in studio-based learning. Peer and instructor feedback has been demonstrated to promote resilience in the face of creative setbacks, enhance reflective thinking, and support iterative development (Blair, 2006; Grey, 2013). A constructive feedback culture is necessary, as several studies have warned that badly handled criticism can deter taking risks (Blythman et al., 2007).

The conflict between structure and freedom in the education of creativity was a recurring issue in the literature. Open-ended projects encourage experimentation, but inadequate direction might result in uninspired work or flimsy results. On the other hand, excessively inflexible systems could restrict creativity (Sawyer, 2012; Hetland et al., 2013). The best strategies struck a balance between these factors and gave students a framework for taking innovative chances. Overall, the results show that an integrated approach combining experience learning, structured supervision, collaborative participation, and reflective critique is the most effective way to foster creativity in art and design studio instruction. This supports the idea that creativity is a dynamic interaction of cognitive, social, and emotional processes rather than a single skill (Amabile, 1996; Glăveanu, 2013).

Conclusion

This comprehensive assessment of the literature looked at the teaching of creativity in college art and design studio courses. The results show that a balance between opportunities for unstructured inquiry and structured pedagogical frameworks is a hallmark of successful creativity instruction in studios. Important tactics include using design thinking and problem-based learning to encourage divergent and convergent thinking, multidisciplinary and collaborative learning to broaden creative perspectives, scaffolded instruction to build autonomy, and criticism sessions to encourage reflective practice. A recurrent issue was the interaction between structure and freedom; the most effective methods gave students the latitude to take innovative chances while yet offering a supportive framework.

The article emphasises how creativity in art and design is a multifaceted process influenced by social connection, emotional fortitude, and critical thinking rather than only being a cognitive ability. To ensure that students are prepared to handle the opportunities and uncertainties that come with creative work, studio pedagogy should be purposefully created to foster all of these characteristics.

Acknowledgements

This research is self-funded. No acknowledgment needed.

References

- Adams, R. S., Daly, S. R., Mann, L. M., & Dall'Alba, G. (2016). Being a professional: Three lenses into design thinking, acting, and being. *Design Studies*, 47, 17–37. https://doi.org/10.1016/j.destud.2016.08.002
- Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity.* Westview Press.
- Blair, B. (2006). At the end of a huge crit in the summer, it was "crap"—I'd worked really hard but all they said was fine and nothing else. *Art, Design & Communication in Higher Education*, 5(2), 83–95. https://doi.org/10.1386/adch.5.2.83 1
- Blythman, M., Orr, S., & Blair, B. (2007). Critiquing the crit: A critical look at the 'crit' in art and design education. *Art, Design & Communication in Higher Education*, 6(2), 83–95. https://doi.org/10.1386/adch.6.2.83 1
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Dorst, K. (2011). The core of 'design thinking' and its application. *Design Studies*, 32(6), 521–532. https://doi.org/10.1016/j.destud.2011.07.006
- García, P., & James, L. (2020). Designing for creativity: Pedagogical approaches in art and design higher education. *International Journal of Art & Design Education*, 39(2), 325–338. https://doi.org/10.1111/jade.12290
- Glăveanu, V. P. (2013). Rewriting the language of creativity: The Five A's framework. *Review of General Psychology*, 17(1), 69–81. https://doi.org/10.1037/a0029528
- Goldschmidt, G. (2014). Linkography: Unfolding the design process. MIT Press.
- Gray, C. M. (2013). Informal peer critique and the negotiation of habitus in a design studio. Art, Design & Communication in Higher Education, 12(2), 195–209. https://doi.org/10.1386/adch.12.2.195_1
- Hall, C., & Thomson, P. (2017). Creativity in teaching: What can teachers learn from artists?

 Research Papers in Education, 32(1), 106–120. https://doi.org/10.1080/02671522.2016.1187667
- Hetland, L., Winner, E., Veenema, S., & Sheridan, K. (2013). Studio thinking 2: The real benefits of visual arts education. Teachers College Press.
- Hmelo-Silver, C. E., Duncan, R. G., & Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006). *Educational Psychologist*, 42(2), 99–107. https://doi.org/10.1080/00461520701263368
- Jackson, N. (2006). Creativity in higher education: Creating tipping points for cultural change. *SCEPTrE Scholarly Paper*, University of Surrey.
- Kitchenham, B., & Charters, S. (2007). Guidelines for performing systematic literature reviews in software engineering (EBSE 2007-001). Keele University.
- Loyens, S. M. M., & Rikers, R. M. J. P. (2011). Instruction based on inquiry. In R. E. Mayer & P. A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 361–381). Routledge.
- McLellan, R., & Nicholl, B. (2011). If I was going to design a chair, the last thing I would look

- at is a chair: Product analysis and the causes of fixation in students' design work. *International Journal of Technology and Design Education*, 21(1), 71–92. https://doi.org/10.1007/s10798-009-9107-7
- OECD. (2019). *OECD learning compass 2030: A series of concept notes*. OECD Publishing. Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences: A practical guide*. Blackwell Publishing.
- Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24(1), 92–96. https://doi.org/10.1080/10400419.2012.650092
- Sawyer, R. K. (2012). *Explaining creativity: The science of human innovation* (2nd ed.). Oxford University Press.
- Sawyer, R. K. (2017). Teaching creativity in art and design studio classes: A systematic literature review. *Thinking Skills and Creativity*, 23, 70–79. https://doi.org/10.1016/j.tsc.2016.11.002
- Schön, D. A. (1983). The reflective practitioner: How professionals think in action. Basic Books.
- Shreeve, A. (2012). The way we were? Signature pedagogies under threat. *Journal of Art & Design Education*, 31(2), 119–130. https://doi.org/10.1111/j.1476-8070.2012.01744.x
- Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: A best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual Review of Psychology*, 70, 747–770. https://doi.org/10.1146/annurev-psych-010418-102803
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222. https://doi.org/10.1111/1467-8551.00375
- Xiao Fei, W., Ibrahim, R., & Ahmad, M. (2025). Blended learning in design education: A systematic literature review and research agendas. *Journal of Research on Technology in Education*. Advance online publication. https://doi.org/10.1080/15391523.2025.2456042