

# Designer identity among graphic design students in the artificial intelligence era

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**Received:** 08 September 2026 | **Revised:** 25 October 2026 | **Accepted:** 26 October 2026

## ABSTRACT

Generative artificial intelligence is changing design practice and raising questions about what it means to become a designer. This study examines how undergraduate graphic design students construct designer identities through professional positioning, creativity, control, and expectations for the future. A basic qualitative research design was employed with 18 students who had completed at least one comprehensive design project. Data were collected using a structured written form containing 16 open-ended questions, developed through a literature review and evaluation by a subject specialist and a qualitative research methods specialist. A five-stage hybrid thematic analysis combined deductive overarching categories with inductively generated codes and subcategories across five dimensions: designer identity, professional positioning, relationships with artificial intelligence, control, value and creativity, and perceptions of the future. Four subcategories were identified within each overarching category. Cross-category comparisons yielded four ideal-typical profiles: Technology-Integrated, Innovative, and Proactive; Traditional, Emotion/Art-Oriented, and Protective; Process/Development-Oriented and Cautious Student/Aspiring Designer; and Pragmatic, Functional, and Solution-Oriented. These profiles represent analytical configurations of meaning, not fixed participant groups; statements from the same participant could align with different profiles. Designer identity emerged as dynamic and context-sensitive, involving professional values, originality, perceived control, and technological change. Design education should recognize differing orientations toward artificial intelligence and support reflection on authorship, autonomy, and professional futures. Longitudinal and multi-institutional research could examine how these orientations develop across educational settings and stages.

**KEYWORDS:** Professional positioning; Creative agency; Authorship; Higher education; Hybrid thematic analysis

**DOI:** <https://doi.org/10.29329/pedper.2026.213> | Vol. 5, No. 2 (2026) | pp. 518-534

## 1. Introduction

Graphic design has long been defined as a technical and applied field concerned primarily with the production of visual materials. The field's contemporary character, however, points to a complexity that extends beyond this narrow definition. Design practice is now understood as an integrated activity that encompasses not only the production of aesthetic solutions but also problem solving, decision making, and interaction with different stakeholders. Underlying this change is a process of digital transformation that has reshaped design tools, workflows, and modes of production.

Automation, generative algorithms, and interactive design tools have rapidly transformed graphic design.

The historical development of design reveals the close relationship between technological progress and changes in professional practice. Hamalainen (2024) shows that design has not developed independently of technological advances and that technological changes have played an important role in transforming design practice. A similar transformation is evident in professional roles and terminology: writing specifically about learning design, Wagner (2025) notes that even the name of the discipline continues to evolve. Graphic design should therefore be understood as a dynamic profession that continually responds to social and technological changes rather than as a fixed set of practices.

Although technology is central to the factors that make graphic design so changeable, the primary effects of this transformation are experienced by the person using it: the designer. At this point, the discussion shifts from design practice to the concept of designer identity. Professional identity is not unique to design; it has also been examined systematically in professional contexts such as teaching, law, and higher education (Cardoso et al., 2014; Clarke et al., 2013; Thomson, 2015). In their review of this literature, Beijaard et al. (2004) describe professional identity as a dynamic construct that is continually reconstructed through interaction with context rather than as a fixed characteristic. Designer identity undergoes a similar process of construction, closely intertwined with design education. Studies of instructional design education indicate that professional identity construction can be supported through reflective thinking and reflective writing (Hutchinson & Tracey, 2015; Tracey et al., 2014). As Dall'Alba explains, learning to become a professional concerns not only what we know and can do but also who we are becoming (2009, as cited in Baha et al., 2020). This perspective redefines the purpose of design education: programs should develop students' technical skills while also supporting their process of becoming designers.

The question of when a student becomes a designer consequently involves the development of a professional identity as well as the acquisition of technical competence. In legal education, Thomson (2015) argues that professional identity cannot be taught directly through didactic instruction, but that its development can be intentionally supported through learning experiences that encourage students to question professional values, responsibilities, and their own professional selves. The central purpose of design education is therefore to develop designer identity alongside professional skills.

Designer identity cannot be explained through a single component. Kunrath et al. (2016) define it as a combination of personal attributes and design skills developed through education and experience, arguing that a holistic understanding requires consideration of both dimensions. Within this framework, creativity occupies a central place in designers' self-definition rather than functioning merely as an indicator of ability. Kunrath et al. (2020) similarly conceptualize designers' professional identity as a social and self-perceptual construct describing how designers understand themselves as professionals. They emphasize that this identity begins to take shape in higher education and develops and is reconfigured through social interactions during the transition to professional life. Professional values are another important component: the grounds on which students make design decisions and the outcomes they consider important can be read as concrete expressions of their identity. Examining development during education, Kunrath et al. (2017) found different profiles of professional self-awareness among undergraduate and postgraduate students, with identity components developing at different rates. Personal attributes changed particularly slowly, whereas

design skills developed more noticeably through education. These findings locate designer identity at the intersection of personal characteristics, acquired capabilities, and professional values.

The transformation of graphic design practice and the multidimensional nature of designer identity are especially visible in the context of generative artificial intelligence (AI). Through text-to-image systems, generative AI tools directly affect ideation and change the interaction between designers and clients. In a study of architectural practice, Schneider et al. (2025) report that AI facilitates clients' direct participation in design, progressively shifting designers' roles from generating ideas to evaluating the feasibility of generated ideas. They emphasize that this transformation creates uncertainty concerning creative agency, professional authority, and authorship. In human–AI collaboration, Azhar (2026) proposes the concept of algorithmic intimacy to describe the emotional and collaborative bonds that student designers develop with AI tools and shows how these relationships shape attribution of authorship and professional identity formation. Identity in AI-assisted design is therefore not simply a matter of tool use; it also involves the extent to which personal identity is reflected in an output and the question of who can claim authorship (Azhar, 2026). Drawing on existing research, Zhou et al. (2025) link the gradual assumption of traditional, manual design responsibilities by AI algorithms to designer dematerialisation. They suggest that this transformation changes the competencies expected of designers, foregrounding interaction with AI and strategic decision making. AI thus provides a powerful context in which the meaning of being a designer is being reconsidered.

The literature seeks to explain this transformation along two distinct lines. One body of research examines how professional identity is constructed across the transition from education to professional life, focusing on educational environments, professional development, social context, and professional interactions (Beijaard et al., 2004; Kunrath et al., 2020). Another centers on contemporary technological transformation, particularly the effects of generative AI on design processes, addressing its ethical and professional consequences alongside automation and increased efficiency (Elgendy, 2024; Özdal, 2024; Zhou et al., 2025). Nevertheless, research on the formation and transformation of professional identity in design remains relatively limited. Tracey and Hutchinson (2018, p. 263) observe that academic discourse in design has paid little attention to professional identity development and that the subject remains insufficiently addressed in design education. Similarly, Bjorklund et al. (2020) emphasize the limited understanding of how designers construct their professional identities as their organizational roles change. They highlight the need to understand how designers position themselves and negotiate professional identities within changing professional contexts. Baha et al. (2020), meanwhile, argue that existing literature predominantly focuses on professional identity based on institutionalized definitions of design, giving relatively less attention to students' personal motivations for wanting to become designers. Taken together, these observations suggest that identity debates arising around AI have not yet been adequately addressed through a framework that makes differences in students' individual perceptions and positioning visible. Research explaining how students make sense of their designer identities within the changing design ecosystem remains limited.

This gap is not only theoretical but also a practical issue with direct implications for the future of design education. Graphic design students must shape their identities in an environment that already includes AI before they enter professional practice. Understanding how they position themselves is therefore necessary for adapting design curricula and career guidance to this new reality. If students' perceptions of designer identity follow different orientations rather than a single pattern, systematically identifying these differences becomes particularly important. This study addresses

that need by considering students' accounts of designer identity, professional positioning, relationships with AI, perceptions of control, value and creativity, and expectations concerning their professional futures as an interconnected whole. It draws on written responses grounded in students' own experiences and examines how they construct their designer identities within a changing design context. A basic qualitative design and hybrid thematic analysis are used to identify the patterns through which these meanings are connected.

The study addresses five research questions concerning these interconnected dimensions. The questions examine how students define themselves and their profession, how they interpret their relationships with AI, and how their values and future expectations differ. They guide the organization of the analysis and the presentation of the findings:

1. How do graphic design students define designer identity?
2. How do graphic design students position themselves professionally?
3. How do graphic design students make sense of their relationships with AI?
4. How do graphic design students' understandings of control, value, creativity, and originality differ?
5. How do graphic design students' perceptions of their professional futures and educational needs differ?

## 2. Method

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### 2.1. Research Design

This study employed a basic qualitative research design to explore the meanings that graphic design students attribute to designer identity and professional positioning in the context of generative AI. Basic qualitative research focuses on understanding how participants interpret their experiences and the meanings they assign to them (Merriam, 2009). Accordingly, students' written statements about designer identity, professional positioning, relationships with AI, control, value and creativity, and perceptions of the future were considered together. The typologies were developed to make recurring patterns of meaning visible as ideal-typical profiles across five analytical dimensions. Their purpose was to identify complementary patterns across statements from different participants, not to classify participants into groups. A basic qualitative design was preferred because the aim was to describe and interpret the meanings students themselves attach to designer identity, rather than to explain the essence of a lived experience (phenomenology), to generate a theory (grounded theory), or to examine a single bounded case. This orientation shaped how the typologies were built. Open coding and subcategories remained close to participants' statements, and the ideal-typical profiles were developed only afterwards, as an analytical synthesis of those subcategories. The profiles are therefore interpretive constructs derived from the findings of the basic qualitative analysis.

### 2.2. Participants

The participants were 18 undergraduate graphic design students studying in a medium-sized faculty of fine arts in Türkiye who had completed at least one comprehensive design project. They were selected through criterion sampling, a purposive sampling strategy. The central inclusion criterion was that students had experienced all stages of the design process and were able to reflect on designer identity and their professional futures. Selecting a qualitative sample in line with the research purpose supports access to information-rich cases concerning the phenomenon under investigation (Merriam, 2009). Participants' experience with different project types, including children's book design, corporate identity design, social awareness campaigns, packaging design,

and typography, enabled meanings of designer identity to be examined across varied production experiences. Participant identities were kept confidential, and each participant was assigned a source code from K1 to K18.

### 2.3. Data Collection Instruments

Data were collected using the Graphic Design Students' Professional Identity Perceptions Form, developed by the researchers through a staged process. First, the literature on professional identity, designer identity, design education, and AI-assisted design was reviewed. A structured written form with open-ended questions was selected in line with the research questions, and question structures in similar instruments were examined. A pool of questions was then prepared to cover perceptions of designer identity, professional positioning, relationships with AI, control, value and creativity, and perceptions of the future. One subject specialist and one qualitative research methods specialist evaluated the draft form for alignment with the research purpose and questions, coverage, clarity, comprehensibility, sequence, and answerability. Repetitive and ambiguous wording was revised in response to their feedback. The finalized form contained 16 open-ended questions that were aligned with the study's objectives, understandable, and conducive to detailed responses. It comprised five sections corresponding directly to the five overarching analytical categories: designer identity perceptions (Questions 1–5), professional positioning (Questions 6–8), relationships with AI (Questions 9–12), control, value and creativity (Questions 13–14), and perceptions of the future (Questions 15–16).

#### 2.3.1. Procedure

Data were collected during May 2026 from 18 undergraduate graphic design students studying in a medium-sized faculty of fine arts in Türkiye who met the inclusion criterion. Participants voluntarily completed a structured open-ended form, responding on the basis of design projects they had previously completed and experiences gained during their graphic design education. Students completed the forms individually and returned them to the researchers. The handwritten forms were analyzed directly, and each form was linked to a source code between K1 and K18.

### 2.4. Data Analysis

Data analysis in this study sought to identify recurring patterns of meaning systematically and to connect interpretations directly to the data. This approach is consistent with the requirements of basic qualitative inquiry described by Merriam (2009). The data were analyzed through a five-stage hybrid thematic approach combining deductive and inductive processes (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). The analysis was carried out by one of the researchers across all five stages, and the resulting codes, subcategories, comparison matrix, and profiles were then examined together with the second researcher. The staged procedure described below, together with this joint examination, supported the reliability of the analysis (see also Section 2.4.1). In the first stage, five overarching categories were established in parallel with the instrument's structure: Designer Identity, Professional Positioning, Relationships With AI, Control, Value and Creativity, and Perceptions of the Future. All responses were organized within this deductive framework.

In the second stage, inductive analysis was conducted through open coding. All responses to the open-ended questions were read line by line, and the key ideas in each statement were translated into conceptual codes. For example, metaphors such as a “piggy bank,” used by participants to describe themselves, and statements describing AI as “just a tool” or “a partner that supports the process” were coded separately. Line-by-line analysis enables detailed identification of concepts,

categories, and subcategories within the data (Güler et al., 2013). No predetermined subcategory or typology template was used during coding.

In the third stage, codes that were similar and shared the same thematic meaning were grouped into subcategories. For example, statements about who made the final decision during design generated the Operator Control subcategory. Statements from participants who did not develop a sense of ownership over AI-generated outputs formed the Threat to Ownership subcategory. Thus, the overarching categories derived from the structure of the data collection instrument, whereas the subcategories emerged directly from participants' statements.

In the fourth stage, a comparison matrix was used to examine conceptual similarities, contrasts, and complementary relationships among the subcategories within the five overarching categories. The units of analysis were statements, rather than participants, and their sources remained traceable through participant codes. For example, statements defining design as artistic expression and the communication of emotion were compared with statements presenting AI as a threat to ownership and human labor. These statements were examined as manifestations of the same meaning orientation across different analytical dimensions. The analysis therefore sought coherent configurations of meaning across the five dimensions rather than assigning individual participants to particular classes.

In the fifth and final stage, similar and divergent meaning patterns across the subcategories were compared, and four designer identity profiles were developed by analytically combining complementary orientations across the five overarching categories. These profiles are not classes that place participants into fixed, mutually exclusive groups. A participant's statements may align with more than one profile in different contexts. The typologies simplify complex and fluid discourses within the dataset to make visible the principal positions that designer identity assumes in relation to technology, professional values, control, and perceptions of the future. Categories and profiles were supported by direct participant statements so that their relationship to the data could be traced. Table 1 summarizes the overarching analytical categories and examples of the subcategories developed within them.

**Table 1** *Overarching analytical categories and examples of subcategories*

| Category                                   | Examples of subcategories                                                                | Analytical focus                                                 |
|--------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Designer identity (DI)</b>              | Problem solving; emotion/art; developing student; functional translation                 | How participants define being a designer                         |
| <b>Professional positioning (PP)</b>       | Interdisciplinary; independent art; market adaptation; agency/commercial                 | Desired field of work and understanding of success               |
| <b>Relationships with AI (RAI)</b>         | Partner/assistant; threat; conditional consultant; technical tool                        | Role assigned to AI in the design process                        |
| <b>Control, value and creativity (CVC)</b> | Human direction; labor/emotion; original thought; operator control                       | Authority over production and the source of design value         |
| <b>Perceptions of the future (PF)</b>      | Continuous development; professional threat; uncertainty/learning; functional adaptation | Orientation toward the profession's future and educational needs |

*Note.* AI = artificial intelligence; DI = designer identity; PP = professional positioning; RAI = relationships with AI; CVC = control, value and creativity; PF = perceptions of the future.

#### 2.4.1. Validity and Reliability

The study addressed validity and reliability through the criteria commonly used to evaluate qualitative inquiry. These include credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). To support these criteria, the research design, participant selection criteria, instrument structure, and analytical stages were described. Reporting the sample, data collection instrument, and analytical procedures enables readers to trace how findings were generated and assess their credibility (Creswell & Miller, 2000). These descriptions provide the basis for evaluating the relationship between the research process and its interpretations.

To support credibility, the categories and typologies were grounded in participants' written responses and illustrated with direct quotations. A staged analytical process was established through which the relationships among open codes, subcategories, and overarching categories could be followed. Illustrating the categories with direct participant statements in the Findings section enables readers to assess the relationship between analytical interpretation and the raw data. Defining ideal-typical profiles as analytical constructs that explain similarities and contrasts among statements, rather than as participant classes, also makes the scope of interpretation explicit.

Transferability was supported by an account of the institutional context, inclusion criterion, and sampling strategy. Criterion sampling and the inclusion of students with experience of different design projects allow the findings to be considered in relation to similar educational contexts. Presenting findings alongside direct quotations also provides detailed description through which readers can judge transferability to other settings (Merriam, 2009). Dependability was supported by conducting the analysis in five successive stages: establishing overarching categories, open coding, developing subcategories, constructing a cross-category comparison matrix, and developing ideal-typical profiles. To support confirmability, interpretations were restricted to recurring patterns of statements in the dataset, participant codes were used only to trace the sources of statements, and each category was linked to direct quotations. The instrument-development and expert-review procedures described in Section 2.3 supported the clarity and conceptual coverage of the questions (Creswell & Miller, 2000; Patton, 2014).

#### 2.5. Ethical Considerations

Participant identities were kept confidential. Source codes K1–K18 were used to link statements to their sources. Ethical considerations were taken into account at every stage of the research process.

### 3. Findings

This section presents the findings systematically in relation to the five research questions. For each question, the categories are first defined in terms of their conceptual scope, then grounded in direct participant statements, and finally interpreted in relation to the research problem. Quotations were selected from statements that most clearly reflected the boundaries of each category; equal representation of participants was not an objective. This presentation makes the relationship between raw data and analytical interpretation traceable and enables comparison of differing patterns of meaning concerning designer identity. Participant quotations have been translated from Turkish into English, and the original K1–K18 source codes have been retained.

To make conceptual relationships across the five research questions visible, Table 2 summarizes the four ideal-typical designer identity profiles across the five analytical dimensions. The categories and direct participant statements underlying these patterns are elaborated in the following subsections.

**Table 2 Four designer identity profiles across five analytical dimensions**

| Domain     | Profile 1                             | Profile 2                                 | Profile 3                            | Profile 4                    |
|------------|---------------------------------------|-------------------------------------------|--------------------------------------|------------------------------|
| <b>DI</b>  | Innovative problem solver             | Emotional artist                          | Developing student/aspiring designer | Functional visual translator |
| <b>PP</b>  | Interdisciplinary and international   | Artistic and independent                  | Development and market adaptation    | Commercial and agency        |
| <b>RAI</b> | Production partner and assistant      | Threat to ownership                       | Conditional consultant               | Technical tool               |
| <b>CVC</b> | Human-directed creativity             | Value centered on human labor and emotion | Original thought remaining human     | Operator control             |
| <b>PF</b>  | Adaptation and continuous development | Professional threat and protection        | Uncertainty and learning needs       | Functional adaptation        |

Note. AI = artificial intelligence; DI = designer identity; PP = professional positioning; RAI = relationships with AI; CVC = control, value and creativity; PF = perceptions of the future. Profile 1 = Technology-Integrated, Innovative, and Proactive; Profile 2 = Traditional, Emotion/Art-Oriented, and Protective; Profile 3 = Process/Development-Oriented and Cautious Student/Aspiring Designer; Profile 4 = Pragmatic, Functional, and Solution-Oriented. Profiles represent analytical configurations of statements, not participant groups.

### 3.1. Designer Identity

The first research question examined how graphic design students define designer identity. It explored the fundamental meanings through which students answer the question “Who is a designer?” The analysis identified four subcategories of designer identity perception: Innovative Problem Solver, Emotional Artist, Developing Student/Aspiring Designer, and Functional Visual Translator.

**Innovative Problem Solver.** This subcategory comprises statements defining the designer as a proactive agent who transforms conventional visual language, establishes new conceptual relationships, and solves problems. It is illustrated by “Disrupting the ordinary and building a new conceptual language, solving problems” (K5) and “I am a creative designer who focuses on solutions to problems” (K17). These statements indicate that some students construct designer identity through the ability to generate innovation and creatively synthesize different elements.

**Emotional Artist.** This subcategory encompasses statements that view the designer as an artist who transforms feelings and thoughts into visual narratives, empathizes with others, and creates personal stories. Examples include “I am a designer who expresses my feelings and thoughts through visual expression” (K3) and “I am a vector artist, and video editing is my area of expertise; I think someone with these abilities is a graphic designer” (K8). The K3 statement foregrounds emotional expression, whereas the K8 statement emphasizes artistic identification and technical expertise. Together, these accounts suggest that, for some students, designer identity is primarily a form of personal expression and artistic belonging.

**Developing Student/Aspiring Designer.** This subcategory comprises statements defining designer identity as an unfinished process of learning and accumulating experience. It is illustrated by “I see myself as a piggy bank that has only just become half full” (K16), “Someone who keeps trying, because the more you try, the better the work that emerges” (K9), and “Somewhere between a

student and a designer; I can produce good work, but there is still a lot I need to learn” (K9). These findings indicate that students position themselves within the process of identity formation rather than outside designer identity.

**Functional Visual Translator.** This subcategory encompasses statements defining the designer as a professional who solves a problem and transforms verbal or complex requests into clear visual messages. Examples include “It is about solving a problem and clearly expressing what is wanted to the other party” (K2), “A visual translator, perhaps: I translate people’s verbal requests into visual expression” (K2), and “A bridge that turns words into images” (K3). Designer identity can thus also be constructed through function, communication, and meeting client needs.

### 3.2. Professional Positioning

The second research question examined how students position themselves professionally. It explored their desired future working environments, areas of expertise, and understandings of success. The findings were organized into four subcategories: Interdisciplinary and International Positioning, Artistic and Independent Positioning, Development and Market Adaptation, and Commercial and Agency Positioning.

**Interdisciplinary and International Positioning.** This subcategory encompasses ambitions to work at the intersection of new technologies and different design fields and to gain visibility in national or international projects. It is illustrated by “I would like to be a designer with a distinctive design language who takes part in national or international projects” (K10) and “At the intersection of CGI [computer-generated imagery], digital motion graphics, and conceptual typographic work” (K5). These statements show professional identity being constructed through innovation, a diversity of expertise, and visibility on a broad scale.

**Artistic and Independent Positioning.** This subcategory includes aspirations such as holding original exhibitions and incorporating personal feelings and stories into design. Examples include “Writing poetry, reflecting emotional expression in my designs, and creating original stories” (K3) and “I want to be a designer who has developed my own style, can touch people through my work, and keeps creating” (K11). For some students, professional success therefore means establishing a space for original expression rather than attaining commercial status.

**Development and Market Adaptation.** This subcategory concerns efforts to address gaps in knowledge and prepare for the market before attaining a clearly defined professional status. It is illustrated by “A student who is still developing and lacks sufficient knowledge; I feel that I belong neither to the industry nor to the market, and I see myself as someone who acknowledges shortcomings and tries to close the gaps” (K16). Professional positioning is thus experienced as a matter of acquiring competence during the transition from student to professional.

**Commercial and Agency Positioning.** This subcategory includes ambitions to work within an agency, establish one’s own agency, or pursue graphic design directly as a profession. Examples include “An agency owner. I am setting up an agency” (K4), “A designer whom clients will come back to after they have agreed to work with a poor designer” (K4), and “I see myself in the business sector, having made graphic design my profession” (K2). These statements reveal an aspect of designer identity constructed through entrepreneurship and the provision of professional services.

### 3.3. Relationships With AI

The third research question examined how students make sense of their relationships with AI. It explored the positions assigned to AI in the design process as partner, threat, consultant, or tool. The

findings were organized into four subcategories: Production Partner and Assistant, Threat to Ownership, Conditional Consultant, and Technical Tool.

**Production Partner and Assistant.** This subcategory comprises statements defining AI as a helper that supports ideation, accelerates draft production, and participates in the process. Examples include “Developing ideas, producing quick visual drafts, speeding up the steps, like an active assistant” (K5) and “It is a partner that provides support and helps improve the design process” (K11). These statements place AI in a supportive role that strengthens the creative process rather than replacing the designer.

**Threat to Ownership.** This subcategory encompasses statements indicating that AI use weakens designers' sense of ownership of and connection to their work. It is illustrated by “I prefer not to use it because I cannot say I made this” (K8), “I do not feel it, because I cannot say I made it” (K8), and “Well, not really, because I do not think of it as contributing an original idea” (K15). Resistance to AI thus arises not only from technical concerns but also from a sense of lost authorship and identity.

**Conditional Consultant.** This subcategory concerns limited use of AI, particularly when ideation stalls or reaches an impasse. Examples include “Sometimes it helps, and sometimes it does not help at all” (K16) and “Getting help when I am completely stuck and at a dead end” (K15). The tool is therefore used as a source of advice when needed rather than as a continuous partner.

**Technical Tool.** This subcategory comprises statements that do not attribute emotional qualities or creative agency to AI and instead view it as a technical resource that accelerates work. It is illustrated by “A tool. Artificial intelligence is artificial, as the name says; when you start from an idea, all the designs look alike” (K4) and “It is entirely a tool; the graphic takes shape in my hands, and without us it is inadequate on its own” (K2). AI is thus assigned an instrumental position in which it does not produce value independently of the designer.

### 3.4. Control, Value and Creativity

The fourth research question examined differences in students' understandings of control, value, creativity, and originality. Within this dimension, originality was examined in relation to control, value, and creativity. The question explored how authority over production and the source of design value are distributed between humans and AI. Four subcategories were identified: Human-Directed Creativity, Value Centered on Human Labor and Emotion, Original Thought Remaining Human, and Operator Control.

**Human-Directed Creativity.** This subcategory comprises statements asserting that the designer determines artistic direction and makes the final decision even when AI participates in production. Examples include “It is my mind that gives AI the prompt and artistic direction” (K5) and “Although AI generally serves as a tool in the design process, the designer is the one who chooses the right ideas and evaluates the resulting output” (K12). Creative authority is therefore retained by the human designer even when collaborative production is accepted.

**Value Centered on Human Labor and Emotion.** This subcategory encompasses statements linking the value of design to human labor, personal style, and the empathetic communication of emotion. It is illustrated by “The designer's style and human labor” (K6) and “Entirely the communication of emotion, I think; whoever communicates emotion better” (K18). Originality is thus defined through human experience and emotional expression rather than merely through technical difference.

**Original Thought Remaining Human.** This subcategory includes statements that acknowledge AI's extensive productive capacity while locating the source of original ideas in the designer. Examples include “AI can produce anything, but original thought comes from the designer” (K9) and “It will

depend on the ability to generate original ideas, solve problems, and express one's own perspective, because however much technology develops, original thought still comes from humans" (K11). The boundary between humans and technology is therefore drawn through the originality of thought rather than the quantity of production.

**Operator Control.** This subcategory comprises statements attributing all control to the human who writes prompts and manages the software. It is illustrated by "I enter the prompt. I make the edits" (K4), "Under [the designer's] control. AI is just a tool" (K7), and "Entirely mine. I manage the AI too" (K2). Process management and technical decisions are thus treated as the primary basis of designer authority, independently of creativity.

### 3.5. Perceptions of the Future

The fifth research question examined students' perceptions of their professional futures and educational needs. Within this dimension, educational needs were considered alongside expectations for professional life. The question explored how students position themselves in relation to adaptation, concern, uncertainty, and functionality in the face of technological transformation. The findings were organized into four subcategories: Adaptation and Continuous Development, Professional Threat and Protection, Uncertainty and Learning Needs, and Functional Adaptation.

**Adaptation and Continuous Development.** This subcategory encompasses statements suggesting that the future belongs to designers who adapt to technology and develop creative thinking. Examples include "Someone who uses technology well and can think creatively. I see myself as a designer who continually develops in this area" (K10) and "Someone who uses AI appropriately and is a good researcher in design; that is how I see myself" (K6). Educational needs are therefore perceived in terms of learning new tools while also developing creative competence.

**Professional Threat and Protection.** This subcategory comprises statements viewing the spread of AI as a threat to professional security and the value of human labor. It is illustrated by "Negative and worrying; my profession is not safe" (K8) and "I do not want it to become too widespread; human labor loses its meaning" (K6). Future educational expectations therefore need to encompass protection of human labor and originality as well as technical adaptation.

**Uncertainty and Learning Needs.** This subcategory includes statements that do not articulate a clear direction for the future in the face of technological transformation. Examples include "I cannot see a future yet" (K16) and "I cannot see myself anywhere for now, and I think the designer of the future will be AI; even now, people have AI do the work instead of designers and then print it" (K16). These statements indicate a need for greater educational support in technological literacy, professional orientation, and originality so that students can assess their professional futures.

**Functional Adaptation.** This subcategory comprises statements viewing technological development as inevitable and assessing AI positively insofar as it helps solve practical problems. It is illustrated by "Avoiding technological developments only harms us" (K7) and "It will continue to produce solutions to problems" (K2). Preparing for the future is therefore associated with effective, purposeful tool use rather than investing technology with emotional meaning.

The patterns summarized in Table 2 were derived from relationships among subcategories across the five analytical dimensions. The following profiles synthesize these recurring configurations of meaning. These profiles are analytical constructs rather than statistically representative participant classes. Participant codes are cited alongside the quotations so that the evidential basis of each profile can be traced, and the number and detail of supporting statements differ across profiles and dimensions (see Section 4.1). The same participant's statements can also be illustrated under

subcategories of different profiles; for example, statements by K11 appear under Production Partner and Assistant (Profile 1), Artistic and Independent Positioning (Profile 2), and Original Thought Remaining Human (Profile 3).

### 3.6. Designer Identity Profiles

**Technology-Integrated, Innovative, and Proactive.** This ideal-typical profile analytically combines statements that construct designer identity as continually evolving. Within this pattern, the designer is an agent who transforms conventional visual language and creates new conceptual relationships, as expressed in “Disrupting the ordinary and building a new conceptual language, solving problems” (K5). Professional ambitions concern visibility in interdisciplinary and international projects. AI is positioned as a partner that accelerates the process rather than as a threat: “It is a partner that provides support and helps improve the design process” (K11). Nevertheless, final decisions and artistic direction remain the designer's responsibility. Statements about the future similarly emphasize technology use alongside continuous development.

**Traditional, Emotion/Art-Oriented, and Protective.** This ideal-typical profile combines statements that define designer identity through art and emotional expression with protective orientations toward AI. Within this pattern, the designer is described as a “vector artist” (K8), while professional ambitions involve establishing a space for original expression rather than commercial success: “Writing poetry, reflecting emotional expression in my designs, and creating original stories” (K3). AI is described as undermining the sense of ownership and connection to one's work, as in “I do not feel it, because I cannot say I made it” (K8). The value of design is associated with human labor, emotion, and personal style. Statements about the future foreground concern for protecting the profession and the value of human labor.

**Process/Development-Oriented and Cautious Student/Aspiring Designer.** This ideal-typical profile combines statements that construct designer identity as an ongoing learning process rather than an accomplished position. Describing oneself as “a piggy bank that has only just become half full” (K16) links professional positioning to addressing knowledge gaps and preparing for the market. Statements describing recourse to AI only when blocked, such as “Getting help when I am completely stuck and at a dead end” (K15), accompany a cautious acceptance that original thought should remain human. Uncertainty about the future, expressed in “I cannot see a future yet” (K16), suggests a fluid position within education rather than a fixed identity.

**Pragmatic, Functional, and Solution-Oriented.** This ideal-typical profile analytically combines statements that construct designer identity through service and problem solving rather than primarily as an emotional or artistic identity. The designer is a “visual translator” who turns complex requests into understandable visual messages: “I translate people's verbal requests into visual expression” (K2). Professional ambitions involve establishing an agency or working within commercial organizations. AI is positioned solely as a technical tool that accelerates work, as expressed in “It is entirely a tool; the graphic takes shape in my hands, and without us it is inadequate on its own” (K2), while control is attributed to the human entering the prompt. Statements concerning the future indicate a functional orientation that accepts technological development as inevitable and values tools insofar as they solve practical problems.

## 4. Discussion

This study examined how graphic design students construct designer identities in the context of generative AI. Using a basic qualitative design and written accounts from 18 students, it addressed the limited understanding of how professional identity and technological change intersect in design

education. The findings indicate that students' statements cannot be explained through a single pattern but can be interpreted through four ideal-typical configurations of meaning. Abbreviated as Technology-Integrated, Traditional/Protective, Student/Aspiring Designer, and Pragmatic, these typologies connect the educational construction of professional identity with the effects of generative AI on design practice at the level of statements rather than dividing participants into groups. Tracey and Hutchinson (2018) identify limited academic attention to professional identity development in design, while Zhou et al. (2025) emphasize the limited synthesis of AI's effects on designer identity. The patterns identified here suggest that these two dimensions are intertwined in students' accounts rather than occurring independently.

The Technology-Integrated, Innovative, and Proactive typology explains how statements positioning AI as a production partner rather than a threat combine with an emphasis on innovation, continuous learning, and creative control. This pattern resembles the innovator and co-creator identity narratives identified by Bjorklund et al. (2020), whose findings highlight innovation, learning, and a sense of community as recurring features. The observation by Schneider et al. (2025) that AI can shift designers' roles from generating ideas to evaluating them also parallels statements positioning AI as an assistant. Azhar's (2026) concept of algorithmic intimacy, developed to explain collaborative bonds between student designers and AI tools, helps interpret the co-production orientation in this ideal-typical profile. Together, these connections situate the profile within a professional orientation that combines technological participation with retained creative direction.

The Traditional, Emotion/Art-Oriented, and Protective typology explains the conjunction of statements defining design as an extension of human labor and emotional expression with statements viewing AI as a threat to originality and ownership. This orientation resembles concerns about competencies and professional roles associated with designer dematerialisation in the literature (Zhou et al., 2025). Elgendy (2024) likewise notes that integrating AI into graphic design raises concerns about job security, originality, and transparency. Schneider et al.'s (2025) finding of uncertainty in architects' perceptions of authority and originality is also comparable to the loss of connection to one's work expressed here. The crafter narrative identified by Bjorklund et al. (2020) provides a conceptual basis for interpreting the protection of labor and personal production. This profile thus connects concerns about technological change to the sources from which students derive the value and personal significance of design.

The Process/Development-Oriented and Cautious Student/Aspiring Designer typology explains statements that construct designer identity through experimentation, learning, and addressing shortcomings rather than through a completed professional position. This pattern resembles Kunrath et al.'s (2017) finding that elements of designer identity consolidate slowly throughout education. Studies of reflective writing by Tracey et al. (2014) and Hutchinson and Tracey (2015) also show that students can struggle to move from describing their experiences to attributing professional meaning to them. Expressions of uncertainty about the future and conditional reliance on AI can therefore be interpreted as a fluid identity orientation within education rather than as characteristics of a fixed student group. Dall'Alba's account of becoming a professional as involving who we are becoming alongside knowledge and skills also helps explain this fluidity (2009, as cited in Baha et al., 2020). The profile locates caution and uncertainty within a continuing process of professional formation.

The Pragmatic, Functional, and Solution-Oriented typology brings together statements that construct designer identity through problem solving, visual communication, and meeting client needs rather than primarily through artistic belonging. This pattern is consistent with the social and self-perceptual framework through which Kunrath et al. (2020) explain how designers understand themselves

professionally. Özdal's (2024) finding that AI-assisted tools accelerate design processes and increase efficiency parallels statements describing AI as “just a tool.” This ideal-typical profile indicates that relationships with AI are interpreted not only through emotional or ethical considerations but also through the functions and purposes of design activity.

Considering the four typologies together shows that statements about designer identity differ at the intersection of professional values, perceived control, and relationships with AI. This finding supports Bjorklund et al.'s (2020) argument that identity work is multifaceted and embedded in context within the specific setting of graphic design education. When professional identity and AI's effects on design are considered together, technological transformation emerges in students' accounts as a context for reassessing the meaning of becoming a designer, extending beyond a change in tools.

The study's contribution lies in bringing professional identity and technological transformation into the same analytical frame. Its findings are consistent with accounts of professional identity as dynamic and context-sensitive (Beijaard et al., 2004; Bjorklund et al., 2020). By examining this construction directly in the context of generative AI, the study offers an empirical response within graphic design education to gaps identified by Tracey and Hutchinson (2018) and Zhou et al. (2025). It thus connects two bodies of literature that have often been considered separately. Whereas the literature has largely developed along two separate lines, one on professional identity formation (Beijaard et al., 2004; Kunrath et al., 2020) and one on the effects of AI on design (Elgendy, 2024; Özdal, 2024; Zhou et al., 2025), the profiles developed here combine definitions of the designer, professional positioning, relationships with AI, perceived control, and future perceptions within single configurations. Compared with the identity narratives described by Bjorklund et al. (2020) and the algorithmic intimacy described by Azhar (2026), the added contribution is a typology in which orientations toward AI are interwoven with professional values and expectations of becoming a designer, and in which identity is treated as fluid across statements rather than fixed within persons.

The educational significance of these findings can also be considered through existing work on reflection and professional formation. Azhar's (2026) proposed pedagogy of algorithmic reflexivity provides a basis for helping students develop informed positions on authorship, autonomy, and ethics. Reflective writing, as proposed by Tracey et al. (2014), can support movement from describing experiences to interpreting their professional meaning, especially among students whose statements approach the Student/Aspiring Designer orientation and who have not established a clear direction for the future. Baha et al. (2020) similarly propose that educators and students jointly construct a plural and dynamic understanding of design. These connections give a pedagogical context to the different orientations identified in the present study.

The findings also have implications for how identity development is investigated over time. The slow consolidation of identity described by Kunrath et al. (2017) provides a rationale for following students across educational stages, while the limited synthesis identified by Zhou et al. (2025) supports considering professional identity and AI's effects within a shared framework. Such perspectives help situate the study's recommendations within continuing debates about professional learning and technological transformation.

#### 4.1. Limitations

The findings should be interpreted in light of several limitations. First, the study is based on handwritten responses to structured open-ended forms from 18 undergraduate graphic design students in a medium-sized faculty of fine arts in Türkiye. This single-institution context requires readers to consider contextual characteristics when judging transferability to other design education

settings. Second, the written-form procedure used in this study did not include follow-up questions, which may have limited access to the reasoning and contextual meanings underlying some statements. Third, because the instrument's five sections provided the deductive overarching categories, the framework may have limited the visibility of meaning patterns falling outside it. Fourth, responses varied in length and detail, which may have resulted in some categories being represented by fewer or shorter quotations.

In addition, the instrument's content validity relied on the views of two specialists, one in the subject area and one in qualitative research methods; a broader expert panel could have strengthened validity. Some analytical dimensions of the ideal-typical profiles were likewise illustrated by statements from a limited number of participants. This uneven representation should be considered when interpreting the patterns in the dataset. The typologies also simplify attitudes that may vary by context or reflect more than one profile. The cross-sectional design also prevents direct observation of how these statement patterns change throughout education.

#### 4.2. Implications and Recommendations

Several recommendations for future research follow from these limitations. First, examining the four typologies in larger samples drawn from different institutions through semi-structured interviews would help assess their credibility, transferability, and explanatory value across educational contexts. Second, longitudinal studies should reassess students at different stages of education, from their first year to graduation, using the same structured form or interview protocol to trace changes in designer identity. Such designs could make the gradual consolidation of identity visible within graphic design education. Third, future research should continue to consider professional identity alongside AI's effects on design processes within a shared framework. This would support a more integrated understanding of how students interpret technological change as they become designers.

For design education practice, the findings indicate that students' statements express differing orientations toward AI rather than a single homogeneous attitude; curriculum design should therefore take these four orientations into account. Approaches centered on algorithmic reflexivity can help students develop an informed position on authorship, autonomy, and ethics. Reflective writing can also help students move from describing experiences to making sense of their professional significance, particularly when their statements align with the Student/Aspiring Designer orientation and they lack a clear future direction. Finally, design educators and students should jointly develop a plural and dynamic understanding of design. These practices can support students in positioning their designer identities more consciously in the context of AI.

#### 5. Conclusion

This study examined how graphic design students construct their designer identities within a changing design context. The findings show that participant statements can be meaningfully organized around four ideal-typical profiles: Technology-Integrated, Innovative, and Proactive; Traditional, Emotion/Art-Oriented, and Protective; Process/Development-Oriented and Cautious Student/Aspiring Designer; and Pragmatic, Functional, and Solution-Oriented. These profiles do not divide participants into fixed groups. Instead, they make visible the principal configurations of meaning connecting designer identity, professional ambitions, relationships with AI, understandings of control and creativity, and expectations for the future. Different statements from the same participant can align with more than one profile, highlighting the context-sensitive and fluid character of designer identity. The study's distinctive contribution is to examine this dynamic construction

directly in the context of generative AI and bring professional identity and the effects of AI into a shared analytical framework for graphic design education. The findings respond to the gap identified at the outset, namely the limited attention to professional identity development in design (Tracey & Hutchinson, 2018) and the limited synthesis of AI's effects on designer identity (Zhou et al., 2025). By showing that students' professional values, perceived control, and relationships with AI are articulated within the same accounts, the study indicates that AI appears in students' accounts not only as a change of tools but also as a context in which they renegotiate what it means to become a designer.

## 6. Declarations

### 6.1. Conflict of interest

The authors declare that there is no conflict of interest to disclose.

### 6.2. Funding

The authors declare that the study received no external funding.

### 6.3. Author contributions (CRediT)

Aytaç Özmutlu: Conceptualization; Methodology; Software; Validation; Formal analysis; Investigation; Resources; Data curation; Writing—original draft; Writing—review & editing

Emel Bayrak Özmutlu: Conceptualization; Methodology; Software; Validation; Formal analysis; Investigation; Resources; Data curation; Writing—original draft; Writing—review & editing

All authors reviewed the results and approved the final version of the manuscript.

### 6.4. Data availability statement

The anonymized data supporting the findings of this study are available from the corresponding author upon reasonable request, subject to participant confidentiality and consent restrictions.

### 6.5. Ethics approval

Ethics committee approval was not obtained for this study. Ethical principles were observed throughout the research process. Data were collected through written forms completed voluntarily by students. Participant confidentiality was protected by excluding identifying information from the analysis dataset and using codes (K1–K18) when reporting findings.

### 6.6. Use of artificial intelligence (AI) tools

Artificial intelligence tools were used for general writing formatting, language checks, internal consistency checks, and bibliography checks. The authors reviewed and edited all content and take full responsibility for the publication.

### 6.7. Acknowledgements

None.

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