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Original Research Article

Analyzing the Syllabus of Workshop Courses in Undergraduate Graphic Design in Higher Education from the Authentic Learning Perspective

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Abstract

Introduction: The alignment between university graphic education and professional requirements is a key criterion for the effectiveness of university curricula. Workshop education, as the primary platform for experiential learning in graphic design, must possess characteristics such as a connection to real-world issues, collaborative learning, multi-source feedback, and professional evaluation. The theory of authentic learning, proposed by «Herrington and Oliver» as nine key components, provides a framework for assessing educational authenticity. This research aims to analyze the content of approved syllabi for workshop courses in undergraduate graphic design in Iran, based on the components of authentic learning, and seeks to answer the question: «To what extent do the official syllabi of workshop courses in undergraduate graphic design at Iranian universities align with the components of authentic learning?»

Research Method: This study was conducted using a descriptive-analytic and mixed approach. The research method was a directed qualitative content analysis based on the nine-component Herrington model. In the first step, the components of authentic learning were identified within the context of graphic design education. Then, 42 workshop course titles approved by the Ministry of Science were selected as the research population, and the official syllabi, including objectives, teaching methods, and evaluation methods, were analyzed. Subsequently, the obtained data were interpreted using descriptive analysis.

Findings: Based on the content analysis of the approved syllabi, the component of «Scaffolding» is present in all courses, and «Reflection» is also observed in a significant portion of the syllabi. In contrast, components such as «Authentic Context», «Authentic Assessment», «Multi-Source Feedback», and «Collaborative Learning» have limited presence or are not structurally included in the programs. This uneven distribution indicates a greater focus of the curricula on educational guidance, compared to the recreation of professional conditions and multi-faceted interactions at the approved curriculum level.

Conclusion: The research results indicate that, in the official syllabi of graphic design workshop courses at the undergraduate level, only a portion of the components of authentic learning are reflected in the program structure, and their prediction has not been systematically carried out. This situation indicates that, at the level of the approved curriculum, a comprehensive, structural link between workshop training and the professional ecosystem of graphic design has not been established, and the degree of alignment with the authentic learning model is relative and limited.

Keywords

Authentic Learning, Graphic Education, Graphic Design, Graphic Workshop, Educational Authenticity, Curriculum

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Introduction and Problem Definition

In many educational systems, the ability to design workshop courses that align with professional contexts has become an important indicator of the quality of art education. In leading educational systems, graphic design education is not limited to the transfer of technical skills; rather, it has shifted toward nurturing creative, problem-oriented designers ready to enter the professional, real-world arena. One effective approach to meeting this need is authentic learning, which emphasizes real-world contexts, professional activities, multi-source feedback, collaboration, reflection, and assessment in real situations, striving to connect education with real life and professional fields. In graphic design education in Iran, workshop courses have always held a central position; however, it seems that at the level of the official and approved curriculum, the lack of structural and content alignment of these courses with the real needs of the job market and the key components of authentic learning has caused many graduates to face performance deficiencies when entering the professional world. It should be noted that this statement refers to the «predictions and emphases included in the syllabi», not the evaluation of the actual implementation of the classes. This is expected, as workshop training provides an opportunity to work on real projects, learn in an interactive environment, receive multi-source feedback, and develop interdisciplinary skills. Given the importance of workshop courses as a link between academic education and the profession of graphic design, the aim of the present research is to explore and conduct a comparative analysis of the content of the approved syllabi of workshop courses in the undergraduate graphic design program in Iran, focusing on the nine components of authentic learning. This research seeks to answer how well the official syllabi of workshop courses in the graphic design program at Iranian universities align with the nine components of authentic learning. The present study, using a directed qualitative content analysis approach based on the nine components of authentic learning by «Herrington and Oliver», first conducted a systematic review of the approved syllabi for 42 workshop courses in the undergraduate program of the Graphic Design department at the Ministry of Science, Research, and Technology. Subsequently, using descriptive statistical analysis, the extent of the presence or absence of these components in the course outlines has been illustrated. Ultimately, practical suggestions have been made to revise the official curriculum for graphic workshops to create a more effective link between academic education and the real needs of the professional world.

Research Method

The present research is applied in purpose and qualitative-quantitative (mixed) in approach, and it aims to examine the degree of alignment between the workshop course syllabi in the undergraduate graphic design program and the nine components of authentic learning. This study was conducted in three main stages: 1. Identification of component instances; 2. Directed qualitative analysis; 3. Descriptive statistical analysis. In the first step, to improve the accuracy of aligning the theoretical model with the specialized content of the graphic design field, the conceptual identification of authentic learning components for workshop-based educational environments was carried out. Based on the theoretical foundations of Herrington and Oliver, each component was interpreted in terms of objectives, teaching methods, types of practical tasks, educational interactions, and assessment methods in graphic workshop courses. This stage was conducted in collaboration with two specialists in graphic design and art education. For example, «Authentic Context» was defined as real projects with a professional client, and «Expression» was defined as the ability to professionally defend the work. This conceptual formulation served as the basis for coding

in the next stage. In the second stage, a directed qualitative content analysis was used, in which the data were analyzed using a predetermined theoretical framework. The research framework included the nine components of authentic learning, each assigned a code from A1 to A9. The research community included all official syllabi for the workshop courses in the undergraduate graphic design program, extracted from the Ministry of Science, Research, and Technology's database. The unit of analysis was the written content of the syllabi, including objectives, course descriptions, skills, and suggested teaching methods. For each lesson, an analytical table was designed, and its compliance with the components was determined at three levels: «presence (✓)», «Partial presence (±)», and «Absence (✗)». The coding was performed by the principal researcher, and to enhance the content validity of the analysis, the results were presented in comparative tables to two art education specialists to evaluate the conceptual appropriateness and classification accuracy; their feedback was then incorporated into the final review. In the third stage, the data obtained from coding were analyzed using descriptive statistics. For each component, the degree of its realization across 42 workshop Courses was calculated and presented as frequency tables and bar charts, categorized by levels of presence. Additionally, to clarify the implementation stages, a conceptual model was designed to illustrate the research process, from the formulation of theoretical components to qualitative and statistical analyses and the extraction of findings, in a step-by-step manner (Fig. 1).

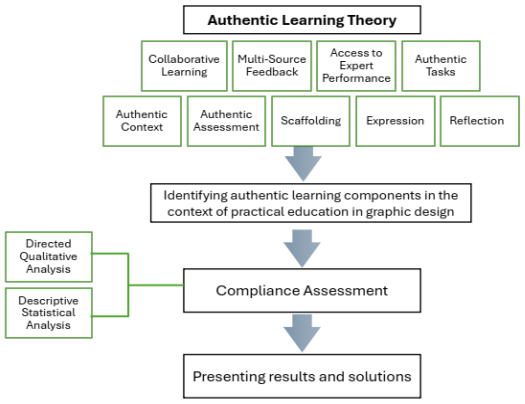


Fig 1. Conceptual model of the research implementation stages. Source: Author.

Research Background

Numerous studies have highlighted the gap between the higher education system and the job market's actual needs in the fields of art and design. The research by «Khorshidi and Hamdi» (2016) showed that aligning education with market needs, especially in demand-driven fields, has a direct impact on graduates' career success. Additionally, the study by «Pakzad and Abdollahi Tabrizi» (2024) on the employment status of graphic design graduates found that, despite the significant role of workshop courses, a considerable gap remains between the educational content and professional requirements. This issue is also in line with the findings of «Rahimi et al.» (2022), who identified the curriculum and skill training as key factors for entering the job market in their employability model. At the global level, «Taneja» (2021) also concluded, through an examination of employers' perspectives in the graphic field, that graduates in this discipline face deficiencies in key skills such as critical thinking, project planning, teamwork, and problem-solving. This weakness is largely due to the traditional, skill-oriented structure of graphic education, which still falls

short of the «learning by doing» paradigm. The review of graphic design course syllabi also indicates a lack of coherence in educational program design. «Hassanzadeh» (2015) concluded, in a comparative analysis of university curricula in Iran and abroad, that graphic workshop courses in Iran have a minimal share in the curriculum, and that the excessive focus on theoretical courses has weakened the possibility of training professional graphic designers. His findings are also in line with the research of «Nasiri and Khaksar» (2021). In this study, it is emphasized that graphic design education without familiarity with advertising management and market trends will be incomplete. This structural weakness has led to a gap between the skills required by the market and what is taught at the university. In the theoretical domain, the nine-component framework of «authentic learning» proposed by «Herrington and Oliver» (2000), which emphasizes concepts such as real-world context, authentic task, reflection, collaborative learning, and professional assessment, has recently become one of the foundations for revising design education methods. This framework is rooted in the theory of «situated cognition» proposed by «Brown, Collins, and Duguid» (1989) and emphasizes that learning is only comprehensible in real contexts. The study by «Zhang» (2023), focusing on design-based learning, emphasizes the importance of reflection-in-action and introduces multimedia tools as a means to enhance this reflection. Additionally, «Stoltenberg and Vibeke» (2014) have shown that using video and other visual media for documentation effectively enhances the visual expression of ideas and self-assessment among design students. The present study, using the theoretical framework of authentic learning and a comparative analysis of 42 graphic design workshop courses, evaluates the extent of overlap between the content of the approved syllabi for graphic design workshop courses in Iran and the components of authentic learning. The innovation of this study lies in its focus not only on the content level of the syllabi but also on evaluating that content from an instructional design perspective, grounded in a valid theoretical framework. Unlike previous studies that have primarily focused on employment outcomes or on describing employment status, this research seeks to identify the structural causes of this gap in the curriculum and to propose corrective strategies based on established learning models.

Theoretical Foundations

1. Authentic Learning Theory: Deep transformations in learning theories over the past three decades have led to the formation of approaches that emphasize practical experience, social interaction, and meaning-making in real contexts. One of these fundamental approaches that has gained attention in recent years, especially in higher education, is authentic learning. This approach, rather than relying solely on the transfer of theoretical concepts and content-based education, focuses on designing activities that, in terms of their nature, context, and process, resemble real-world professional and social situations (Lombardi, 2007). Authentic learning is rooted in the theory of situated cognition, a model first proposed by «Brown, Collins, and Duguid» in (1989). According to this theory, learning will be deep and lasting when it occurs in a context similar to the real-world application of knowledge. This perspective contrasts with the traditional view of education, which separates content from context and places the learner in an abstract space. In this model, interaction with tools, culture, and real activities is considered a prerequisite for the effective internalization of knowledge. Authentic learning refers to a set of educational experiences in which the learner encounters real and meaningful issues, uses professional tools and methods, and engages in activities within social-cultural contexts similar to the actual work environment. This type of learning enhances high-level cognitive abilities,

including critical thinking, problem-solving, and adaptability to new situations (Herrington & Oliver, 2000). Subsequently, «Herrington, Oliver, and Reeves» (2003) presented a nine-component framework for designing authentic learning environments in their foundational research. This framework is considered one of the most-cited models in the field of authentic learning and has been used in particular in the design of practical and professional courses. The components of this model are presented in Table 1.

Table 1. The Nine Components of Authentic Learning Based on the Views of Herrington and Oliver. Source: Author.

No.	Authentic Learning Component	Scientific definition
1	Authentic Context	The learning environment should be simulated or derived from real professional situations so that the student can gain experience in a setting similar to reality.
2	Authentic Tasks	Educational assignments should be complex, realistic, multi-step, meaningful, unstructured, and allow for various solutions to strengthen problem-solving thinking in students.
3	Access to Expert Performance	Students should observe real-life models of professional experts and become familiar with the actual methods of problem-solving and decision-making in the industry and profession.
4	Multi-Source Feedback	Education should provide access to diverse perspectives and experiences from professionals and professional feedback.
5	Collaborative Learning	Learners should be able to produce and share knowledge through collaboration, negotiation, dialog, and teamwork.
6	Reflection	Learners should be able to reflect on what they have learned or done in a structured manner (for example, in the form of a process report).
7	Expression	Students must acquire the ability to clearly express ideas, decisions, and defend them in professional situations.
8	Scaffolding	The role of the instructor in providing step-by-step guidance and adjusting the level of challenge to the learner's ability is essential.
9	Authentic Assessment	Evaluation should be performance-based, grounded in real products, and conducted in real contexts.

2. Practical Interpretation of the Theoretical Framework of Authentic Learning in Graphic Education: In fields like graphic design, which have a professional and practical nature, authentic learning can provide an ideal framework for educational design. Unlike traditional learning approaches where projects are designed hypothetically, in isolation, and without real context, authentic learning requires students to engage with a project that has a real client, time, financial, and execution constraints, targeting a real audience, the possibility of receiving feedback from various sources (instructor, classmates, and client), and the opportunity to defend, document, and present their work. The theoretical framework of this research is based on the nine-component model of authentic learning, presented by «Herrington and Oliver» (2000) and developed by «Herrington, Oliver, and Reeves » (2003). However, to analyze the content of graphic design workshop syllabi, these main components have been redefined operationally and executively to enable systematic

analysis. For example, «authentic context» is interpreted as the existence of projects with a client or real need; «authentic task» as multi-stage and challenging projects; and «reflection» as the documentation of the design process (Table 2). This alignment enables the coding and categorization of topics to measure the extent of authentic learning achievement.

Table 2. Practical Examples of Authentic Learning Components in the Content of Workshop Course Syllabi in the Graphic Design. Source: Author.

No.	Authentic Learning Component	Practical examples in graphic workshop education
1	Authentic Context	Defining projects with real topics related to society, industry, or culture in the form of class projects. For example, designing packaging for a real domestic brand.
2	Authentic Tasks	Carrying out projects in a multi-stage manner (design, implementation, and approval) and without professional constraints (personal preferences of the instructor, student, and other individuals), in order to enable the evaluation of various solutions.
3	Access to Expert Performance	Invitation to professional designers to present their portfolio, analyze, and conduct a live demonstration of the design process in a classroom or professional environment.
4	Multi-Source Feedback	The possibility of receiving feedback from a range of specialists (not just the course instructor) and related resources throughout the project.
5	Collaborative Learning	Group projects with defined roles in the design team (such as the brainstorming group, art director, and illustrator).
6	Reflection	Documentation of the design and writing stages of the analytical report on the implementation process by the student.
7	Expression	Oral presentations of projects, collective critiques, and analytical discussions about works in class.
8	Scaffolding	Guided, step-by-step, and providing appropriate feedback from the instructor at project decision points.
9	Authentic Assessment	Evaluation based on a presentation to the employer or a simulation of a presentation to the employer with judges outside the university.

Alignment of Authentic Learning Components with the Content of Graphic Workshop Course Syllabi

The findings section of this research is organized into two levels: qualitative analysis (at the individual course level) and descriptive analysis (at the course collection level), and it explains the extent of overlap between the content of the workshop courses in graphic design and the components of authentic learning. As stated in the methodology section, the content of all workshop courses approved by the Ministry of Science, Research, and Technology for the undergraduate program in Graphic Design (42 titles) was qualitatively analyzed using the nine-fold model of authentic learning by «Herrington and Oliver». For each course, an independent table was prepared for qualitative analysis, which specified the status of the realization of authentic learning components at three levels: «full presence», «partial presence», and «absence». Since it is not feasible to present the analysis of all 42

courses within a single article, this section provides a sample analysis table for the course «Sign Design Workshop». The analysis of this sample showed that despite the appropriate support from the instructor (in the component of Scaffolding) and a relative effort to create «authentic tasks», «reflection», and the opportunity for «student expression», many key components of authentic learning, including «authentic context», «access to expert performance», «multi-source feedback», «collaborative learning», and «authentic assessment», are not significantly present in this course. This pattern was also observed in the analysis of other courses in a nearly identical manner (Table 3).

Table 3. Qualitative Analysis of Authentic Learning Components with the Content of the Course «Sign Design Workshop». Source: Author.

Code	Authentic Learning Component	Status of Achievement in the Logo Design Course	Explanation and Analysis
A1	Authentic Context	✗	The course project may involve designing sign for hypothetical institutions or cultural topics and is less connected to a real employer or professional environment.
A2	Authentic Tasks	±	Projects are generally carried out in multiple stages (design, execution, and approval), but due to the absence of a real client, there is sometimes the possibility of being influenced by the preferences of the instructor or student.
A3	Access to Expert Performance	✗	In the syllabus, there is no indication of the presence of professional designers or the demonstration of real design processes; however, it is possible that the instructor is a professional expert in the job market.
A4	Multi-Source Feedback	✗	Without real projects, it is not possible to benefit from the opinions and feedback of a real employer throughout the project.
A5	Collaborative Learning	✗	Most activities are individual, and group or collaborative learning is not included in the syllabus unless the instructor has made arrangements in this regard.
A6	Reflection	±	Documenting the process has not been made mandatory in the syllabus.
A7	Expression	±	Usually, in the form of a final project presentation, the student explains their work; however, formal training in presentation and scientific defense skills is not included in the curriculum.
A8	Scaffolding	✓	The instructor should accompany the student step by step from idea to execution, which aligns with the component of Scaffolding.
A9	Authentic Assessment	✗	The final project is the basis for evaluation, but it is not defined in the form of a presentation to the

	employer or a real institution or external assessment.

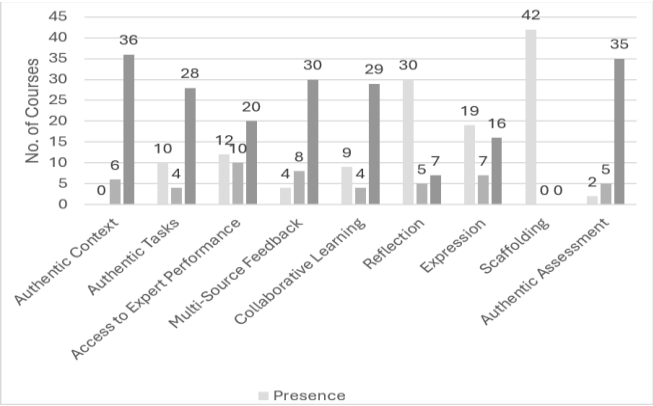
In the second stage, the data from 42 qualitative analysis tables were categorized by the frequency of component realization and organized into a table (Table 4). The findings showed that the only component fully realized across all workshop courses is «Scaffolding (A8)», which refers to the instructor's continuous presence during the execution process. The components «Reflection (A6)» with 86% realization and «Expression (A7)» with 61% realization rank next, indicating a relative presence of reflection and presentation in the educational syllabi. In contrast, components such as «Authentic Context (A1)», «Multisource Feedback (A4)», and «Authentic Assessment (A9)» have the least realization, indicating a deep gap between academic education and real professional needs. Additionally, the «Collaborative Learning (A5)» component is rarely observed in the curriculum, and most activities are designed individually. These patterns indicate that although workshop courses appear to be project-oriented in their formal structure, they likely lack effective connections to the real environment, professional employers, and a diverse network of feedback. Therefore, it can be said that the curriculum for workshop courses in graphic design education at Iranian universities still falls short of the principles of authentic learning and requires a profound redesign of its objectives, methods, and evaluation techniques.

Table 4. Descriptive Analysis of the Achievement of Authentic Learning Components with the Formal Curriculum of the Ministry of Science, Research, and Technology in the Undergraduate Program of Graphic Design. Source: Author.

Code	Authentic Learning Component	Presence	Partial Presence	Absence	Achievement Percentage	Analytic Explanation
A1	Authentic Context	0 Courses	6 Courses	36 Courses	14.2%	Limited courses are directly related to real societal issues or the job market, and most projects are hypothetical.
A2	Authentic Tasks	10 Courses	4 Courses	28 Courses	33.3%	Although most courses are project-based, the lack of real-world problem-solving has made the tasks less authentic.
A3	Access to Expert Performance	12 Courses	10 Courses	20 Courses	52.3%	The lack of a clear structure for inviting professional designers or analyzing the actual design process is evident.
A4	Multi-Source Feedback	4 Courses	8 Courses	30 Courses	28.5%	Given the absence of a real employer, most feedback will come from the course instructor, and the student will not be exposed to the challenging and sometimes negative feedback of the market.

A5	Collaborative Learning	9 Courses	4 Courses	29 Courses	30.9%	Group learning has been undefined and overlooked in most subjects.
A6	Reflection	30 Courses	5 Courses	7 Courses	86.3%	Some courses focus on documentation or design process analysis, but this topic is not universally and mandatorily included in the syllabus.
A7	Expression	19 Courses	7 Courses	16 Courses	61.9%	Final presentations are common; however, in the syllabus, structured training in expression, defense, and specialized dialog is not included.
A8	Scaffolding	42 Courses	0 Courses	0 Courses	100%	In all workshop courses, the professor is defined as accompanying the student from the idea stage to execution.
A9	Authentic Assessment	2 Courses	5 Courses	35 Courses	16.6%	Most evaluations are conducted in-class and by the professor; professional evaluations have not been provided by external experts.

Diag 1 shows the extent of the realization of authentic learning components across 42 graphic design workshop classes. This diagram shows three levels of achievement (presence, partial presence, and absence) for each component, providing a more accurate understanding of the quality of education in this field.



Diag 1. The degree of alignment of the workshop course content in the graphic design program with the components of authentic learning at three levels of realization (Presence, partial presence, and absence). Source: Author.

Critical Analysis of the Gap between Workshop Education and Authentic Learning in Graphic Design Education

The results of this research indicate that although the educational structure of undergraduate graphic design workshop courses has been somewhat project-oriented, it often falls short of the criteria for authentic learning. Among the nine proposed components in the theoretical framework of authentic learning, only the component «Scaffolding» was observed to be

fully realized in all courses, while components such as «Authentic Context» (14.2%), «Authentic Assessment» (16.6%), «Multi-source Feedback» (28.5%), and «Collaborative Learning» (30.9%) showed the least degree of realization (Diagram 2). This model presents a formal, project-based program, but in terms of content and context it only partially realizes the logic of authentic learning.

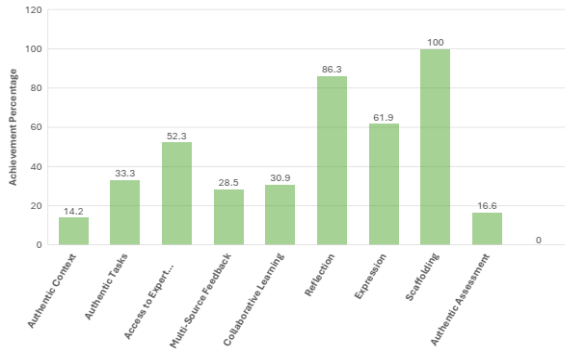


Diagram 2. The degree of alignment of the workshop course syllabus in the graphic design program with the components of authentic learning. Source: The author.

These findings are in line with numerous international studies. For example, the research by «Petrova» (2021) in the field of learning in digital design studios shows that without an effective link between student projects and real societal or industry issues, learning often remains superficially limited, and the expected professional skills do not develop. Additionally, «Rule» (2006) emphasizes that project-based learning can lead to authentic learning only if the real context and audience are involved in the project; otherwise, the exercises will merely be skill drills at the classroom level. At a higher level, students' collaboration and participation in real international projects enhance critical thinking, decision-making, and problem-solving skills. The article «Polina et al.» (2022) also elucidates the benefits of student collaboration with real foreign institutions and their positive impact on professional skills. At the domestic level, research by «Pakbaz and Abdollahi Tabrizi» (2024) also highlights the gap between university education and the practical needs of the profession in graphic design education. They show that although students possess technical design skills, their unfamiliarity with employer expectations, target markets, and the real-world order environment prevents them from effectively presenting their work in the competitive industry space. The findings of the present study also provide further confirmation of this result. On the other hand, successful international studies such as «Westholm» (2021), «Taneja» (2021), and «Barron and Darling-Hammond» (2008) have shown that in samples where design education is organized within the framework of real projects and with the participation of external institutions, students demonstrate greater abilities in critical thinking, decision-making, and problem-solving. Based on this body of research, a critical analysis of the gap between workshop-based education and authentic learning in Iran's official graphic design program can be expanded along several axes.

1. The Gap between Authentic Context and Hypothetical Projects: The findings of this research indicate that in the formal structure of graphic workshop syllabi in Iran, although there is an emphasis on project execution, these projects are rarely defined in explicit connection with real professional situations or the actual needs of employers and users. This situation does not align with the literature on project-based and authentic learning. In graphic design studies, it is emphasized that authentic learning can lead to professional

readiness when students engage in «real» or «genuine» projects; projects that are rooted in professional contexts and target real issues or gaps (Jones, 2019; Taneja, 2025). Research in the field of situated learning also shows that learning is most effective when the learning context overlaps with the context of actual knowledge application; conversely, in unfamiliar or disconnected contexts, learning effectiveness decreases (Brown, Collins, & Duguid, 1989). «Taneja's» reported reliance on hypothetical projects lacking real employers and users in some graphic design programs describes a situation where these projects, although appearing attractive in students' portfolios, rarely see implementation in the real world. In these projects, the user, the client, and the real-world context are absent, many decisions are made based on guesswork and assumptions, and the complete cycle from production to deployment in the real world is not followed (Taneja, 2025). The present analysis shows that at the level of the official graphic design program in Iran, the lack of emphasis on real contexts, the role of the client or user, and the complete cycle of project realization creates a ground for the reproduction of the same pattern; a pattern in which the project is reduced to mere classroom practice and distances itself from the component of «Authentic Context» within the framework of authentic learning. In this context, it can be said that the superficial, project-based nature of the curriculum, without a structural connection to the real issues facing society and industry, does not, in itself, guarantee the realization of authentic learning. The very low level of «Authentic Context» realization (14.2%) in this research is also a quantitative indicator of this structural gap.

2. Collaboration and Soft Skills Gap: The results of the present study indicate that the component of «Collaborative Learning» in graphic workshop curricula is mainly limited to general references to teamwork or lacks specific mechanisms for designing and evaluating collaborative experiences. This is while the literature on design education and employability consistently emphasizes the role of skills such as collaboration, teamwork, interpersonal relations, communication, and problem-solving in the professional success of graphic designers (Donnelly & Fitzmaurice, 2005; Wang, 2006; Taneja, 2022). Additionally, these studies indicate that high-level social, emotional, and cognitive skills, such as critical thinking, problem-solving, self-management, and collaboration, are becoming the core competencies required in the job market. Project-based learning studies consider collaboration not an optional addition but a key component of meaningful learning environments, because teamwork provides opportunities for dialogue, exposure to different perspectives, and the development of complex cognitive activities (Ellis & Hafner, 2007; Race, 2007, 126; Jones, 2019). In other words, students, while leveraging their individual strengths, also cultivate skills such as patience, respect, and conflict management, skills essential to social and community life (Taneja, 2022). In the reviewed official syllabi, although there are references to teamwork, the lack of explicit goals in the area of soft skills and the absence of a structure for monitoring and evaluating participation indicate that collaboration is perceived more as a method for organizing work rather than as an authentic component of learning with specific cognitive and social outcomes. The relatively low rate of «Collaborative Learning» realization (30.9%) in this study also reinforces this perception quantitatively. As a result, it can be said that part of the gap between the formal curriculum and the logic of authentic learning is due to the systematic neglect of the role of collaboration and soft skills in the design and evaluation of workshop courses; a gap that aligns with Wang's findings on the importance of soft skills in the employability of graphic designers (Wang, 2006).

3. The Dominance of «Scaffolding» alongside the Absence of Other Authenticity Components: Contrary to the diminished presence of «Authentic Context», «Authentic

Assessment», and «Structured Collaboration», the component of «Scaffolding» is very prominent in the workshop syllabi of in-person graphic courses and has been fully (100%) observed in all subjects. In the course outlines, there is repeated emphasis on the instructor's role in guiding, supervising, and directing the project process, which can be seen as an indication of a strong scaffolding model at the formal program level. The authentic learning literature considers scaffolding an essential element in the gradual progression of students toward deeper understanding and greater independence in learning (Great Schools Partnership, 2015; Taneja, 2022). In this approach, instructors help learners achieve their learning goals by breaking down tasks into smaller parts, providing models and examples, and using reminders and coaching. However, within Herrington's framework, scaffolding can lead to authentic learning only when accompanied by real-world contexts, open and complex tasks, collaboration, and authentic assessment. The present analysis shows that in formal curricula, scaffolding is defined in a context where other components of authenticity are either absent or minimally present. In other words, the formal curriculum emphasizes controlling and directing the in-class process more than empowering students to act independently in real-life situations. This inconsistency is one of the structural mechanisms that can explain the persistence of the gap between the formal curriculum and authentic learning experience. In the meantime, another noteworthy finding is the relatively high level of «Reflection» achievement (86.3%). In some classes, the documentation of the design process and the analysis of project execution trends are conducted systematically, which can be considered a strength of graphic workshop education. This finding aligns with «Rosli's» (2018) results, which consider reflection as one of the key components in shaping an independent and responsible learner and demonstrate that reflective exercises significantly aid design students. Additionally, studies such as «Zhang» (2023) on «Designing to Support Reflection in Design-Based Learning» highlight reflection as a key element of authentic and self-directed learning in design disciplines. Therefore, it can be argued that combining the existing mechanisms for «Reflection» and «Scaffolding» with «Authentic Context», «Authentic Assessment», and «Collaboration» offers significant potential to move toward authentic learning within these structures.

Conclusion

The present study was conducted to examine the degree of alignment between the structure of workshop courses in undergraduate graphic design and the nine components of authentic learning. The analysis of 42 course titles showed that the implementation of these components in the Ministry of Science's approved curricula exhibits a relatively unbalanced pattern. In response to the research question, it became clear that only a portion of the theoretical capacity for authentic learning has been realized at the official program level, and there is a significant inconsistency among the components. The three components of «Scaffolding» (100%), «reflection» (86.3%), and «Expression» (61%) have the most presence in the syllabi, while «Authentic Context» (14.2%), «Multi-Source Feedback» (28.5%), and «Authentic Assessment» (16.6%) have a weak presence or are essentially absent. Based on this, approximately 40-45% of the capacity for authentic learning has been realized in the formal program. Although the workshops are formally project-based, the projects mostly remain at the level of class-centered exercises and have little connection to real-world, professional contexts. This situation indicates a structural gap between the formal curriculum and the logic of authentic learning; a gap that can be attributed, among other things, to the lack of organized connections between the university and industry, as well as an excessive focus on technical and individual skills. As a result, the goals of

collaboration, solving real problems, and receiving multi-source feedback often remain limited to general recommendations. Therefore, the workshop-based graphic education system still falls short of the logic of authentic learning, in that it fails to engage students with real situations, professional interaction, and diverse feedback. It should be emphasized that the scope of the inferences of this research is consciously limited to the level of «syllabi and official documents». This study does not claim that what is stated in the syllabus document is implemented exactly as it is in the classrooms; it is obvious that some instructors may go beyond the syllabus text and, with varying degrees of intensity and quality, realize the components of authentic learning in practice, while others may even operate at a level lower than what is predicted in the syllabus. However, in accordance with the stated objective of the article, the focus of this research is on evaluating the capacity and orientation of the formal program; that is, on the question of how much the approved syllabi, at the structural design level, provide the opportunity and necessity for authentic learning to be realized by instructors. From this perspective, the findings indicate that the observed limitations, rather than being merely the result of individual teachers' preferences or implementation shortcomings, are rooted in the design of the formal curriculum. Based on this, several programmatic and policy implications can be proposed: 1. Clarification of authenticity components in the syllabi, including the definition of real contexts, the presence of employers, and evaluation based on real artifacts; 2. Institutionalizing collaboration and soft skills, along with specific metrics for group evaluation; 3. Purposeful utilization of the capacities of «Scaffolding» and «Reflection» to link intra-university projects with real-world situations. From a research perspective, this study can be considered the first step in a two-tiered research program that, at the first level, analyzes the structural content and the gap between the formal program and authentic learning, and, at the second level, is complemented by field research. For the future, conducting qualitative and mixed-method studies is recommended to explore the lived experiences of students and instructors in graphic workshops in relation to these nine components, including observing studio classes, analyzing portfolios, and conducting in-depth interviews with stakeholders. Additionally, intervention studies that focus on the design and testing of redesigned workshop units based on authentic learning can empirically examine the link between formal program reform and changes in educational practice. Such studies, alongside the present analysis, can help form a more comprehensive picture of the transition of graphic design education in Iran toward authentic learning and strengthen the sustainable link between the university and the professional field.

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Conflict of Interest

The author (s) declare that there are no potential conflicts of interest related to this research, in writing, and publication of this article

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