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Article

Rethinking Watercolor Pedagogy in Undergraduate Art Education: Current Challenges and Strategic Responses

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Abstract: Watercolor occupies a distinctive position in undergraduate art education due to its material sensitivity, technical complexity, and capacity for individual expression. Unlike other media, watercolor requires prompt judgment in managing water, pigment, and timing. Although Chinese undergraduate institutions have accumulated substantial teaching experience, classroom practice often remains dominated by teacher-centered demonstration and imitation. Consequently, while students achieve technical stability, their creative confidence, aesthetic judgment, and adaptive professional competence remain underdeveloped. In response to diversified artistic practices and higher expectations for innovative talent, conventional watercolor pedagogy requires urgent reconsideration. This paper revisits undergraduate watercolor teaching through the lenses of educational purpose, curriculum structure, classroom methodology, and student development. It outlines the medium-specific characteristics demanding a responsive teaching model and reviews existing scholarship, noting a prevalent focus on technical foundations. The study analyzes major challenges in current education, including outdated instruction, excessive technical drills at the expense of originality, inadequate aesthetic cultivation, and weak connections to professional practice. To address these issues, the paper proposes practical strategies: student-centered pedagogy, layered curriculum design, critical appreciation training, digital resource integration, expanded field practice, and multidimensional assessment. Ultimately, watercolor teaching must transcend narrow technical transmission to cultivate students' abilities to observe, interpret, experiment, and create. Balancing foundational training with innovation and real-world engagement is essential to foster independent, perceptive, and creative art graduates.

Keywords: art education; watercolor painting; pedagogy; creativity; aesthetic literacy

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1. Introduction

Watercolor has long occupied an important place in the curriculum of undergraduate art education. As both a foundational and expressive medium, it contributes not only to students' mastery of color and form but also to the cultivation of perception, sensitivity, and visual interpretation. Compared with drawing, gouache, or oil painting, watercolor possesses a special material logic. Its visual language is shaped by the interaction among water content, pigment transparency, paper absorbency, timing of application, and the artist's immediate control of touch. The medium is therefore highly dependent on both planning and responsiveness. A slight change in moisture, edge control, or pigment concentration may alter the tonal rhythm, spatial atmosphere, and emotional effect of the whole image [1]. Because of this, watercolor training is never simply a matter of acquiring manual skills; it is also a training in observation, anticipation, restraint, and expressive decision-making.

Within undergraduate institutions, watercolor courses have traditionally emphasized the teaching of basic techniques through step-by-step demonstration, studio exercises, copying, and teacher feedback. This mode of instruction has undoubtedly played a positive role in helping students establish technical competence. It is especially useful in the early stages of learning, when students need to understand wash control,

brush methods, layering, tonal transition, and compositional order. However, as higher education enters a period marked by rapid social change, intensified employment competition, and the growing demand for innovative and adaptable graduates, the limitations of this model have become increasingly visible. Students who are trained primarily through imitation may produce orderly assignments, yet they often struggle when asked to undertake independent creation, develop personal language, or connect watercolor practice with broader cultural and professional contexts [2].

This issue is particularly important in art education, where technique and individuality should grow together rather than remain disconnected. A technically competent watercolor student is not necessarily a perceptive or creative one. Many students can complete realistic exercises under close guidance but become hesitant when they must choose themes, organize ideas, or experiment with materials on their own. In other words, technical training alone does not guarantee artistic maturity [3]. Undergraduate watercolor pedagogy must therefore address a wider set of educational questions: What kind of artistic capability should watercolor courses cultivate? How can teaching move beyond demonstration and correction? In what ways can classroom instruction strengthen students' creativity, aesthetic judgment, and confidence in independent expression?

Another reason this issue deserves reconsideration is the expansion of watercolor itself as a contemporary medium. Modern watercolor practice is no longer limited to a narrow understanding of transparent watercolor on paper [4]. In current artistic practice, watercolor often intersects with gouache, acrylic, ink, collage, mixed media, and digital preparatory methods. The boundaries of the medium are more open than before, and contemporary visual culture has also broadened students' exposure to diverse styles and image-making methods. If undergraduate teaching continues to define watercolor too narrowly, students may not fully appreciate its contemporary vitality or its potential for experimentation.

Against this background, the present paper aims to rethink undergraduate watercolor teaching in a more systematic manner. Rather than treating watercolor merely as a technical subject, it views the course as a site where skill training, aesthetic cultivation, creativity, and educational philosophy intersect. The paper first reviews the current scholarly discussion on watercolor teaching in higher education and identifies the main concerns and limitations of existing research. It then analyzes the major problems that still affect classroom practice and proposes corresponding strategies for improvement. By doing so, the study seeks to provide a more comprehensive pedagogical framework for undergraduate watercolor education and to contribute to the ongoing reform of art teaching in universities [5].

2. Literature Review

2.1. Existing studies on watercolor teaching in higher education

Research on watercolor teaching in Chinese higher education has largely focused on instructional methods, curriculum effectiveness, and the cultivation of students' practical competence. Existing discussions generally recognize watercolor as a medium with distinctive expressive qualities and acknowledge the need to adapt teaching to the characteristics of both the discipline and the learner. At the same time, most studies have emerged from frontline teaching experience and are therefore closely connected to classroom realities.

The importance of creative thinking in university watercolor education has been emphasized, and watercolor teaching should not be reduced to mechanical technique training. From this perspective, effective instruction should help students develop an awareness of originality and explore more imaginative approaches to pictorial construction. This view is significant because it shifts attention from the completion of standard exercises to the educational function of cultivating creative consciousness [6].

In the context of application-oriented universities, attention has been given to teaching models and their relationship to educational goals [3]. It is suggested that watercolor instruction in such institutions should respond to practical talent-training needs and should therefore reconsider the balance among skills, classroom methods, and student participation. This perspective highlights that watercolor pedagogy cannot be separated from the broader orientation of institutional training. Different universities may vary in disciplinary emphasis, yet all need to consider whether their watercolor courses are aligned with the competencies students are expected to develop.

Problems in current university watercolor teaching have been widely discussed, along with corresponding suggestions for reform. Issues such as outdated methods and insufficient adaptation to students' developmental needs have been identified. This is valuable because it reflects widespread concerns that conventional models remain too narrow and repetitive. It also indicates that teaching reform has become an established topic in watercolor education [7].

Although these studies vary in emphasis, they share several important tendencies. First, they acknowledge that watercolor teaching should not be confined to the mechanical transmission of technique. Second, they suggest that innovation in teaching methods is necessary if watercolor courses are to meet contemporary educational expectations [8]. Third, they imply that student development should be understood in a broader sense, including not only technical proficiency but also creativity, appreciation, and adaptability. These shared concerns provide an important basis for further discussion.

2.2. Limitations of existing research

Despite the value of the above scholarship, current research on undergraduate watercolor teaching still shows several limitations. One limitation is that many studies remain relatively concise and problem-oriented, often presenting broad recommendations without constructing a sufficiently systematic pedagogical framework [4]. The teaching issues are correctly identified, yet the internal relationship among educational philosophy, curriculum design, student psychology, aesthetic literacy, and assessment is not always fully elaborated. As a result, suggestions for reform sometimes remain at the level of principle rather than implementation.

A second limitation is that the literature often gives stronger attention to teaching technique than to the medium's broader educational significance. In practice, watercolor is frequently discussed as a professional skill course, while its role in cultivating observation, reflection, emotional sensitivity, and cultural understanding is less fully theorized [9]. This narrowing of focus may inadvertently reproduce the very problem that teachers seek to overcome: an overemphasis on skill at the expense of artistic development.

A third limitation is that the relationship between watercolor teaching and contemporary visual culture is not always sufficiently addressed [10]. Today's students grow up in an image-rich environment shaped by digital media, online platforms, cross-disciplinary design, and rapidly changing aesthetic references. They are exposed to both traditional painting and new forms of visual production. Yet much of the existing discussion still centers on conventional studio routines and does not fully explore how watercolor pedagogy can respond to this wider visual context without losing disciplinary rigor.

Finally, there is still a need for more integrated discussion of how watercolor courses can support students' long-term development beyond the classroom [11]. Undergraduate teaching should not only help students complete coursework; it should also prepare them for exhibition practice, independent creation, teaching work, cultural production, and interdisciplinary artistic engagement. Existing studies gesture toward these needs, but they do not always translate them into a coherent strategy for curriculum reform.

2.3. Research orientation of the present paper

In light of the above, this paper extends earlier discussions by situating undergraduate watercolor teaching within a broader educational framework. It acknowledges the necessity of technical foundations but argues that technique should be

integrated into a teaching system that also values initiative, creativity, aesthetic interpretation, and real-world experience. The paper examines watercolor pedagogy not only as a classroom procedure but also as an educational purpose. In doing so, it seeks to bridge the gap between general calls for reform and more structured proposals for practice [11].

3. The Distinctive Nature and Educational Value of Watercolor

A meaningful reform of watercolor pedagogy must begin with a clear understanding of the medium's unique characteristics. Watercolor differs from many other pictorial media because water is not merely a carrier of pigment but an active force in image formation. The amount of water used, the order of washes, the humidity of the paper, and the timing of brush contact all influence the visual result. This dual quality makes watercolor especially valuable in education: it trains not only hand skill but also visual anticipation, patience, and responsiveness to change.

In addition, watercolor's transparency allows students to perceive pictorial construction in a particularly direct way. Because earlier layers often remain visible, each decision affects the structure of subsequent layers. Students must therefore learn to think in sequences rather than isolated strokes. This encourages planning, compositional foresight, and respect for process. At the same time, the freshness and fluidity of watercolor also invite spontaneity and emotional immediacy. A successful watercolor often depends on the balance between discipline and openness, between deliberate order and living accident. Such balance is pedagogically meaningful because it mirrors a larger artistic principle: true creation requires both mastery and freedom.

From a curricular point of view, watercolor also serves as a bridge between observational training and expressive development. It can be used to study still life, landscape, figure, architecture, and atmosphere, yet it also provides ample space for individual interpretation [12]. Through watercolor, students can learn not only how to record visual phenomena but also how to reorganize them into mood, rhythm, and style. For this reason, watercolor education should not be treated as a peripheral or purely technical subfield. It is an important arena in which students learn how materials, perception, and meaning interact.

4. Major Problems in Current Undergraduate Watercolor Teaching

4.1. Persistence of a teacher-centered instructional model

One of the most prominent problems in current undergraduate watercolor teaching is the continued dominance of teacher-centered instruction. In many classrooms, the teacher explains techniques, demonstrates procedures, provides the same reference for all students, and then comments on completed exercises. Although this method offers clarity and control, it often reduces students to passive followers. They learn what to do, but not always why they do it. As a result, their dependence on the teacher remains strong.

This model also weakens classroom interaction. When students are mainly expected to imitate and complete tasks, they have fewer opportunities to raise questions, compare approaches, or articulate their artistic intentions. The studio becomes a place of execution rather than inquiry [13]. In such an environment, students may improve their ability to follow instructions, but their confidence in independent decision-making develops slowly.

4.2. Overemphasis on technical drills and insufficient cultivation of originality

Technical training is essential in watercolor, especially for beginners [9]. However, in many undergraduate settings, technical drills remain disproportionately central throughout the course sequence. Students repeatedly practice still lifes, landscapes, or copied images, while original subject development and material experimentation receive less attention.

The long-term result is that students often possess basic skills without a corresponding ability to generate ideas [14]. They may know how to render familiar objects, but they struggle to choose meaningful themes, adapt form to content, or

experiment with visual structure. In a contemporary art environment that values originality and personal voice, this imbalance becomes a serious limitation.

4.3. Inadequate cultivation of aesthetic appreciation and critical judgment

Another key problem is the insufficient integration of aesthetic education into watercolor courses. Many classes focus heavily on production, while art appreciation and critique occupy only a small portion of teaching time. Some students therefore approach painting mainly as technical performance and lack deeper criteria for judging the quality of a work [15]. They may equate success with smooth washes or accurate likeness, without fully considering atmosphere, expressiveness, conceptual coherence, or pictorial tension.

Aesthetic judgment, however, does not arise automatically from technical practice. It must be cultivated through looking, comparing, discussing, and reflecting. Without systematic exposure to excellent works, stylistic diversity, and critical dialogue, students' visual standards may remain narrow. This not only affects their appreciation of art but also limits the ambition and depth of their own creative work.

4.4. Weak connection between studio learning, lived experience, and professional development

Watercolor is closely connected to life, nature, and changing visual environments. However, many undergraduate courses remain overly confined to indoor exercises and preset motifs. Students spend substantial time completing classroom assignments but relatively less time engaging in field sketching, observational research, community-based themes, or culturally grounded projects. As a result, their work can become repetitive and detached from lived experience.

This separation is problematic because artistic vitality often comes from direct encounters with the world. Outdoor observation, social attention, and cultural immersion can all deepen students' emotional and visual understanding. At the same time, the weak connection between watercolor training and wider professional pathways makes it harder for students to see the practical relevance of the course. If teaching does not demonstrate how watercolor relates to exhibitions, illustration, education, public art, design, or interdisciplinary practice, students may regard it as an isolated requirement rather than a living artistic resource [3, 9].

5. Strategies for Improving Undergraduate Watercolor Teaching

5.1. Establishing a student-centered and inquiry-based classroom

The initial requirement for reform is to update the teaching philosophy. Teachers should continue to serve as guides and experts, but they should no longer dominate the classroom as the sole active center. Students need opportunities to ask questions, propose ideas, compare solutions, and reflect on processes [5]. Inquiry-based tasks, peer discussions, thematic explorations, and process critiques can all help transform the studio from a site of repetition into a site of learning through investigation.

In practice, this means that assignments should not always begin and end with a teacher model. Instead, teachers can set visual or thematic goals while allowing students to choose part of the content, reference, or expressive strategy [14].

5.2. Designing a layered curriculum that integrates foundation and experimentation

A more effective watercolor curriculum should be progressive rather than uniform [8, 11]. At the introductory stage, students need systematic foundation training in material handling, color relationships, tonal transitions, composition, and observation. At the intermediate stage, these skills should be extended through thematic studies, mixed media experiments, and selective creative tasks. At the advanced stage, students should undertake more independent projects, including serial creation, topic-based exploration, and personal style development.

This layered design ensures that creativity is not introduced in a vague or premature way, but neither is it postponed indefinitely. Students gradually move from learning how watercolor works to learning how watercolor can be used to express ideas.

5.3. Strengthening aesthetic literacy through appreciation and critique

To enhance students' aesthetic abilities, watercolor teaching should include regular art appreciation and critique. Students need to analyze works from various periods, regions, and styles, focusing on composition, rhythm, mood, material use, and expressive intention [8]. They should also learn to discuss paintings in a precise and reflective manner, avoiding vague praise or rejection.

Critique sessions can be particularly effective when they link process and outcome. Instead of merely correcting faults, teachers can encourage students to explain their intentions, assess whether those intentions were achieved, and explore alternative solutions. Peer critique also broadens perspectives and helps students articulate artistic quality more effectively.

5.4. Integrating digital resources and expanding practice platforms

Contemporary teaching should effectively utilize digital tools while ensuring they do not replace the hands-on experience of painting. Multimedia presentations, online museum collections, process documentation, and image comparison can enhance classroom teaching and broaden students' perspectives. Digital resources also assist students in reviewing techniques and analyzing works more efficiently.

Simultaneously, institutions should offer broader practice platforms, such as exhibitions, competitions, workshops, campus art festivals, and interdisciplinary collaborations. These activities provide real audiences and practical contexts for student work, thereby enhancing motivation and professional awareness.

5.5. Reconnecting watercolor teaching with life, nature, and culture

Field sketching, plein-air painting, visual diaries, and local cultural investigation should be integral to undergraduate watercolor education. Students need opportunities to observe changing light, weather, human activity, architecture, and landscapes directly. Such practice enhances perception and helps them understand that artistic creation is rooted in lived reality.

Teachers should encourage students to draw inspiration from local history, daily life, and social observation. When watercolor is connected to real places and experiences, students are more likely to produce work with emotional sincerity and visual freshness.

5.6. Reforming assessment to support comprehensive development

Evaluation standards strongly influence student behavior. If watercolor courses assess only technical neatness or likeness, students will naturally avoid risk and pursue safe solutions. A more appropriate assessment system should include multiple dimensions: technical competence, observational ability, originality, aesthetic quality, process engagement, and reflective depth [9, 15]. Such an approach better aligns with the educational goals of undergraduate art teaching and encourages balanced development.

6. Conclusion

Undergraduate watercolor teaching is at a stage where reform is both necessary and possible. Traditional methods have helped generations of students build technical foundations, and their value should not be denied. However, when teaching remains confined to demonstration, imitation, and correction, it can no longer fully respond to the needs of contemporary art education. Today's students require more than procedural skill; they need the ability to observe carefully, think independently, judge aesthetically, and create with confidence and individuality.

The reform of watercolor pedagogy should therefore be understood as a structural adjustment rather than a superficial addition of new methods. It requires a renewed teaching philosophy, a more developmental curriculum, stronger aesthetic education, closer connection with life and culture, better use of digital and institutional resources, and more comprehensive assessment criteria. Only by integrating these dimensions can undergraduate watercolor courses move from narrow skill transmission toward the cultivation of mature artistic capacity.

In this sense, the central task of watercolor teaching is not simply to show students how to control water and pigment. It is to help them develop a way of seeing, feeling, and thinking through painting. When watercolor education achieves this goal, it can contribute not only to students' technical growth but also to the formation of creative, reflective, and culturally responsive art professionals.

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