Research and Practice on Hybrid Teaching of "Digital Advertising Design"

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Abstract: This paper uses the "Digital Advertising Design" course as an example to explore the implementation of blended learning in the context of "Internet + Education." The shift from passive to active learning by students, from traditional classroom teaching to a combination of online and offline teaching, and from a focus on knowledge and skills education to an emphasis on process and method training, has reshaped the teaching model, improved teaching materials, and reformed teaching methods. Through teaching reforms, this model can be applied to other core courses in the same major and even extended to the construction of courses within the design discipline cluster, achieving a comprehensive construction and exemplary leading effect from a single point to a wider range.

Keywords: Blended learning; Digital advertising design; Teaching reform

1. Introduction

"Internet + Education" is a new educational model that combines Internet technology with the field of education, emerging alongside the continuous development of modern science and technology. This model has brought significant impacts and challenges to higher education. The evolution of blended learning internationally has undergone three phases: the technology application phase, the technology integration phase, and the "Internet +" phase. Merrill proposed four effective stages of activation, demonstration, application, and integration, which create a virtuous cycle of "teacher guidance - teacher-student interaction - self-directed learning" [1]. Feng *et al.* (2021) proposed an implementation framework for blended learning, emphasizing four key elements: models, strategies, structure, and support. This framework forms a complement between online learning and classroom teaching, promotes teacher-student interaction, and enhances students' self-directed learning abilities. It also fosters a new relationship between teaching and learning, and a new model of teaching organization, moving from "surface learning" to "deep learning" in the stage of high-quality development [2].

2. Course background and teaching design approach

2.1. Course background

Digital Advertising Design is a core course offered to undergraduate students majoring in Digital Media Art. The course deeply integrates the cultivation of Chinese spirit and professional ethics into its content, in line with the requirements of the "Four New" professional construction, and aims to cultivate application-oriented talents who can serve regional economic development. The course establishes the objective of "adhering to moral education, integrating knowledge, ability, and quality organically, and cultivating students with interdisciplinary capabilities." Knowledge imparted includes the ability to articulate the concepts, processes, and standards of H5 digital advertising design, summarize methods for interactive, motion, and sound design, and apply interdisciplinary knowledge to H5 design practices. Skills development includes the ability to read the latest industry literature, and case analysis articles writing, and use critical thinking to evaluate the latest technologies and trends in H5 digital advertising and analyze cutting-edge issues and current challenges in the era of AI-generated content (AIGC). Value shaping involves the ability to explore the design wisdom embedded in the Chinese spirit, establish a correct understanding of Chinese culture, and cultivate a deep sense of patriotism, as well as develop a spirit of craftsmanship in pursuit of excellence and foster a strong sense of professional identity.

The course plans to explore solutions through hybrid teaching to address three key issues: The course focuses heavily on H5 visual design and expressive tension but neglects the artistic shortcomings of students from literary and directing backgrounds, leading to lower learning efficiency and output for some students. How can the course accommodate the different characteristics of various student sources? The course traditionally emphasizes the teaching and training of students' practical abilities while neglecting the cultivation of their abilities in self-expression, literature research, and reading industry articles. How can the course develop students' advanced abilities in evaluation and creation? Traditional teaching methods overlook student interaction and participation. How can the course shift from the "teacher speaks, students listen" model to enhance student participation in the classroom?

2.2. Teaching design approach

The course identifies the deep integration point of "Information Technology + H5 Design + Chinese Spirit" and establishes a "Three-Three Coupling" course mechanism, integrating a six-step teaching method for hybrid teaching.

The "Three-Three Coupling" mechanism consists of three innovations rooted in design creativity:

(1) "New Concept" involves the interdisciplinary integration of educational concepts, pinpointing the convergence of "Information Technology + H5 Design."

(2) "New Method" emphasizes the use of various information technology tools to facilitate hybrid classroom instruction, creating conditions for cultivating students' innovative high-level abilities.

(3) "New Model" deeply integrates "Information Technology + H5 Design + Chinese Spirit," reconstructing course content and resources to achieve differentiated growth and hierarchical resource provision.

The three integrations, with Chinese Spirit as the core, include:

(1) "Integration" emphasizes the fusion of ideological and political elements within the course, such as the cultivation of the Chinese spirit and professional orientation, highlighting the value of the course.

(2) "Connectivity" refers to the construction of a self-built commercial case and ideological-political case resource library, connecting various types of resources inside and outside the classroom.

(3) "Innovation" guides students to practice thematic creations on the Chinese Spirit through H5 creativity,

visual design, and interactive technology, covering topics such as rural revitalization, traditional culture, and cultural confidence.

The three experiments, with the hybrid classroom as the wing, include:

(1) "Experiment" employs PBL (Problem-Based Learning) group role-playing, emphasizing students' ability to meet online and offline learning goals by performing their respective roles.

(2) "Experience" addresses the issues of students undervaluing theory and being weak in expression by encouraging students to write case analysis articles, record audio sharing, and engage in exploratory learning through online learning, including reading the latest industry literature and articles, explaining them, and discussing them in class.

(3) "Examination" involves the organic combination of restructured design outcomes with university student disciplinary competitions, using high-level competitions to evaluate the effectiveness of course learning [3].

2.3. Design of the hybrid teaching process

Under the "Three-Three Coupling" course mechanism, and leveraging the digital learning platform, the course adopts a flipped classroom approach combined with task-driven methods, role-playing, case-based teaching, and other online and offline teaching methods. These are integrated with a six-step teaching method to facilitate hybrid teaching, as outlined in the following steps.

2.3.1. Pre-class stage (Online)

Step 1: Task sheet guided learning

The task sheet includes sections such as knowledge point tracking diagrams, learning objectives identification, learning guidance suggestions, task assignments, and self-assessment.

Step 2: Video-based self-learning

Knowledge content is presented ahead of time through micro-lectures, guiding students to engage in self-directed learning and complete the associated tasks.

Step 3: Shared analysis and appreciation

Addressing the expression weaknesses of art students, this step involves engaging with industry techniques and standards, guiding students to write H5 analysis essays, share them online, and participate in peer evaluations, fostering their comprehensive abilities in reading, writing, analysis, and expression.

2.3.2. In-class stage (Offline)

Step 4: Centralized explanation

This step involves building the chapter framework, using "Chinese Spirit" as the task driver to explain key points and difficulties, organize the knowledge structure, and summarize topic-related knowledge points.

Step 5: Role-playing group work

PBL group tasks are assigned, where art students and students from literature and directing backgrounds role-play to deeply integrate and complete H5 project tasks.

2.3.3. Post-class stage (Online)

Step 6: Discussion-based reporting

Students are required to read the latest industry literature and articles, explain them in class, extend the

discussion to online platforms, and complete a discussion-based report.

3. Course teaching design: Using "Exploring the World of Digital Advertising H5" as a sample

The teaching objectives and process will be detailed using "Exploring the World of Digital Advertising H5" as a sample, illustrating the course's allocation of online and offline hours, as well as the tasks involved in the hybrid pre-class, in-class, and post-class stages. This approach is aimed at achieving the teaching objectives and addressing the three "neglected" pain points mentioned earlier.

3.1. Student analysis and teaching objectives

To enhance students' interest in learning the content of digital advertising H5, the course aims to cultivate their ability to research, analyze, and trace the development of digital advertising H5 from its inception to its current form, and to understand the essential relationship between H5 and advertising, thereby building a foundational theoretical system for H5. By the end of the course, students are expected to master the following knowledge, skills, and abilities: the concept and definition of H5, the logical relationship between H5 and future digital design, and the marketing advantages of H5. This section will also introduce an H5 thematic design project centered on the "Chinese Spirit," requiring students to conduct in-depth research on the creative concepts, interactive forms, and visual impact of H5. The course will guide students in forming their values, fostering cultural confidence, expanding their international perspectives, and instilling a sense of national pride.

3.2. Teaching process and implementation methods
3.2.1. Pre-class stage design (Online)

(1) Task sheet for online self-directed learning and pre-class preparation

Students are first required to claim the online self-directed learning task sheet, which includes sections such as knowledge point tracking diagrams, identification of learning objectives, learning guidance suggestions, task assignments, and self-assessment. Next, the knowledge content is presented ahead of time through the micro-lecture video "What Exactly is H5?" guiding students to engage in self-directed learning and complete the related discussion topic: "Some say 'H5 = mobile PPT/APP,' what is your opinion on this view?" In this session, the task completion rate for this stage was 98.78%, with an average score of 92.33 on the chapter quiz.

(2) Shared analysis and appreciation

This method strengthens students' self-expression and research abilities. Based on the learning objectives of "Exploring the World of Digital Advertising H5," students are required to utilize the commercial case resource library and the ideological and political case resource library built by the instructor to introduce the concept of sharing and complete the first reading and sharing task published on the learning platform. Students are asked to understand the connotation of the "Chinese Spirit," search for H5 cases related to this theme, and write case analysis articles, covering aspects such as creative positioning, visual design, and interaction logic. Students are then required to conduct self-assessments and peer reviews through the online teaching platform and provide feedback on the evaluation results.

3.2.2. In-class stage design (Offline)

(1) Problem-based discussion and video case introduction

The class begins with the video "A Fruit Metaphor to Understand the Advantages of H5," guiding students to observe, think, and discuss the four elements mentioned in the video and reflect on the communication advantages of H5. Students are then encouraged to interactively connect their pre-class learning outcomes with in-class reflections through problem discussions, generating a word cloud from the discussion to introduce the teaching content: the differences between H5 marketing design and traditional marketing design, thereby sparking students' interest in learning about H5 and its characteristics.

(2) Questioning, sharing, and discussion

Questions are posted on the learning platform, allowing students to respond with comments, creating a relaxed and enjoyable discussion environment. Students are guided to articulate their understanding of the hypotheses "H5 = HTML5," "H5 = WeChat Webpage," and "H5 = Mobile PPT." After discussing and responding to these questions, students can evaluate and share their thoughts, summarizing the concept of H5 and attempting to understand the role of its definition.

(3) Offline flipped classroom: Experiencing the Chinese Spirit

To achieve the course's ideological and political goals, the flipped classroom is used to complete the full-process creation of an H5 project themed around the "Chinese Spirit." This session builds on the pre-class online shared analysis, requiring students to extend their analysis of H5 cases into the offline classroom, deeply exploring the creative concepts, interaction forms, and visual impact of H5 related to traditional culture, smart healthcare, rural revitalization, and more. The goal is for students to articulate their ideas with reasoning, substance, evidence, and strength. This approach also echoes the pre-class content and flipped classroom tasks published online, guiding students to select themes for in-depth exploration in the flipped classroom. Students are required to form PBL (Problem-Based Learning) groups, mixing students from different backgrounds to role-play and complete the first stage of the H5 project creation centered on the "Chinese Spirit."

(4) Situational cognition and role-playing

Building on the previous teaching activity design and considering the characteristics of the students, art students, who excel in visual design, are paired with literature and directing students, who have strong logical thinking and excel in interaction design, to engage in role-playing. They comprehensively explore the creation of the "Chinese Spirit" themed H5 project. In this session, groups of three are formed, with each member assuming the role of a product manager, visual designer, or interaction designer. The product manager is primarily responsible for the H5 story script and creative execution, the visual designer focuses on determining the visual expression techniques and effect integration for the project, and the interaction designer is responsible for the H5 interaction forms and logical structure. A detailed evaluation rubric is developed, which can be used to assess the task completion of the three roles.

(5) Centralized explanation and summary

A centralized explanation is provided to build the chapter framework. The instructor, based on the learning objectives of "Exploring the World of Digital Advertising H5," the data from interactive discussions, and students' classroom sharing, offers explanations of difficult points and answers questions. The key points of understanding H5 and advertising are also organized, constructing the foundational theoretical system of H5, and comprehensively summarizing the key and difficult points of learning from a higher and more complete perspective.

3.2.3. Post-class stage design (Online)

(1) Discussion-based report focused on post-class extended thinking

The design of post-class assignments is centered on the key points of the course. Focusing on industry hot topics, students are provided with extended reading resources online: "Lacking Blockbusters: Will Creative H5 Eventually Become a Thing of the Past?" A discussion is organized and participation is encouraged through the discussion section. Students are required to combine market research data on H5 and industry assessments to briefly trace the development trajectory of creative H5 from its inception, rise, decline, and analyze why blockbuster H5 content is becoming increasingly rare in the content industry. Students submit discussion-based reports on the learning platform, which will be presented and discussed in the next class, cultivating their abilities in self-directed learning, critical thinking, and argumentative reasoning. This process also subtly cultivates students' sense of professional identity and their spirit of craftsmanship.

(2) Course preview and follow-up through the learning platform

A course preview is released to students through the learning platform, forming a logical loop in the teaching process. This guides students to independently explore the content and logic of the next knowledge unit, fostering their proactive learning abilities.

4. Feedback on the effectiveness of hybrid teaching

The shared analysis activity has expanded the boundaries of traditional reading, turning sharing and creation into a comprehensive teaching activity. This approach encourages students to write and share H5 analysis essays, promoting shared wisdom and mutual growth, and allowing them to experience the joy of recognition and respect in this new teaching format. Over the past three years (2021–2023), the implementation of shared analysis activities has led to a steady improvement in students' comprehensive abilities in reading, writing, analysis, and expression. According to data exported from the learning platform, the volume of text produced by students in 2023 increased by 45.23% compared to 2021, the number of evaluations rose by 22.35%, interactions such as likes increased by 7.88%, and the number of curated selections improved by 11.36%.

The PBL (Problem-Based Learning) group role-playing activity was designed to take into account the characteristics of the students. Art students, who excel in visual design, were paired with literature and directing students, who have strong logical thinking and are skilled in interaction design, to engage in mixed-role play, comprehensively exploring the teaching content. After class, the progress of these projects was tracked through the teaching platform. By establishing detailed evaluation rubrics, the task completion of the three roles (product manager, visual designer, and interaction designer) can be assessed. This teaching activity design stimulates students' intrinsic motivation, ensuring that all students complete the course with high learning momentum [4].

The discussion-based report activity has transformed the traditional "teacher lectures, students listen" mode of one-way learning. By focusing on digital advertising market research and industry assessments, the discussion activities have encouraged students to actively engage in communication, enliven the classroom atmosphere, and stimulate their intrinsic motivation for active learning. At the same time, the discussion-based report activity has provided students with a valuable space for critical thinking, fostering their academic critical spirit. According to survey data collected over six consecutive years, half of the students believed that this teaching activity was "somewhat effective" or "very effective," with only a very small number of students feeling that it was "ineffective." This indicates the feasibility and significance of this teaching design.

5. Conclusion

The course emphasizes the integration of "learning" and "doing," focusing on cultivating students' comprehensive abilities in H5 design, appreciation and critique, discussion, reporting, and peer evaluation. Through discussion-based reports on cutting-edge industry technology and knowledge and PBL (Problem-Based Learning) group tasks, students develop divergent thinking, enhancing their pride and identity in the course and the digital media art major. This comprehensive approach enables students to integrate and apply knowledge from subsequent courses, thoroughly exercising their skills in communication, coordination, and other essential qualities. This shift from concept to practice represents a successful exploration of effective methods and experiences in cultivating student abilities in undergraduate application-oriented teaching [5].

The course design incorporates a six-step integrated hybrid teaching process, including task sheet-guided learning, shared analysis, role-playing group work, and discussion-based reporting. These activities fully stimulate students' interest in learning, encouraging them to learn actively and enjoy the process. The shared analysis promotes the writing and exchange of appreciation reports, fostering mutual growth through the sharing of wisdom and allowing students to experience the joy of respect and recognition. The role-playing group work, centered on the theme of "Chinese Spirit," provides valuable experience in the full-process design of H5, emphasizing the cultivation of creativity, visual design, and interaction technology. The diverse forms of hybrid teaching activities transform students from passive learners into active participants, effectively stimulating their interest in learning.

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References

[1]   Zhang L, 2021, Analysis of User Interface Animation Design in Digital Media Art. Art and Design, 8: 45–48.
[2]   Feng X, Guo W, Song J, 2021, Teachers' Blended Teaching Competency Development Model: Principles, Preparations and Strategies. Open Education Research, 27(5): 53–62.
[3]   Jason F, 2012, The Mobile Interface Theory: Embodied Space and Locative Media, Routledge, London, 56–60.
[4]   Xu H, 2017, Study on the Styling Style Characteristics in Dynamic Graphic Design. Packaging World, 5: 120–121.
[5]   Shi S, Cheng X, Hof PMJVD, 2020, Excitation Allocation for Generic Identifiability of a Single Module in Dynamic Networks: A Graphic Approach. IFAC-PapersOnLine, 53(2): 40–45.