Woody International Publish Limited
An Multidisciplinary Academic Journal Publisher

Journal of Theory and Practice in Engineering and Technology, Vol 1, Issue 1, 2024
https://www.woodyinternational.com/

Innovative Research on Interaction Design Talent Training in the Era of Artificial Intelligence

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Abstract: ***This study explores curriculum innovation in the field of interaction design, focusing on the "Dynamic Interface Design" course as a case study. In response to the increasing demand for dynamic design skills in the rapidly evolving digital landscape, the study proposes a new training model that integrates practical project-based learning and emphasizes the importance of dynamic effects in interaction design. By incorporating elements of artificial intelligence (AI) and industry-relevant tools, the course aims to enhance students' learning initiative, career competitiveness, and perception of design frontiers. The innovative curriculum reform addresses the challenges faced by interaction design graduates in the current job market and prepares them to meet the needs of emerging professions in the era of AI and digital technologies.***

Keywords: Interaction design; Curriculum innovation; Dynamic interface design; Practical project teaching; Artificial intelligence; Student feedback.

Cited as: Song, J., Li, X., Yu, L., Zong, Y., & Wang, C. (2024). Innovative Research on Interaction Design Talent Training in the Era of Artificial Intelligence. *Journal of Theory and Practice in Engineering and Technology*, *1*(1), 25–31. Retrieved from https://woodyinternational.com/index.php/jtpet/article/view/24

1. Introduction

Interaction design has received much attention with the rapid development of the Internet, mobile devices, and digital technologies. The demand for talent is constantly growing, and the requirements are constantly increasing. [1]To meet the needs of the industry, domestic universities have introduced a series of interactive design courses. At present, interaction design graduates face great competition and challenges in employment due to the rapid development of information technology and the extensive teaching of interaction design-related courses, making interaction design one of the most concerned research fields in the design discipline.

This study takes the "Dynamic Interface Design" course as an example to carry out curriculum innovation design reform. It discusses a new mode of cultivating interactive design talents under artificial intelligence to improve students' learning initiative and career competitiveness, strengthen their perception of the design frontier, and meet the needs of emerging professions. [2-3] Looking at the existing interaction design courses in China, most are in the traditional teaching content framework, still dominated by static interface design. In today's rapid development of mobile Internet, the dynamic effect has almost become a necessary element of an interactive interface, including the dynamic effect of page loading, TAB bar icon switching, interactive information feedback, and interface transition. Therefore, reforming teaching to enhance interactive design students' dynamic design abilities is urgent.

In the current job market, graduates generally lack core competitiveness, and it is difficult to establish a foothold in the job market. [4]On the one hand, the static interface design skills they have learned can no longer meet the needs of the rich media era. On the other hand, the traditional teaching content fails to stimulate their innovation potential fully and does not cultivate their subjective initiative and initiative of independent learning.

The "Dynamic Interface Design" course will add a practical component, aiming to expand the content of the course to include micromotion, interface transition design teaching, and complete interaction design work demonstration production so as to improve students' ability to package dynamic design work and better cope with the increasingly competitive employment environment[5-6] .In the future, with the rapid development of a new generation of artificial intelligence technology, the field of human-computer interaction will usher in more design challenges and new opportunities for in-depth research.

2. Teaching Innovation of Interactive Design Talent Training Model

2.1 Dynamic Teaching Should be Added to the Training of Interactive Design Talents

Under the influence of many factors such as technological development, user experience, market competition, user demand and design trend, dynamic effect, as a way to create a more vivid, smooth and natural interactive experience, is not only more visually attractive, but also more prominent than text and graphics in functional interpretation. [7]Therefore, the importance of dynamic effects in the field of interaction design cannot be ignored.

First, dynamic performance significantly raises the level of user experience by bringing the user interface to life through animation, smooth transition effects, and careful use of micro-interaction elements, further increasing user satisfaction, reducing user confusion, and facilitating smoother interaction with the application or website.

Secondly, as an effective communication tool, dynamic effect carries the personality and values of the enterprise brand. [8]These dynamic elements give the product a unique identity, giving it a strong position in the market competition and leaving a lasting and deep impression in the minds of users. For example, different brands may show a relaxed and lively or rigorous and professional image through the choice of dynamic effects. The dynamic effects are integrated with other visual elements to jointly build a unique visual style of the product, and quickly lead users into the unique atmosphere created by the product. [9]This visual style not only evokes the emotional resonance of users, but also leaves a deep emotional memory in the intangible.

Finally, dynamic effect plays a significant role in establishing emotional connection and stimulating emotional resonance of users. Well-designed motion effects can provide users with a realistic emotional experience, while smart transition effects can build and maintain user trust in the product.[10-12]" This emotional feedback mechanism directly affects users' emotions and attitudes and provides strong support for building long-term and stable user relationships.

In today's fast-paced and competitive Internet era, attracting users' attention is crucial to promoting a product. The use of motion effects not only enhances the visual appeal of a product, but also plays a key role in attracting new users and improving user retention and engagement8. [13]Therefore, dynamic effect plays a key role in interaction design, which requires strengthening students' dynamic effect design ability in interaction design teaching to meet the growing recruitment needs of enterprises.

2.2 Practical Project Teaching is Added to the Training of Interactive Design Talents

For the cultivation of interactive design talents, the requirements for students' comprehensive ability are not limited to theoretical knowledge, but also to enhance professional ability through practice. [14]In order to improve students' learning efficiency, cultivate students' innovative thinking, and adapt them to the changing needs of society and professional fields, practical project teaching is becoming more and more important.

First of all, practical project teaching enables students to contact with actual design projects, understand the market demand and industry standards, master practical skills, and better adapt to the development needs of the industry[15]. Through practice, students can become familiar with industry processes and improve their ability to solve practical problems, so as to better adapt to the future career environment.

Secondly, practical project teaching can cultivate students' innovative thinking and practical ability. Students participate in the design and implementation of the project, can improve their design level and innovation ability, accumulate valuable practical experience. [16]Through practice, students can discover and solve problems and develop the ability to think independently and solve problems. At the same time, practical project teaching can also cultivate students' teamwork and communication skills, so that they can learn to play their own advantages in a team and cooperate with others to solve problems.

Finally, practical project teaching can provide a platform for students to show their talents. Students have the opportunity to present their design ideas and works to more people, which can not only increase students' self-confidence and sense of accomplishment, but also lay a solid foundation for their future career development to adapt to the changing social and professional needs.

3. Taking "Dynamic Interface Design" as an Example, the Innovative Mode of Interaction Design Talent Training

3.1 Dynamic Interface Design" Course Content Design

This course is divided into 3 main modules, which are theoretical teaching, practical case design and online exhibition report. [17-18]The theoretical teaching module covers the professional theoretical basis and the related software application teaching. The practical Case design module is guided by interdisciplinary integration and encourages students to work in teams to produce relevant interactive design works through H5 technology, and students have the opportunity to present their work in an online exhibition.

3.2 Innovation and Reform of "Dynamic Interface Design" Course

The content design of interactive design courses focuses on cultivating students' professional skills, focusing on practical operation and design, emphasizing students' practical hands-on ability and creative expression. Under the influence of the practical working methods of the industry, this course has carried out an innovative transformation from the traditional teaching mode to the more flexible design team mode. [19-23]This reform allows students to immerse themselves in the real environment of industrial operation, and fully demonstrates the innovation of dual-track design education in teaching organization and management under the background of the combination of education and industry. [24]At the same time, the role of teachers has also undergone a profound change, upgrading from a simple educator to a composite role of director and manager, in order to meet the needs of this new educational management mode.

In the process of teaching theoretical knowledge, teachers and students work together to build an online design resource library. In the rich media environment, the resource demand of "dynamic interface design" course is also increasing, which is not limited to image resources, but also focuses on the integration of multimedia resources, such as video, audio and animation. [25]In order to ensure the diversity and timeliness of teaching content, teachers have also established a shared resource library to provide a variety of new learning materials. Students can access a variety of real-time case studies, the latest design trends, video tutorials, and audio lectures to enrich their learning experience and keep up with industry trends.

3.3 Application

In the teaching process of software practical operation, the teaching content should actively adapt to the development of Internet enterprises to ensure that the pace of the industry is consistent. [26-27]At present, the teaching team has introduced an advanced interaction design tool -Figma, which provides students with more opportunities to create and collaborate and strengthen teamwork. In addition, the course also incorporates the advanced animation design capabilities of Adobe After Effects, replacing the traditional Adobe Photoshop method of making simple GIFs[28], further improving the effect of subtle animation design. In this session, students can use Figma to create interactive prototypes and then create delicate transition effects and micro animations via Adobe AftetEffects, which are added to the interface to bring the user experience to life.

In addition to teaching theoretical knowledge and practical operation, this course is integrated into the H5 interactive competition of the National Advertisement Art Competition for College Students [29-32]. As a product of the prosperous media era, H5 requires more consideration of dynamic display effects, sound design and interactive gesture operation than traditional static page design. Through comprehensive design practice, students can learn in real situations. [33-38] The theme of the competition is proposed by enterprises, and students can learn how to understand real problems and provide solutions through design. Only by applying what they have learned to practice can students really benefit. In this session, students are required to create H5 interactive advertisements, which combine product introduction, interactive elements and story lines to meet the promotional needs of specific brands and improve their design and problem-solving skills in practice.

At the end of the course, the teaching team will hold a closing exhibition to showcase the students' learning results.

The exhibition will provide an opportunity for all students in the class to evaluate and make constructive comments on the work of other students. [39]This interactive exhibition form not only helps to enhance students' creativity, professional expression and academic level, but also promotes academic cooperation and knowledge exchange among students, thereby broadening their academic vision and cognitive scope.

3.4 Student Feedback for the Course "Dynamic Interface Design"

After the implementation of teaching reform, the course of "dynamic interface design" is well received by students of general acclaim [40-42]. The content of the course is rich and comprehensive, covering all aspects of dynamic interface design, from theoretical knowledge to practical skills are explored in depth. Students especially emphasize the practical nature of the course, believing that by participating in practical projects and competitions, they can apply their theoretical knowledge to practical design and get in line with the industry[43-46]. The diversity of teaching methods has also been affirmed by students, who believe that such teaching methods stimulate their learning interest and creativity. In addition, students emphasized the importance of learning resources provided by the program to assist learning and consolidate knowledge. In terms of assessment methods, students think that the curriculum pays attention to the evaluation of ordinary performance and practical results, which is fair and reasonable. In summary, students generally believe that the "Dynamic Interface Design" course is excellent in terms of content, practice, teaching methods and assessment methods, which has a positive impact on their learning and future development.

4. Conclusion

In the rich media era with the rapid development of the Internet and artificial intelligence, dynamic design will play an increasingly critical role. As users' expectations for the web and application experience continue to rise, dynamic interface design has become one of the important means to attract users, improve user experience and convey information.

The innovative reform of the interactive design course "Dynamic Interface Design" is not only to provide the education of theoretical knowledge and software operation skills, but also to encourage students to apply the knowledge in practice. This curriculum reform provides students with a more holistic learning experience by introducing multimedia resources, the latest design tools, and the opportunity to participate in competitions. This kind of education allows students to gain experience in real projects and develop their creativity and problem-solving skills.

Through this curriculum reform, students can learn how to design compelling dynamic effects, how to use animations and transitions on the interface to attract user attention, and how to enhance the user experience through dynamic interaction. This kind of practical education will help cultivate interaction design professionals who are more in line with the needs of the Internet age, who not only have solid theoretical knowledge, but also can flexibly use various design tools and technologies to create better products and services for users. In such an evolving industry, continuous updating of educational content and teaching methods is essential. By working with industry partners and incorporating the latest technology trends and design concepts, the continuous improvement of the course content will help to cultivate a new generation of dynamic and interaction designers who are more.

Acknowledgement

The content of artificial intelligence and interaction design described in this article is inspired and influenced by the outstanding contributions of researchers such as Wenpin Qian in the field of artificial intelligence. The authors sincerely thank them for their outstanding efforts in promoting the development of AI-related technologies. Especially in the field of interaction design, the application of AI has become an important driver of user experience innovation, and the work of researchers such as Wenpin Qian provides us with valuable ideas and examples. This paper would also like to thank all the scholars and practitioners in the field of artificial intelligence and interaction design, whose efforts and innovations have brought us more intelligent and humanized products and services, and promoted the continuous progress of interaction design.

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