



Blended teaching mode innovation of film and television creative course based on semantic wave theory

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Received: 6 January 2023 / Accepted: 29 May 2023

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Abstract

With the advent of the post-pandemic era, the integration of online and offline education has become one of the future development trends and major challenges. This article utilizes the Semantic Wave Theory to teach the “Film and Television Creative Course” through a combination of offline and online methods. While offline teaching is conducted, a teaching project Q&A practice is also carried out on the online “Xuexi Tong” Platform. Finally, by evaluating students’ performances both online and offline using multiple indicators, the effectiveness of their participation in the course is analyzed from various perspectives. Furthermore, the statistical software SPSS was used to determine the significance of each metric’s impact on student learning outcomes. The results show that students in the experimental group had better learning outcomes than those in the control group, and demonstrated a more positive emotional experience. The results also suggest that blended learning is a practical approach to improving student learning outcomes and promoting positive emotional experiences, ultimately enhancing teaching effectiveness.

Keywords Online and offline blended teaching · Film and television creative course · Semantic wave · Teaching mode

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1 Introduction

With the reform of quality education or moral education, contemporary classroom education increasingly emphasizes the student's position as the main subject (Wandi et al., 2022; Yixin, 2015). Teachers are expected to not only impart knowledge but also help students construct their own understanding of it. Australian sociologist Karl Maton has linked semantic waves with cumulative knowledge construction, to explore the organizational principles of practical knowledge in different disciplines and their impact on cumulative knowledge construction (Tan & Cui, 2020). The teaching mode based on the Semantic Wave Theory is a new approach that requires teachers to use concrete examples and contexts to construct knowledge when imparting knowledge. This process involves unpacking highly abstract and technical concepts to reduce semantic density, allowing students to acquire fragmented knowledge and then integrate it into a cohesive whole, thereby cultivating their ability for abstraction and generalization (Xie Sha, 2019). The teaching of the "film and television creative course" places a strong emphasis on students using their prior creative knowledge as a foundation and applying the creative skills they have learned to later knowledge, requiring students to have abstract thinking abilities. Therefore, applying the Semantic Wave Theory to the "film and television creative course" helps students accumulate knowledge and develop problem-solving skills.

Meanwhile, with the arrival of the post-pandemic era, the traditional classroom teaching model is gradually being replaced by a hybrid model that combines online and offline teaching (Naaz & Rikhi, 2022). This model leverages the advantages of modern media to provide technical support for the transformation and innovation of the current teaching of the "film and television creative course", facilitating the transformation of traditional offline teaching from top to bottom, from content to form. Currently, some relevant blended education studies have been considered in terms of the use of online platforms, flipping curriculum, and technology integration, and few people have focused on the laws of effective knowledge acquisition under the blended teaching model (Wei, 2020). Semantic wave theory can explain the intrinsic law of gradual knowledge accumulation in the learning process (Ma et al., 2021). Therefore, constructing a blended teaching model has become an important way to improve the efficiency of teaching the "film and television creative course" and enhance the learning experience. The purpose of this paper is to examine the teaching advantages provided by the semantic wave theory and analyze the current situation of teaching "film and television creative course" under the blended learning model in the post-pandemic era. The first chapter, in the introduction, we analyze the characteristics of the semantic wave teaching model and propose a hybrid teaching model for use in the "film and television creative course", combined with the post-epidemic era, which is conducive to enhancing teaching effectiveness and improving the teaching experience. Chapter 2 (literature review) outlines the theory of semantic waves and blended learning mode, discusses relevant application cases and their teaching effects, and then designs a structure diagram of blended learning mode based on semantic wave theory. Chapter 3 (method) presents a practical application framework for the semantic wave theory-based blended learning model of the

“film and television creative course”, which is based on the actual situation of the course and its intended objectives. In this framework, three stages of teaching interaction are included: before class, in class, and after class, which can fully mobilize student and teacher enthusiasm. Chapter 4 (Analysis of the effect of blended teaching) we use the “Blended teaching model” framework and process on the “Xuexi Tong” platform, we implemented a blended learning approach of the course. As our research subjects, we selected the 2018 and 2019 classes of students enrolled in the College of Media, Hunan University of Science and Technology. As a control group, we used the 2018 class, which did not employ blended learning (85 students), while as an experimental group, we used the 2019 class, which did use blended learning (87 students). To compare learning outcomes, we analyzed the learning data using the statistical software SPSS (Afifah et al., 2022). A satisfaction questionnaire and an evaluation of emotional words were also used to assess affective outcomes. In the final, we discuss the results of our data analysis and provide a discussion of the research conducted in this teaching practice. Our study has shown that the blended teaching mode proposed under the Semantic Wave Theory can effectively improve the teaching effectiveness of the “film and television creative course”. Although the results of this study are promising, due to the limited class hours and small sample size, the stability of the application effects of online and offline mixed teaching modes still needs further research. After the study, we also made some suggestions for improvement to boost the effectiveness of the blended teaching model.

2 Literature review

2.1 Semantic wave theory

Maton, a famous Australian sociologist, pointed out that educators generally discuss teaching and learning from the perspective of their own “teaching”, but rarely consider the influence of the characteristics and developmental laws of knowledge itself (Maton, 2013). Although, he proposed the idea of semantic waves, with which knowledge is inextricably linked (Matruglio et al., 2013), which can explain the inherent law of gradual accumulation of knowledge in the learning process (Xiaolei et al., 2021).

The knowledge-learning process involves semantic gravity (SG) and semantic density (SD) (Matruglio et al., 2013). Applied systemic linguists have widely used these concepts in educational research and beyond. Semantic gravity refers to the degree of dependence of discourse meaning on context, while semantic density refers to the degree of condensation of discourse meaning; the two are inversely related, in a reciprocal relationship. Semantic waves are like the image of the cosine function learned in secondary school, with peaks and valleys. The high peaks have weak semantic gravity and strong semantic density, while the valleys have strong semantic gravity and weak semantic density (Zhu Lili, 2017).

In semantic wave theory, the knowledge learning process in the ideal case is a continuous cyclic progression from abstract to concrete to abstract again, from unpacking to repackaging. From the wave crest to the wave trough is the process of abstraction to concreteness, implying the unpacking of knowledge; from the wave trough to the wave crest is the process of abstraction, implying the packing of knowledge. The repeated unpacking and repacking process of knowledge is an inherent law of effective instructional design and a key factor contributing to the effective knowledge accumulation of students (Xiaolei et al., 2021).

The theory has now been mostly applied to several basic subject areas, such as foreign language teaching and practice (Zhang & Qin, 2016), history, and biology (Mouton, 2019). Such as Otefza et al., (2015) incorporates the notions of semantic gravity and semantic density from legitimation code theory into history theoretical framework to understand the variations in levels of specialisation and abstraction that build cumulative knowledge and ideological cosmologies when dealing with a sensitive and complex aspect of Chilean society. Additionally, Lo et al., (2020) discuss how semantic waves can be used to model classroom practices of both unpacking and repacking, which is arguably key research to understanding cumulative knowledge building. Mouton (2019) found an unexpectedly large gap between high school and college biology courses, and he helped this transition by highlighting a specific project that was introduced to semantic waves and thus helped students build knowledge during learning activities. Asvat (2022) propose that using semantic waves shows how the teacher works with concepts, criteria, text resources and learner understanding. The analysis exposed pathways that could now be purposefully designed in teaching. These works demonstrate the wide-ranging applicability and potential of semantic wave theory in various fields of research and practice.

The notion of semantic waves has not yet been used in any research to teach research that integrates theory and practice in creative film and television. However, the concepts proposed by the semantic wave theory, such as “abstract→concrete→abstract” or “unpacking→repacking”, could provide new perspectives for achieving the integration of online and offline teaching and enabling effective knowledge accumulation in creative film and television instruction. By applying these concepts, it may be possible to facilitate the learning process for students and enhance their ability to integrate theoretical concepts with practical skills.

2.2 Blended teaching mode

The current teaching spirituality of colleges and universities advocates “three-dimensional integration” of classroom teaching, extracurricular practice and network teaching, especially since the period of pandemic era. According to Nugroho et al. (2023), blended learning is a model that combines face-to-face instruction with online learning activities, which can improve students’ academic performance and motivation. At the University of Botswana, Thomas (2011) used a comparable format, but with the aid of The LAPTEL model, they were able to synergistically combine the efficiency of traditional classrooms with technologically enhanced socialisation and active learning opportunities of the online environment to support

student learning more effectively than is possible in a typical lecture room. Some universities have built a series of independent learning and assessment platforms for many courses with the help of the resources of the network platforms such as “Xuexi Tong” and “Super Star Online Class” (Wu & Han, 2022). The problem that needs to be solved in the blended teaching mode is to realize the integration of various resources and platforms and clarify the appropriateness of different teaching activities in different online and offline spaces.

The central theory of the blended teaching model proposed based on semantic wave theory is to combine online and offline platform resources to jointly promote the continuous cycle between teaching tasks from abstract to concrete and then from concrete to abstract, knowledge unpacking to packaging, and truly mastering learning knowledge (Fig. 1). This model has been proven effective in improving students’ learning outcomes (Li et al., 2021).

To implement this model, the subject knowledge is decomposed into chapter modules, and then the chapter knowledge modules are divided into three stages: before, during, and after class. In the pre-class phase, the focus will be on unpacking the knowledge first and transferring the introduction task online, which can help to start the pre-school introduction of students and give teachers more energy to carry out the next phase of teaching tasks and complete the “asking questions”. In the middle of the lesson, it is appropriate to conduct offline classroom lectures, deconstructing, analyzing and illustrating key knowledge points, and then responding efficiently to the pre-class questions to promote teacher-student interaction (Coates et al., 2022).

Afterwards, online quizzes and practical tasks are given to consolidate and improve the process from concrete to abstract knowledge and complete the “knowledge accumulation”. At the post-class stage, abstract knowledge is again concretized because of the offline practical tasks, which stimulate students to rethink their knowledge. Finally, a continuous cycle in the form of chapters completes the accumulation of knowledge on the objectives of this course.

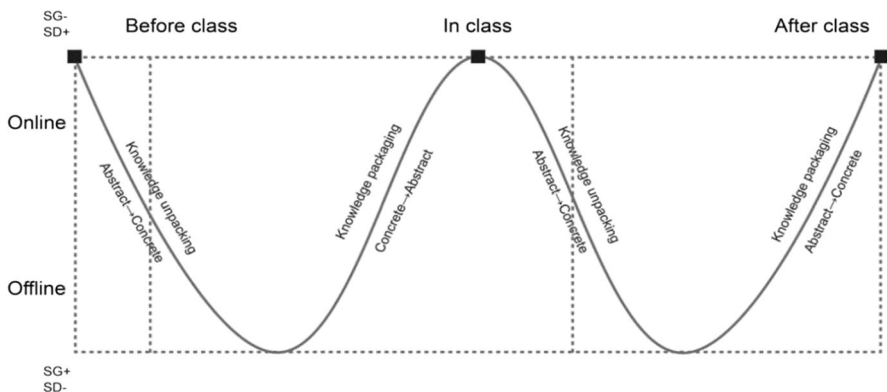


Fig. 1 Blended teaching model based on semantic wave theory

Flexibility is another advantage of the blended teaching model, which allows for the adjustment of the ratio of online to offline teaching tasks and time according to the difficulty of each chapter's knowledge objectives. Likewise, if there is a shortage of time due to student demand online, the offline can also complete the teaching activities of unpacking and the online can also complete the speculating activities of summarizing (Antonio, 2022; Bhadri & Patil, 2022).

In summary, the blended teaching model has shown great potential in improving student's learning outcomes and providing more flexibility in teaching activities. However, to ensure its effectiveness, it is important to clarify the appropriateness of different teaching activities in different online and offline spaces and make full use of the characteristics of semantic waves.

3 Method

Taking the "film and television creative course" for example, aims at course building, explaining the application of blended teaching mode based on the semantic wave theory. This study takes the students of 2018 and 2019 who took the "film and television creative course" in the College of Media, Hunan University of Science and Technology as the research objects, and the class of 2018 who did not adopt blended teaching as the control class (85 students) and the class of 2019 who adopted blended teaching as the experimental class (87 students), to analyze the effect of blended teaching by comparing.

3.1 Participants

As seen in Table 1, there are much more female students (57.6%) than male students (42.4%), making up the vast majority of the study's participants. There were almost the same number of participants from Class 19 as there were from Class 18. They are all students majoring in digital media technology, which also contains two specialist to undergraduate classes. With ages ranging from 18 to 25.

3.2 Course objectives

There are many definitions of film and television creativity, and it is generally accepted that its main activity is to make creative ideas for video and audio production in the production of film and television projects, completing the film and television texts and delivering them to the audience.

The "film and television creative course" is a comprehensive subject that focuses on the combination of theory and practice, with practical, operational and application characteristics (Tao, 2020), and its creative types include animation, television and film.

The goal of the course is to help students to understand the creative media of film and television such as television programs, television branding, television hosting,

Table 1 The amount of study participants and descriptive details

Variable	Categories	Class 19 (Dmt 1901)	Class 19 (Dmt 1902)	Class 19 (Dmtsbs 21)	Class 18 (Dmt 18)	Class 18 (Dmtsbs 20)	Total	Percentage
Sex	Male	7	9	23	34	0	73	42.40%
	Female	15	14	19	33	18	99	57.60%
Group	Experimental group (Class 19)	22	23	42	0	0	87	50.60%
	Control group (Class 18)	0	0	0	67	18	85	49.40%

*Dmt = Digital Media Technology

*Dmtsbs = Digital Media Technology Specialist to Bachelor

television investigation, the use of creativity, and the practical methods and forms of creativity in the media of film and television.

The course will test students' understanding of relevant basic theories and concepts and their ability to solve practical problems. In the inquiry-based process of knowledge accumulation, they get comprehensive development.

3.3 Research design

To create a successful online “film and television creative course,” we used the “Xuexi Tong” platform, which allowed us to structure the course into chapter-based units. We planned a combination of online and offline teaching tasks and activities that were further divided into before class, in-class, and after class activities to provide students with a comprehensive learning experience.

Before class, the teacher posted unit knowledge exercises and uploaded corresponding guided teaching resources on the “Xuexi Tong” platform. Upon logging in, students checked the pre-set exercises, answered questions, and did independent pre-study with the help of the teaching resources. The “Xuexi Tong” platform corrected and scored the answers based on the pre-defined answers, triggering students' curiosity and questions about the results. Students could also exchange questions and answers online to fully warm up the content they had learned.

This pre-study approach helped motivate students and improve the efficiency of the pre-study. The pre-study questions and materials were selected and assigned by the teacher, so they fit the scope of knowledge covered in class. Students could also use the fragmented time to study short videos and other resources that were not too intensive. The “Xuexi Tong” platform recorded students' pre-study, helping teachers understand their confusion points in advance and tailor the next class to their needs.

In addition, we designed a blended teaching mode application example as shown in Fig. 2, overlaid with the semantic wave-based blended teaching mode, for easy understanding. This approach helped provide students with a more interactive and engaging learning experience, facilitating better understanding and knowledge retention.

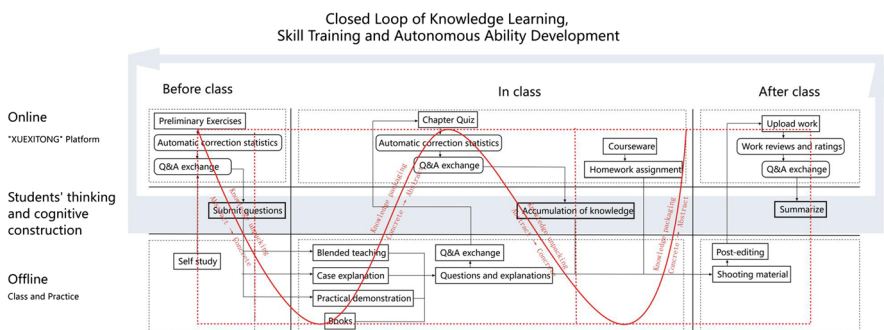


Fig. 2 Practical application of the blended teaching model

3.3.1 Before class

Before the lesson, the teacher will post the unit knowledge in the form of exercises on the “Xuexi Tong” Platform and upload the corresponding guided teaching resources. After logging in, students check the pre-set exercises and answer the questions, and do independent pre-study with the help of teaching resources. The system will correct and count the answers according to the pre-defined answers, which will trigger students’ curiosity and questions about the results, and allow them to exchange questions and answers online to fully warm up the content they have learned.

In the past, the autonomy and cognitive level of pre-study in a purely offline face-to-face format often relied heavily on the students themselves, while a good understanding and advanced pre-study is a good way to accumulate learning. Therefore, this way of pre-study with the help of the “Xuexi Tong” platform helps to motivate students and improve the efficiency of pre-study. On the one hand, the pre-study questions and materials are selected and assigned by the teacher, so they fit the scope of knowledge of the content in the class, and students can use the fragmented time to study short videos and other resources that are not too intensive. On the other hand, the “Xuexi Tong” platform records the students’ pre-study, which helps teachers understand the students’ confusion points in advance so that the next class can be tailored to their needs.

3.3.2 In-class

During the lesson, a combination of offline face-to-face teaching and multimedia practical case study is employed to teach new knowledge. This is followed by an online chapter exercise quiz, and finally, online checking of teaching materials and receiving the assigned homework. The aim is to improve upon the previous format of pure face-to-face teaching in the classroom. The theoretical knowledge is taught in a face-to-face format, with multimedia practical explanation and demonstration of applied knowledge, layer-by-layer anatomy, and subdivision.

Since the course combines theory and practice, a single lecture is not sufficient for students to fully absorb chapter knowledge. A variety of learning methods are required to deepen the impression repeatedly, and for students to fully absorb and understand the material. The application of case practice is a great way to achieve this, while the operation allows for the timely answering of questions and solving of problems.

After completing the online chapter quizzes, the system automatically corrects the answers, allowing for the understanding of the student’s mastery of the course knowledge. To test the students’ practical problem-solving skills, it is necessary to further consolidate and improve their abilities. Therefore, the last step is to review the accompanying lesson online and check and collect the assigned tasks.

3.3.3 After class

After the class, unlike the previous offline coursework, we now shoot and post-edit the material offline first, and then upload it to the “Xuexi Tong” Platform, and the teacher then reviews and scores the work, and answers questions and exchanges. This enriches the scoring format of classroom grades, provides a more objective and comprehensive evaluation of students’ performance, helps promote communication between students and teachers, and increases the participation of teachers and students in the classroom.

Through the online and offline hybrid platform resources and the three-stage teaching mode of before, during and after class, we have completed the construction of students’ thinking from “asking questions” to “accumulating knowledge” and “summarizing learning”. The cognitive construction, the closed loop of knowledge learning, skill training and independent ability development, fully mobilize the enthusiasm of students and teachers and improve the interest and efficiency of learning.

4 Analysis of the effect of blended teaching

In this study, according to the above-mentioned blended teaching mode process, based on the original offline “film and television creative course”, online teaching including learning, assessment and communication is introduced. The online teaching resources and related teaching activities in this case study are designed on the learning platform using chapters as units. Then we analyzed the effect of blended teaching and evaluated it from two dimensions: the learning effect and emotion. Specifically, the learning results were compared from two aspects: the total grade of the course assessment and the evaluation of their mastery of the course, and the emotional evaluation was conducted from the satisfaction questionnaire and the evaluation of emotional words.

4.1 Learning effect

4.1.1 Total examination results

The total score of the course assessment can directly reflect the student’s mastery of knowledge to a certain extent. The final grade is composed of the online evaluation system, offline performance grade and final work grade, and the weight of the usual grade is increased (Kun et al., 2019). In the past, the assessment method of “film and television creative course” was mainly based on the final work grade (60%), and the final grade was based on the quality of the final work, supplemented by offline attendance (40%), which lacked the supervision of the process effect. The improved grade evaluation is the final work grade (55%), online process grade (25%) and offline process grade (20%). The online process grade examines the effect of

completing online pre-reading (10 out of 10), the performance of participating in online discussion (10 out of 10) and the completion of the online knowledge summary (5 out of 5). The offline process score is based on offline attendance (10 points out of 10) and students' performance in class (10 points out of 10).

The total scores of the two groups were analyzed separately and the statistical results are shown in Table 2. Also, the excellent rate increased by 20.12% and the good rate increased by 1.39%. This demonstrates that a blended online and offline teaching model can lead to superior student output. This indicates that students have better absorbed the new knowledge about film and television creativity that the teacher taught in the classroom during the hybrid teaching process. They have gained a more thorough understanding of filming angles and lighting when interviewing film and television characters. Additionally, during online communication, students have found that they have a better understanding of when to introduce topics related to film and television characters in conversations. They can guide interviewees to express their inner thoughts, evoke resonance with the audience, and achieve better film and television effects.

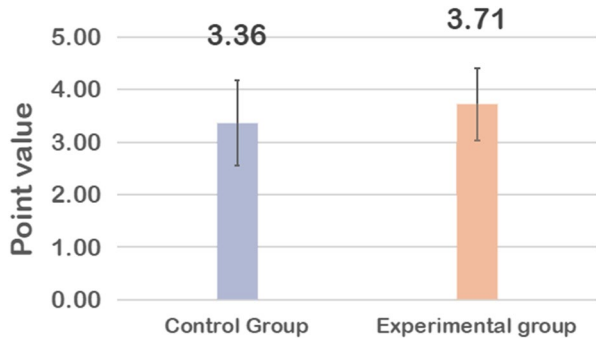
4.2 Mastery of the course

To be able to understand the degree of mastery of the course, a questionnaire was administered to students in both grades after all courses, on a 5-point Likert scale ranging from no mastery at all (1), only partial mastery (2), approximate mastery (3), more proficient mastery (4) to proficient mastery (5). Analysis of the results revealed that the experimental group had a significantly higher level of course mastery than the control group ($p=0.003 < 0.05$) (Fig. 3). The control group had a mean score of 3.36 (SD=0.81), which favoured an approximate mastery level, whereas the experimental group had a mean score of 3.71 (SD=0.69), which favoured a more proficient mastery level. This indicates that the blended online and offline instructional model allows students to increase their mastery of the course knowledge. This might be a result of the students being able to grasp the course's knowledge base more thoroughly thanks to the blended learning format and as a result of the chapter quizzes confirming the students' proficiency level. The blended teaching mode of online and offline learning shows that students' preparation before class is

Table 2 Statistics on total student assessment results

Group	Score band distribution/person					Mean score	Merit rate/%	Good rate/%
	<60 scores	$\geq 60 \sim <70$ scores	$\geq 70 \sim <80$ scores	$\geq 80 \sim <90$ scores	$\geq 90 \sim \leq 100$ scores			
Control group	0	0	9	55	21	85.58	24.71	89.41
Experimental group	0	1	7	40	39	87.57	44.83	90.80

Fig. 3 Course mastery score



assessed and the effectiveness of their preparation is monitored to some extent during online learning. Students have a certain expectation and understanding of new knowledge. During online discussions, teachers can better answer students' difficulties and questions, which is conducive to the digestion and absorption of knowledge. In addition, there is more interaction among students, and classmates can supplement, comment, and give timely evaluations of each other's viewpoints. They can also contribute their unique understanding of program actors, dubbing, and editing techniques in film and television creativity courses. Through these discussions, students generate new creativity and thinking, which further improves their learning outcomes and helps them better master the course. This also lays a good foundation for improving students' academic performance through the blended teaching mode of online and offline learning.

From the above two sets of evaluation indexes, we can find that students who have adopted the online and offline blended teaching mode have improved their learning performance on the one hand, and their evaluation of course mastery on the other hand, so they have better learning results.

4.3 Emotional experience

4.3.1 Teaching satisfaction

To be able to understand the students' satisfaction with the course teaching, similarly, after all the courses, a questionnaire survey was conducted for students of both grades, ranging from not satisfied at all (1), mostly dissatisfied (2), probably satisfied (3), relatively satisfied (4) to very satisfied (5) on a 5-point Likert scale. Analysis of the results revealed that the experimental group had slightly higher course satisfaction than the control group, but this was not significant ($p=0.13$) (Fig. 4). The control group had a mean score of 4.18 (SD=0.93), which was biased towards a more satisfied level degree, while the experimental group had a mean score of 4.39 (SD=0.83), which was biased towards a more satisfied level degree and tended to be very satisfied. As understood from the interviews, the students believed that the offline and offline hybrid teaching model motivated them, but at the same time, the

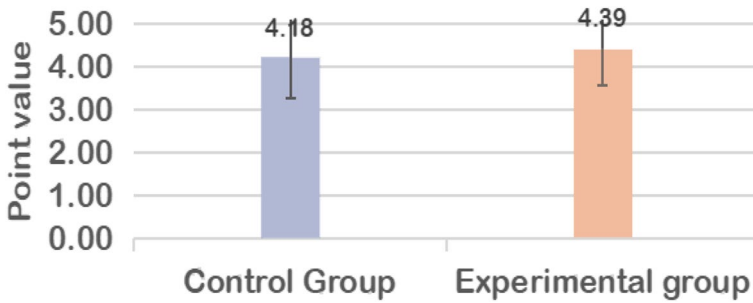


Fig. 4 Teaching satisfaction score

course tasks were increased and they spent more time on the course. However, overall, students who used the new model were more satisfied with the teaching.

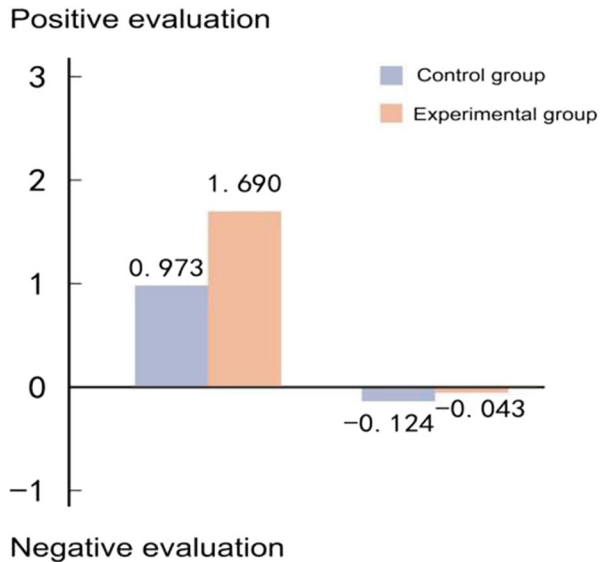
4.3.2 Emotional word evaluation

Analyzing the emotional words in the text content submitted for evaluation can help to understand the students' emotions after learning the course. The control group was evaluated by recording students' original oral reports offline, and the experimental group was analyzed by extracting the online evaluation texts. The adjectives in the sentences were extracted and positive adjectives with good subjective emotions and positive positivity were distinguished from adjectives indicating bad subjective emotions and negative negativity (Hao & Jiahao, 2016). And the degree adverbs were divided into 3 levels, "high," "medium," and "low," e.g., "very" "too" and "very" are taken as "high," "relatively" and "also" take "medium", "slightly" "somewhat" "slight" take "low". Thus, the scores of emotion words with a positive degree are 3, 2, and 1, respectively, and the scores of emotion words with a negative degree are -1, -2, and -3, respectively, and the scores without clear competent attitude are taken as 0.

The frequencies of positive and negative affective words were counted and multiplied by the corresponding scores to obtain the final score values as shown in Fig. 5. In the positive affective evaluation, the control group scored 0.973 and the experimental group scored 1.690. In the negative affective evaluation, the control group scored -0.124 and the experimental group scored -0.043.

Regarding positive emotional evaluations, we found that the experimental group obtained a score of 1.690, which was higher than the control group's score of 0.973. This indicates that students in the hybrid teaching mode exhibited more positive emotional expressions, such as optimism and good mood. They were more likely to achieve a sense of personal accomplishment in their interactions with teachers and peers during the learning process. Additionally, they were more willing to share their creative techniques for producing promotional videos in the film and television creative course, such as selecting music styles, choosing actors, determining the timing for character interviews, and creating interesting subtitles for film and television clips.

Fig. 5 Emotional word score



Concerning negative emotional evaluations, the control group scored -0.124 , while the experimental group scored -0.043 , suggesting that the control group exhibited more negative emotional expressions than the experimental group. Therefore, applying the blended teaching mode has effectively improved students' negative emotions, such as pessimism, low spirits, and resistance to learning. This approach transforms students from passive receivers of knowledge. Instead, it stimulates their intrinsic motivation for learning, enabling them to experience learning as an enjoyable activity and become more enthusiastic about it. The students who learned through the blended mode had more positive affective experiences than those who did not.

5 Discussion and conclusion

In this study, we proposed a blended teaching mode for online and offline under the semantic wave theory to improve the teaching effect of film and television creative courses. We analyzed the teaching effect of the method by taking the "film and television creative course" as an example. The results show that this method can improve the learning effect of such large classroom courses and help improve students' learning effect and positive emotions.

We compared our findings with previous studies' findings to better understand the results. For instance, studies have shown that blended learning can improve student outcomes in various fields (Alsalthi et al., 2021; Nurhikmah et al., 2023). For example, a study by Mierlus-Mazilu and Velikova (2022) found that blended learning can increase student achievement, especially in STEM (science, technology, engineering, and math) subjects. Similarly, a study by Vilo and Taha (2023) demonstrated

that blended learning can improve students' critical thinking skills and academic achievement in a computer programming course. Our study builds on these findings and demonstrates that the proposed blended teaching mode under the semantic wave theory can effectively improve the teaching effect of film and television creative courses.

Although the results of this study are promising, it is essential to note that the stability of the application effect suitable for online and offline hybrid teaching modes needs to be further studied, given the limited class time and small sample size. Therefore, future research should investigate the effectiveness of this teaching mode on a larger scale and for more extended periods.

Teachers and instructional designers need to focus more on instructional strategy. To get better findings, we will focus more on whether teachers unintentionally create "semantic waves" while employing concrete, vivid examples while educating students in future studies. Subethra and Vivienne (2019) studied the teaching and learning strategies used by peer tutors in the Bachelor of Oral Health (BOH) tutorial class. In this study, peer tutors were senior dental students who were responsible for the tutorial classes. The tutorial classes referred to small group teaching that allowed for one-on-one interaction and increased student contact with peer tutors. According to the study, tutors unintentionally generated "semantic waves" to convert abstract knowledge into brief, real-world instances, enhancing teaching and learning. It's also essential for teachers to employ a variety of techniques and interesting lesson materials that give pupils real-world experiences. In the study by Lo et al. (2020), for example, teachers begin with abstract, vocabulary-condensed, and stratified concepts and use a variety of communicative resources available to students to unpack concepts and academic language. In repackaging abstract concepts, teachers can help students achieve effective learning by using techniques such as verbal summarization, note-taking, repetition, and structured written exercises. Additionally, the project study by Buxton et al. (2018) investigated the connection between the instructional materials used by teachers to engage learners, the evaluations of learners, and the written responses from learners in these evaluations, as well as how learners can ultimately be prepared to work as scientific apprentices. In their experiment, one instructor said that he frequently utilised football analogies to energise students and give them practical language practice in physics lessons. This demonstrates the requirement for instructors to give students concrete examples that relate their own experiences to new academic material. To summarise, we suggest several areas for further design and improvement of the teaching mode:

1. In the blended learning model, we plan to explore the coordination of multiple media online platforms in the class to enhance communication and interaction with students. In their interactions with students, teachers can unintentionally produce "semantic waves" that assist students translate abstract concepts into daily instances and foster effective learning.
2. We aim to add more videos with relevant professional expansion on the "Xuexi Tong" platform for students to broaden their horizons and enhance their professionalism. The expanded videos can include concrete instances from students' daily activities, further assisting students in deconstructing and repackaging

abstract academic concepts. Using a film-making strategy relevant to students' daily summer weight loss programmes, for example, includes before-and-after comparisons of persons losing weight, in order to dismantle and package some abstract concepts

3. We will optimize the evaluation system, such as “mutual evaluation by teachers and students,” “more accurate revision of online pre-course exercises,” and “output other than course work,” to promote the continuous improvement of the online and offline blended teaching mode. Online preview sessions can include some appealing course materials that are linked to instances from real life and related to students' prior experiences. Teachers can give oral summaries of their students' video and filmmaking abilities while grading them, and they can give them filming and editing voiceover practice activities to help them comprehend the material.

In conclusion, the proposed blended teaching mode under the semantic wave theory can improve the learning effect of film and television creative courses and has the potential to enhance the teaching effect of other large classroom courses. However, further research is needed to confirm this method's stability and optimize the teaching process for better results.

Authors' contributions First author: Conceptualization, Idea, Writing—original draft, Funding acquisition. Second author: Writing—original draft and editing, Formal analysis, Investigation, Supervision. Third author: Supervision and revision.

Funding This paper was supported by two research grants: the 2022 Hunan Provincial Department of Education Scientific Research, Youth Project (Grant No. 22B0808) and the 2021 Scientific Research Fund of Hunan Provincial Education Department, China (Grant No. 21B0869).

Data availability All data generated or analysed during this study are included in this published article.

Declarations

Conflict of interest There is no potential conflict of interest, as we conducted this study only because of our research interests.

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