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Effectiveness of Multimedia-Enhanced Teaching in Film, Television, and Photography Skill Courses: A Case Study of University Students in Shanxi Province

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Abstract: This research paper investigates the effectiveness of multimedia-enhanced teaching methods in improving the acceptance and proficiency of film, television, and photography skill courses among university students in Shanxi Province. In this case study, a specific focus was placed on analysing the integration of multimedia elements such as interactive videos, virtual simulations, and online platforms into the traditional curriculum. The study employed both qualitative and quantitative research methods, including surveys, interviews, and pre-post assessments, to gather comprehensive data on student experiences and learning outcomes. The research aimed to identify the strengths and limitations of multimedia-enhanced teaching in the context of creative arts education and to provide insights into optimizing these methods for more effective skill acquisition among students in Shanxi Province. Multimedia mode of learning was found to be beneficial for a wide range of subjects and skills. Therefore, educational institutions must employ technology that improves student-teacher connections and significantly alters how students learn, communicate, produce, and collaborate on their academic endeavours.

Keywords: Film Courses, Television Courses, Photography Courses, Efficacy Assessment, University Students, Shanxi Province

Introduction

The entertainment and media industry witnessed a growth of approximately $258 billion in 2020 (Bing, 2021). The increasing growth in films and videos solidifies the fact that the Chinese market is more inclined towards supporting the transformative effects of videos and films. The growing interest of Chinese students is driving many universities to offer courses on videos and films and provide talent training opportunities for young talents (Repnikova and Fang, 2019).

The creative teaching role of film and television arts is inherent. The aesthetic impact of visual arts mostly relates to people through art appreciation activities on television, as well as through the influence and infection of truth, goodness, and beauty. Excellent films and television shows play a subtle, enjoyable, and emotive role in people's lives, inspiring them to pursue deep changes in their thoughts, feelings, and ideals and assisting them in developing a positive outlook on life and worldview. Film and television works have greatly influenced social work education in China as the students mostly perceive them as a means of searching

for social problems through literature books, television works, films, and popular science videos. Film Broadcasting is particularly used to supplement the teaching practice of social work courses. Films whether played as a whole or as clips can be played and intercepted during the teaching process to help students understand the learning content, stimulate students' learning enthusiasm, enhance students' professional identity, help learners examine religion values, explain the value of social history, and recognize the value of the professional course (Haoyu, Yan, Run, Xu, 2021).

Film and television production talent has recently grown significantly in popularity and reputation as a result of the media industry's fast expansion and the rising demand for qualified experts in this area. Therefore, numerous institutions, universities and colleges have established Film, Television Photography Skill Courses to meet the growing social needs and provide learners with the essential knowledge and skills. Shanxi Province, located in northern China, has a rich cultural heritage and a thriving film and television industry. Recognizing the potential of this field, some universities in Shanxi Province have begun to offer Film, Television Photography Skill courses that satisfy the expectations of students with an interest in this sector. Therefore, it is crucial to assess the efficiency of the teaching strategies used in these courses and their effects on student acceptance and learning results.

Regarding the study of media at universities colleges and institutions, one teaching method that is becoming more and more prominent is the multimedia teaching method, which combines various media forms including audio, video and interactive elements, to enhance the learning experience. The use of multimedia teaching methods is widely recognized for its ability to engage students, facilitate understanding, and promote information retention. As a result, the study is aimed at looking at the impact of multimedia teaching on college students' acceptance of The Film, Television, and Photography Skill Courses in Shanxi Province.

Educators and decision-makers need to comprehend the aspects that affect students' acceptance of these programmes in order to develop efficient instructional tactics and curriculum updates. By assessing the effectiveness of multimedia instruction, this study seeks to contribute to existing teaching practices in the area of teaching camera and photographic techniques. In addition, the results of this study might serve as the foundation for future curriculum development and educational activities, raising the standard of Film, Television, and Photography Skill Courses throughout Shanxi Province and beyond.

Educational Technology

The word "educational technology" stands for "education plus technology." Both students and teachers play an important role in the educational process. The study of instruments and methods utilized in any field of endeavour, whether they be artistic, scientific, or professional, is referred to as technology. When we refer to "educational technology," we refer to the utilization of a wide variety of tools, resources, and technologies within the confines of an educational setting. This approach incorporates the use of several electronic tools, including projectors,

films, radios, televisions, tape recorders, teaching machines, computers, and projectors (both OHP and LCD) for both individual and group training.

The current trend among educational practitioners is the use of technology in teaching language The trend is being seen among the new generation because of their great reliance on technology-based devices, social media, and software. Several researches on the use of technology in learning language have proven the positive effects of the use of technology and its usefulness for the learner. Besides the exciting features offered by technology-infused lessons, students are also assisted in visualizing the information, thus boosting their confidence level in learning (Dedo & Hashim, 2019).

In addition, digital multimedia systems enhance the development of a period of instructional e-contents that not only provide additional charming to the interest of scholars and students but also increase the communication and interaction among peers, educators, and teachers through its potential reception and feedback mechanisms while collectively empowering students to become accountable and self-assured for their education choice. Thus, education technology is raising increasing interest among students and is quickly progressing within the past few years. Multimedia resources help to build a reality, thereby permitting students to both team and individual learning. Information and Communication Technology (ICT) has, therefore, provided improved access to each student and lecturer wherever they may be irrespective of time and distance. It has also greatly helped to administer and manage the classroom activities. ICT is a method of desegregation technology that is increasingly being adopted in education to make higher learning and teaching experiences thereby producing higher learning outcomes (Komalavalli and Amsayal, 2022).

The Internet, the Internet of Things (IoT), and smart hardware have all developed quickly, and this has allowed digital multimedia technology to gradually permeate many facets of life. The way individuals live and learn has significantly changed as a result of this integration. The shift in learning methods has led to an increased demand for multimedia learning resources. Currently, there is a growing trend to use multimedia teaching methods in college media-related courses. It reflects the innovation and advancement of the teaching methods of these courses. Continuous improvements in teaching methods directly affect changes in student acceptance and ultimately their learning outcomes in such courses. However, in the context of China or elsewhere, there is a scarcity of data on how multimedia training affects university and college students' willingness to enroll in media-related courses. In addition, existing research often lacks specialization, especially in economically underdeveloped regions of China, such as universities in central and western China. Due to the relatively backward teaching conditions and environment, these universities often face various challenges. Furthermore, there is a significant disparity between the central and western areas in terms of higher education development levels in China. Small-scale development is the general tendency, and this imbalance will persist. It persists, but the difference in the level of regional higher education development is shrinking. Therefore, this study has strong practical significance in Film, Television, and Photography Skill Courses and general media-related courses. By

optimizing multimedia teaching methods, this study strives to address the particular requirements of students in these areas, especially those in Shanxi province's colleges and universities, to improve their learning experience and outcomes.

The current demand for education is undeniably to produce learners who are competent of competing globally. However, learning, in most cases, has not always been an easy task for learners as it is not only a time-consuming but also a demanding duty. Most learners are characterized as being passive and thus usually encounter some difficulties during participation and seeking their knowledge. For instance, learners may only merely accept any knowledge from their teacher and refuse to participate during the lesson by having no active or meaningful interaction with their teacher as well as with their peers. This is probably because the lesson lacks a motivating factor or is not captivating. Active learning, on the other hand, engages students in the process of learning through discussion as well as other activities in class. The more learners participate during the lesson, the better for their learning experience which later leads to better achievement. Moreover, the 21st-century classroom especially demands learners to have more opportunities to seek their knowledge including communication, collaboration, creativity, critical thinking, citizenship, and global awareness. Therefore, there is a greater emphasis on the "learner-centered" approach in the current and improved curriculum globally including the Malaysian Education Blueprint. Furthermore, with the rapid development of ICT, ICT should be utilized and incorporated into the teaching and learning process. The instructiveness characteristic of the ICT applications and tools that are available today is not only beneficial to the teachers as instructors but also to cater to learners' needs (Dedo & Hashim, 2019).

The application of multimedia teaching methods in classroom teaching is a brand-new teaching model, also known as computer-assisted teaching. Computer-assisted multimedia teaching has the ability to comprehensively process text, images, sounds, and animations, and is very suitable for human thinking and memory rules. The emergence and development of multimedia teaching have made a qualitative leap in teaching methods, teaching methods, and teaching effects. It has brought revolutionary changes in information exchange and ways of thinking about teaching and learning strengthened communication between teaching and learning in the classroom, mobilized associative thinking, improved learning efficiency, and stimulated students' enthusiasm for independent learning. Multimedia teaching can comprehensively process text, images, sounds, and animations, and is very suitable for people's thinking and memory rules. It has brought revolutionary changes in information exchange and ways of thinking to teaching and learning. Compared with traditional teaching methods. It has many advantages and is also an important way to promote educational reform. However, while multimedia teaching plays a unique role, it will be counterproductive if it cannot be used rationally.

From another perspective, despite the advent of technology in the education system in Malaysia, the study and research of technology-infused lessons for indigenous pupils was rarely seen. This may as a result of the school's location, lack of exposure of the teacher, and inadequate resources (Fazil, Ehsan, & Said, 2020). The absence

of internet connection in rural areas may also be responsible for the lack of technology-infused lessons by the teacher (Abdul Samat & Abdul Aziz, 2020).

Fundamental Multimedia Design

Multimedia refers to a blend of more than one type of media including text (alphabetic or numeric), images, symbols, pictures, animations, audio, and video. It usually comes with the aid of technology to enhance both understanding and memorization. Multimedia supports and strengthens verbal instruction using static and dynamic images such as visualization technology to achieve better information expression and comprehension. On the other hand, multimedia technology refers to both the hardware and software that are employed for both the creation and running of various multimedia applications. Multimedia technology is characterized by several features such as diversity, integration, and interaction thereby enabling people to communicate ideas or information with the aid of print and digital elements. In this context, the print and digital elements refer to multimedia-based applications or tools used to deliver information to people for better concepts' understanding. The advent of ICT has tremendously transformed various aspects of human endeavours including the educational sector. ICT uses both hardware and software in the collection, processing, storage, presentation, and sharing of information, especially in digital forms. An important aspect of ICT is multimedia technology which deals with how the information is represented and also presented digitally with the use of different media types including audio, video, and text among others. It also involves the blend of several technologies to deliver information in the best possible packages, sizes, and formats (Abdulrahaman et al., 2020).

It is, however, very important that the sophistication and design quality of multimedia applications are made high enough and also combine different fundamentals of the cognitive processes to achieve the best teacher's mimicking especially when used for educational purposes such as in the classroom or outside the classroom. The main problem has always been about how to utilize the various ICT applications to provide students with a stimulating experience by delivering information for a better understanding of concepts. Though it is imperative to develop various ICT applications for the delivery of effective teaching, each of these ICT applications has its focus peculiarities, areas, merits, demerits, and target age. Therefore, the component and taxonomy synthesis for the progress of the various multimedia applications should be extensively explored because of their effects on learning, teaching delivery, and wider applicability.

An instructional model has been developed with five multimedia design elements to help learners comprehend a scientific explanation.

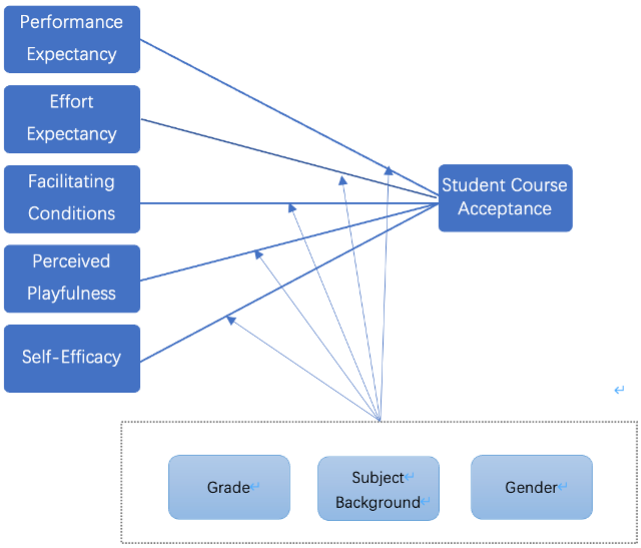
The benefits of presenting information in two ways as opposed to one, such as employing words and pictures or animation and audio narration, were elucidated by the first principle, modality. Additionally, according to Fiorella, Vogel-Walcutt, and Schatz (2012), the modality principle can support students in developing higher-order thinking skills and mastering complex information.

The contiguity principle is the next one, which states that information should be provided in a closed manner so that it is related to one another rather than being

presented in isolation. For instance, it is preferable to explain cloud formation simultaneously using both visual and aural cues so that students may relate to both presentation styles.
The split-attention concept, the third principle, proposes that words work better in animation or video when delivered aural rather than textual.

The fourth principle is that each person is unique, and as such, so are the consequences of contiguity and split attention. Contiguity is not advised for students who possess high-level prior knowledge, as they will be able to create their mental image, according to the CTML.

Theoretical Framework: UTAUT (Unified Theory of Acceptance and Use of Technology



Research Objectives:
RO1: To analyse the impact of performance expectancy, effort expectancy, perceived enjoyment, self-efficacy, and facilitating conditions on the acceptance of film, television, and photography skill courses among university students in Shanxi Province.
RO2: To explore the mediating role of behavioural intention in the relationships between performance expectancy, effort expectancy, perceived enjoyment, self-efficacy, facilitating conditions, and student's acceptance of the courses.
RO3: To examine whether grade level, gender, and major background moderate the relationships between performance expectancy, effort expectancy, perceived enjoyment, self-efficacy, facilitating conditions, and the acceptance of film, television, and photography skill courses. This aims to understand how these factors influence the acceptance of the courses among different grade levels, genders, and major backgrounds.

Hypotheses:
H1: Performance expectancy of multimedia teaching positively influences the acceptance of film, television, and photography skill courses among university students in Shanxi Province.
H2: Effort expectancy of multimedia teaching positively influences the acceptance of film, television, and photography skill courses among university students in Shanxi Province.
H3: Perceived enjoyment of multimedia teaching positively influences the acceptance of film, television, and photography skill courses among university students in Shanxi Province.
H4: Facilitating conditions of multimedia teaching positively influences the acceptance of film, television, and photography skill courses among university students in Shanxi Province.
H5: Self-efficacy positively influences the acceptance of film, television, and photography skill courses among university students in Shanxi Province.
H6: Gender, grade level, and major background of university students moderate the relationship between performance expectancy and students' acceptance of multimedia teaching.
H7: Gender, grade level, and major background of university students moderate the relationship between effort expectancy and students' acceptance of multimedia teaching.
H8: Gender, grade level, and major background of university students moderate the relationship between facilitating conditions and students' acceptance of multimedia teaching.
H9: Gender, grade level, and major background of university students moderate the relationship between perceived enjoyment and students' acceptance of multimedia teaching.
H10: Gender, grade level, and major background of university students moderate the relationship between self-efficacy and students' acceptance of multimedia teaching.

Research Method

The study employs both qualitative and quantitative research methods, including surveys, interviews, and pre-post assessments, to gather comprehensive data on student experiences and learning outcomes. Through the interview, the participants were opportune and enabled to add further comments and thoughts about their learning experience. The interview sessions were administered to the participants individually and on a one-to-one basis.
Location: University students from five universities in Taiyuan, Shanxi Province.

Individuals and Equipment

Individuals

This study was based on action research carried out on their reading fluency and level of proficiency; twenty students were chosen. In this study, which employed

purposeful sampling, all participants had low proficiency levels but mediocre reading fluency.

Elements / Components of Multimedia

Many definitions of "multimedia" emphasize the diverse types of media that are included under one umbrella term. Text, graphics, animation, sound, video, and user interaction are the various forms of content that may be found in multimedia. Other forms of material can include sound and video. Incorporating suitable media components into a multimedia presentation highlights the interactive component, which in turn enhances the content to be conveyed.

Methodology

Design of Research and Research Issues

This study was carried out using the concept of action research, as defined by Altrichter, Kemmis, McTaggart, and Zuber-Skerritt (2002). In order to determine the usefulness of each multimedia component in multimedia learning, the study used five research cycles with various multimedia elements. The two research questions that the study set out to address were "How effective is multimedia learning in improving reading comprehension, especially among indigenous people?" and "Which multimedia elements are effective in helping pupils' comprehension process?"

Process

Before the intervention was put into practice, the students took a pre-test to gauge their level of reading comprehension. The students were then taught using three different multimedia elements each week: audio, picture, and audio. This aimed to assess the impact of each element on the student's comprehension abilities. Finally, as was shown in the previous section on multimedia learning, the students were instructed to use a combination of all three media. The effectiveness of multimedia learning in improving reading comprehension skills was then assessed with the post-test. Ultimately, interviews with students were undertaken to ascertain their perspectives regarding the integration of multimedia instruction into reading comprehension courses.

Data Analysis

Data obtained from the instruments was analysed using both quantitative and qualitative methods. To compare the results, data from the test, post-test, and pre-test were analysed using SPSS software. The thematic review was used to analyse a semi-structured interview. In order to address both research questions, data from the pre-test, post-test, and interview were used and compared.

Results and Discussion

Table 1 displays the rising mean from 2.90 for the pre-test to 7.55 for the post-test. The results of the students' comprehension abilities were displayed in the comprehension text answers both before and after the use of multimedia in the pre-test and post-test. The test scores increased significantly following the

implementation of an intervention aimed at teaching reading comprehension, as indicated by the mean difference (4.650).

Table 1. Pre-test and post-test score

INDIVIDUALS	PRE-TEST	POST-TEST	DIFFERENCE
1	3	8	5
2	3	7	4
3	3	8	5
4	2	8	6
5	4	7	3
6	5	7	2
7	4	8	4
8	4	7	3
9	2	8	6
10	3	8	5
11	2	8	6
12	3	7	4
13	3	8	5
14	3	7	4
15	2	7	5
16	3	7	4
17	2	8	6
18	3	7	4
19	2	8	6
20	2	8	6
OVERALL MEAN SCORE	2.9	7.55	4.65

From the semi-structured interview analysis According to Table 2, 39.47% of students, or 15 out of every 100, indicated they felt more at ease using multimedia learning to improve their text comprehension. The students made good use of the multimedia components available to them when connecting the material, they were taught to what they already knew. The students' response, in which they concurred that multimedia learning speeds up the process of comprehending text through multimedia, reflects this conclusion.

Table 2. Semi-structured interview analysis

Emerging Theme	Frequency	Percentage (%)
Developing comprehension skills	15.0	39.470
Vocabulary retention	6.0	15.780
Mental image creation	10.9	26.320
Learning satisfaction and motivation	7.0	18.430
Total	38.0	100

The results demonstrated that the students could recollect the words they had learned during the exam. Therefore, it has been demonstrated that the right stimulus used in multimedia learning can aid students in memorizing vocabulary knowledge with an agreement rate of 15.78% or a frequency of 6 responses. One of the benefits of multimedia learning is the capacity to form mental images based on the knowledge acquired, as demonstrated in Table 2, where 26.32% of respondents, or 10 times, agreed.

It is possible to conclude that there is a significant difference in this study because the paired samples test in Table 3 shows that the P-value is less than 0.5, indicating that it is statistically significant and that the null hypothesis is rejected. Moreover, there is a statistically significant correlation between the independent and dependent variables. As a result, it has validated the theory that teaching indigenous students reading comprehension through multimedia actually improves their comprehension skills. The purpose of the interview was to find out what the students thought about multimedia learning following the post-test.

Table 3. Analysis of paired sample tests on the use of multimedia learning in reading comprehension instruction

	Mean	Std. Deviation	Std. Error Mean	T	df	Sig. (2-tailed)
Pair 1 score on test before intervention - score on	-4.750	0.851	0.190	-24.971	19	.000

In addition, one of the benefits of multimedia learning is the capacity to build mental images based on the knowledge acquired. The students stated that by forming an internal picture, they were able to comprehend the material in the comprehension text. Students' responses from interviews, which indicated that using textbooks hampered their ability to comprehend and form mental images, corroborate this conclusion.

Numerous media components are included in multimedia learning; therefore, a test was required to determine which components were most useful in improving reading comprehension in native students. The statistical test was selected to analyse the student data that was gathered. The best method to present the results that began with the null and alternate hypotheses appears to be a one-way ANOVA, as indicated below:

i. **Null Hypothesis**: There are no appreciable variations or significant differences in the three media elements' contribution to students' reading comprehension abilities.

ii. **Alternative hypothesis**: Students' reading comprehension skills are significantly impacted differently by each of the three media elements.

Based on Table 4 for the sample of this study (n = 20), the mean score of multimedia element effectiveness for video scored was higher (m = 6.450, SD = 0.605, n = 20) compared to audio (m=3.400, SD=1.095, n=20) and picture (m=5.050, SD=0.887, n=20).

Table 4. Multimedia descriptive analysis components

	N	Mean	Std. Deviation	Minimum	Maximum
Audio	20	3.400	1.095	1	5
Picture	20	5.050	.887	4	7
Video	20	6.450	.605	5	7
Total	60	4.970	1.529	1	7

In the meantime, Table 5 showed that the null hypothesis was rejected since the p-value was less than 00001, indicating that the result is significant at p <.05. Based on a 95% confidence interval, it can be stated that there is sufficient evidence to declare that there are notable variations in the impact of the multimedia elements on the student's reading comprehension abilities, with F (2,57) = 3.15; p< 0.05. Therefore, in order to identify and differentiate between the three aspects, post hoc analysis is required.

Table 5. ANOVA results comparing various multimedia elements

	Sum of squares	df	Mean square	F	Sig.
Between groups	93.233	2	46.617	59.444	.000
Within groups	44.700	57	.784		
Total	137.933	59			

The results showed that there are statistically significant differences between the elements as a whole in Table 5 but not between the individuals, based on the results that have been discussed thus far. As a result, the Tukey Post Hoc test result in Table 6 illustrates the group differences. The table shows that there is a statistically significant difference between the picture and video when it comes to multimedia elements that improve reading comprehension. But there were no distinctions between the audio and the picture or the video.

Table 6. An examination of the multimedia components in multimedia learning using the Tukey Post Hoc Test

(I) GROUP	(J) GROUP	Mean Difference (I-J)	Std. Error	Sig.
AUDIO	PICTURE	-1.650*	.280	.000
	VIDEO	-3.050*	.280	.000
PICTURE	AUDIO	1.650*	.280	.000
	VIDEO	-1.400*	.280	.000
VIDEO	AUDIO	3.050*	.280	.000
	PICTURE	1.400*	.280	.000

The results of the post hoc difference test indicated a significant difference in mean scores between the picture and video groups and the audio group. When the mean difference is negative, it means that the audio group's mean score is lower than the mean score of the other groups.

The homogenous subset of Table 7 demonstrated unequivocally that the mean score of the audio group (3.400) is considerably lower than the means of the image group (5.050) and the video group (6.450). The results of the ANOVA test and the post hoc difference test indicated that indigenous students thought the audio component of multimedia was less beneficial than other components for improving their reading comprehension abilities.

Table 7: The homogeneous subset of multimedia elements in multimedia education

	1	2	3	
AUDIO	20	3.400		AUDIO
PICTURE	20		5.050	PICTURE
VIDEO	20			VIDEO
Sig.		1.000	1.000	Sig.

According to Kirschner et al. (2017)'s theory of multimedia learning, the components of multimedia were carefully chosen and arranged to create a logical flow of thought rather than the human brain simultaneously processing information from multiple media, such as words, images, video, and audio. According to the findings, a mismatch between the stimulus and the information has resulted from improper use and execution of audio in multimedia learning, which is why the majority of students disapproved of the use of audio. In the work of Komalavalli and Amsayal (2022), the multimedia system was shown to significantly facilitate and enhance the learners' fluency of language usage in their second language and learning outcomes. Audio-visual media not only helps students to understand learning materials but also helps students to broaden their experience and knowledge. Presenting learning materials using audio-visual-based learning generally makes students more interesting. Furthermore, video-based learning media provides more realistic learning and new experiences.

Media industries such as film, television and photography have experienced impressive growth and change in China. With the rise of China's economy and the

booming development of its cultural industry, professional skills training courses in the fields of film, television, and photography have become increasingly important (Long, 2019). This article aims to explore the development status of Film and Television Photography Skill Courses in China, including its historical evolution, current status and future trends. The development of film and television photography skills courses is closely related to the rise of China's media industry and plays a vital role in cultivating talents in the fields of film, television and photography.

China's film and television photography skills courses can be traced back to the early part of the last century. Due to the late start of the Chinese film industry, professional training in the field of film and television photography is relatively limited. However, with the rise of China's film industry and the development of the domestic television industry, the demand for practitioners with professional skills has increased dramatically. This has led to the rise and development of film and television photography skills courses (Liang, 2022). In the 1990s, China began to introduce foreign film, television, and photography technologies, and at the same time established a series of training institutions and schools to meet the growing industry needs (Xie, 2016). These training institutions provide students with various courses including directors, photographers, screenwriters, producers, etc. The Cinematography Skills course is a popular choice as it covers key aspects of film and television production.

At present, China's film and television photography skills courses are in a stage of rapid development. Song (2020) believes that the characteristics of this type of course in China are mainly reflected in the following aspects: courses provided by professional schools and universities. Many professional schools and universities in China have established film and television photography skills courses to train a new generation of film, television and photography practitioners. The courses cover everything from photography techniques to the filmmaking process, and renewal of technical equipment. China's film, television, and photography skills courses focus on using the latest technical equipment to ensure students can keep up with industry trends. Education has also been enhanced in areas such as high-definition photography, special effects technology and virtual reality. International exchange and cooperation. Exchanges and cooperation between China's film and television photography skills courses and international film and television schools and institutions are becoming increasingly frequent. This helps Chinese students better understand the standards and trends in the international film, television and photography industries. The film industry boomed. China's film industry has emerged internationally, attracting a large amount of investment and attention. This provides more employment opportunities and career development space for students in film and television photography skills courses (Gong, 2023).

As the industry continues to develop, the future development of film and television photography skills courses in China is full of potential, especially in education. In terms of innovative education, with the continuous development of technology, film and television photography skills courses will adopt more innovative education models. Includes online courses and virtual reality instruction to provide a richer learning experience. For international education, China's film, television, and

photography skills courses will continue to cooperate with international colleges and institutions to promote international education and cultivate more internationally competitive professionals. At the same time, it can also enrich the course content and make the course content more diverse. Future courses will be more diverse, covering different media areas such as film, television, online video and advertising to adapt to changing industry needs. Finally, it will provide employment opportunities for graduates. China's film, television, and photography industries will continue to flourish, providing more employment opportunities for graduates of film and television photography skills courses, including production companies, television stations, advertising agencies, and new media platforms. Although Film, Television, and Photography Skill Courses have developed to a certain extent in China, there are still some problems and deficiencies. Although the development of Film, Television, and Photography Skill Courses in China has made some progress, there are still some shortcomings. For example, educational resources are uneven. The development of film, television, and photography skills courses is mainly concentrated in large cities and economically developed areas, resulting in an uneven distribution of educational resources. Students in many places still face the problems of limited course choices and a lack of educational resources, making it difficult to obtain high-quality education (Dong & Wang, 2023).

The current study indicates the positive effects and benefits of multimedia learning particularly among university students. As a result, one of the study's implications to the school and teachers is to design multimedia-infused lessons with proper guidelines. Furthermore, the school community should incorporate and adopt multimedia in their lesson owing to its inherent potential to help students easily visualise difficult abstract information. The recommendation is in agreement with Abdul Samat & Abdul Aziz (2020). In addition, teachers should be conscious of their students' interests before selecting the materials for multimedia presentations to avoid the failure to create mental images in understanding the materials.

However, the incorporation of multimedia technologies may be challenging because excessive screen time has some potential risks to children's social development and physical health. In addition, technical skill gaps, resource limitations, or inadequate training may also hinder educators from integrating technology into their practices. Nevertheless, the significant impact of the multimedia system would necessitate the provision of adequate support and ongoing professional development for educators (Tang, Zainal & Li, 2023).

Conclusion

The development of technology has resulted in the emergence of a profusion of educational tools, many of which have the effect of accelerating the learning process. One such format is multimedia, which enables users to engage in both solo study and group conversation in the classroom. This multimedia mode of learning is beneficial for a wide range of subjects, including but not limited to language, physics, biology, geography, history, and mathematics. Educational institutions must employ technology that improves student-teacher connections and

significantly alters how students learn, communicate, produce, and collaborate on their academic endeavours.

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