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# Creative Thinking Strategies on Fashion Design Programme for Undergraduate Students in Post Covid-19

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#### **Abstract**

The adoption of online learning can be challenging to increase students' creative thinking skills. This scenario post Covid-19 creates challenges for fashion design programme in China to implement the online learning especially for design studio course. Growing for creativity and innovation is crucial for the students to produce work that is original and uniqueness. This research aims to examine the changes that occurred in undergraduate students of fashion design programme in the post Covid-19 pandemic through online learning. This research used qualitative research methods and twelve students participated sharing experience about new environment and style of learning after pandemic Covid-19. Data were collected through focus groups that included questions on challenges regarding student motivation and discipline, the interaction between student and teacher, the benefits from online learning, student's approach to convey knowledge and information. There was a significant shift from traditional learning (face-to-face) to online learning. Prior is given to advantage on online learning that cultivates student's independent skills carrying out their activities as well as technical issues, followed by teachers' lack of technical abilities and their inability to adapt their teaching style to the online setting. The findings of this research further into adaptability of learning could inform post-pandemic planning and policymaking in the area of education programs. For instance, governments could use such information to prepare strategically by understanding fashion students' creativity. The implications of these findings for future academic studies are discussed.

**Keywords:** Creative Thinking, Education, Creativity, Blended Learning, China

## Introduction

Covid-19 pandemic is the largest disruption to schooling in history (Bhatnagar, 2021). World health Organization (WHO) indicated that the impact of the pandemic has serious effect student learning. The new age of learning in the primary, secondary, and higher learning has creating a paradigm shift in the education system in China. Due to Covid-19 pandemic, the learning process has changed due to movement restriction, most of places locked down and all classes conducted online. Students and teachers forced to adapt to new learning environment, where they have to participate in online learning. This is an alternative arrangement to ensure continuity of learning and teaching and learning through online is about upskilling, unlearning and new norms through a new lens.

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China has acted fast and decisively to lessen the impact of the pandemic on its educational system. Shortly after the outbreak, the Chinese government unveiled an emergency plan called "Classes Suspended but Learning Continues", which urged all schools to close and move teaching and learning activities online (Gu & Li, 2022). In China, online learning becomes prominent. During the pandemic Covid-19 in China, all classes were disrupted, however the learning continues due to the use of accessible educational resources. Nearly 276 million students were unable to return to their schools and universities in China after the government issued a notification for everyone to remain home for quarantine until further notice in an effort to stop the spread of the Covid-19 virus (Huang et al., 2020).

The Ministry of Education (MOE) of China revealed their "National Network Cloud Platform" on February 17, 2020 as a place for storing learning materials for primary and secondary school (Gu & Li, 2022). Live broadcasting's purpose should be to help students get their studies in order and help kids learn more effectively when they're not online (China National Radio, 2020). China Education TV has introduced a second channel to further distribute educational materials and online courses. Those rural areas of the country that lacked easy access to cable TV were still able to receive its broadcasts (China Education Network Television, 2020).

Adapting, realigning, rediscovering, and inventing new approaches at the creative and technological frontiers are essential for learning in this new environment. Students in the Covid-19 era can learn to make do with insufficient resources, for instance, dismantling unused old garments to have better understanding of their construction and then reassembling them by hand-sewing them into fantastic new clothes. Some of the most ground-breaking developments in the world of fashion have resulted from people learning to break boundaries, create new ideas, and established their own styles. However, students frequently have difficulty creating their own unique design aesthetic and process.

Although the design process is integral to the work of all fashion designers, however there is no judgement whether it is right or wrong about it. it is significant for the new generation of fashion students to develop their own unique approach. Businesses, cognitive sciences, philosophy, psychology, art and among others have explored creativity and the phenomenon of creativity is difficult to define and capture because of its multidimensionality, which includes not just individual characteristics and actions but also the interplay of individual's creativity, their ideas and society as well as to capture the phenomenon of society (Karpova et al., 2013).

The aim of this study is to evaluate the impact of creative thinking in changing teaching and learning approaches after pandemic Covid-19 that involves online learning with the following research questions; (1) Has there been any influence on learning outcomes including creative thinking within fashion design students?, (2) What challenges were faced by students with online learning for fashion programme?, and (3) How effectively did students adapt to the change in learning? This research provides recommendations to develop creative thinking approach of how seeing problems outside of conventional boundaries to enhance interest in creativity.

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## Methodology

This study employed a qualitative research approach, and an in-depth case study were conducted with undergraduate students of fashion design. A case study can provide a rich and comprehensive phenomenon of an event and applying effective solutions from previous problems experiences (Yin, 2014). The data were obtained from focus groups with fashion design undergraduate students to seek their perspectives on implementing fully online learning to fashion design program. Twelve undergraduate fashion design students were participated in the focus groups and had experience about online learning at the universities. This qualitative investigation will emphasise on the experience of teaching and learning after pandemic Covid-19, and its effect on students creative thinking. Final-year fashion students from fashion design programmes who volunteer to engage in focus groups.

# **Findings**

## **Online Learning Style and Challenges**

It's understandable that people would hold different views on equity concerns related to online education given the wide variety of ICT applications in the classroom. The digital divide can take on varying forms depending on the context in which online learning is provided (Guo & Wan, 2022). People from all sectors in China emphasised to education during the pandemic Covid-19. Large corporations and universities gave away high-quality learning materials at no cost to the pupils. It is also crucial that different industries work together and share resources. The ultimate objective is to discover solutions and strategies about the challenges that may not have been instantly clear.

Integrating design thinking at every level of a company is the mission of not only designers but also other creative professionals, employees, and executives. As design thinking becomes more common, it will inspire the creation of new services and products in all sectors of industry and society (Gu & Li, 2022). The technological aspect encompasses problem-solving skills when a digital tool or application fails to function, familiarity with and skill in employing icons and interfaces, and insight into the differences between the digital and physical worlds, as well as human-computer interaction (Ferrari, 2013). To date, technology allows for greater mobility and supports virtual work among team members, whereas the design thinking process required physical presence due to its reliance on face-to-face collaboration and a hands-on approach to creativity (Saliba et al., 2022).

The participants highlighted that that the practical studio classes that involved with fabric cutting, sewing using sewing machine, or garment making processes were difficult without lecturer's hands on demonstration. It is also difficult to develop new clothes because limitation of technical equipment such as sewing machine. However, the emotional response from the students from the online learning is higher when they feel safe and useful for lecture class. Teaching presence, social presence, online learning system stability, perceived usefulness of teacher's demonstration, and emotional experience are significantly affected student satisfaction through online fashion design studio class (Lee & Lee, 2020).

## **Understanding Creativity for Fashion Students**

Keeping up with the ever-increasing demand for creativity and innovation is a major obstacle in today's society. As a result of the recent economic downturn, these capabilities are being prioritised by educators, businesses, and policy makers. According to Karpova et al (2013),

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previous researchers argues that creativity goes beyond just the mind where it came to the conclusion that creative thinking required three distinct abilities: (1) the ability to conceptualise issues in novel ways; (2) the ability to identify and prioritise ideas; and (4) the ability to sell one's ideas to others.

The process of designer is only a small part of the work he has done over the course of his career to learn about the designer's mind and explore what he calls, and what is commonly referred to in design research as, "designedly methods of knowing" (Kruger & Cross, 2006). In the teaching process, student must have certain artistic achievements where the teachers not solely focus on the training student's professional ability, but also focus on enhancing fashion design students' skills.

However, the process of learning is different in the post Covid-19 era. Furthermore, due to online learning, many students feel their fashion education is theoretical rather than practical. There is no doubt that certain students' professional quality and skills will increase after they have received professional training and the clothes design does not require the memorisation of knowledge points but engage with innovative thinking (Lulu, 2020). Creativity usually defines as is usually understood, is to be capable of making something that is both original and suitable, and such expectations for designers' actions are consistent with such conceptions of creativity (Bonnardel & Didier, 2016).

The participants expressed that the significance of their understandings and creativity are inspired by other designers' artworks. The structure fashion design program must address the students are learned to design clothes or to create fashion which resulted in creative new opportunities for students to grow as designers. The understanding of the process creating and making clothes must involve of ideation and idea development of concept. Meanwhile users' interpretations are based on their experiences of use and on the opinions of other users or, occasionally, from top level decision makers.

# **Academic Satisfaction Develops Creative Thinking**

Students exposed with videos in the online learning. Student responds to online learning videos to increase their capabilities of creative thinking. A video can be an effective teaching tool for a variety of settings, including full classrooms, smaller study groups, or student alone (Ermila et al., 2022). The video for online learning comprises a variety of multimedia components, such as audio, animation, graphics, and text, that are designed to encourage student involvement and participation in learning activities such as a combination of stories or situations, audio, and visuals. The design and development of media started with the production of storyboards, was continued by research products development in the form of online learning videos to develop students' creative thinking skills, carried by product validation by a team of industry experts and product design revisions (Ermila et al., 2022).

Students believed that they possessed the required technical abilities to participate in the online course and were pleased with the level of interaction with other students and the teacher. Students must learn individually in an online learning environment; therefore, a high level of educational satisfaction increases their motivation to effectively take part in the process of learning, helping them to achieve their learning outcomes (Palmer & Holt, 2009). Students' satisfaction with an online fashion design course was highly influenced by teaching

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and social engagement, the stability of the online learning system, the perceived value of the teacher's presentation, and their emotional reaction to Covid-19.

# Originality

To improve individual's capability for creative thinking, it must requires an element of originality and quality requires an element of acceptability in a certain social environment (Sternberg & Kaufman, 2010). It is dependent upon the individual's creativity and personality. It encompasses cognitive style, the utilisation of heuristics to develop new ideas, and work style. Learning outcomes and deliverables have impact on student's satisfaction when they use various technological tools in the online learning platform. Consequently, it is clear that creativity share a significant social responsibility, that also involves two important objectives such as the in-depth understanding and explanation of the phenomenon of creativity in all its diverse areas, and the education of both young and old generations (Corazza, 2016). Although the objective of concept development is the development of new ideas rather than the reproduction of current knowledge, it is necessary to recall previously stored information (Rietzschel et al., 2007).

E-learning facilitates and cultivates the learning-teaching process by providing a vast array of options for exchanging knowledge and uploading papers in various formats. There may also be distinctions between traditional and online learning in terms of information sources, assessment, and educational quality. Additionally, encouraging communication between students and teachers, student engagement, immediate support, active learning, task time encouraging students to dedicate more time to completing the assignment, high-expectations, therefore the teacher should convey their goals in order to inspire and motivate students, diverse learning, and technological application comprise the basis of good online learning (Coman et al., 2020).

# **Flexibility of Learning**

Furthermore, participants highlighted that online learning enable students to have skills that require quality and up-to-date standards skill worker through the fashion design programme's framework, its materials and content. The students will receive strong practical basis in clothing construction through the understanding of fabric manipulation in innovative apparel design development and products. Online learning students in problem-based classes are required to participate actively in online class and need to demonstrate their development of critical and creative thinking abilities necessary for problem solving (Yustina et al., 2022). A student has the flexibility to think creatively and have the capabilities to provide several solutions and ideas to solve the problems based on the image, story or issues. Additionally, incorporating e-learning into the education process will broaden students' perspectives and allow them to approach challenges from new angles (Yustina et al., 2022).

Students are better prepared to comprehend and utilise web-based fashion content when a fashion course is taught online and it also improves students' ability to visualise fashion through the use of course-related illustrations (Kwon & Brinthaupt, 2012). Participants also claimed that attending the online course was convenient, they thought it is easier or better if it had not been offered totally online, because course have an excessive amount of technology. Furthermore, online platform consistency, the quality of video, the availability of a suitable communication medium between teachers and students, prompt and detailed

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feedback from teachers, and course contents such as material course and assignments developed with an online learning and equipment provision were identified as areas for development for online fashion studio classes (Lee & Lee, 2020).

#### Discussion

There is a significant correlation between how you learn and your ability to think creatively. In general, the research shows that online learning in higher education supports its utility, efficacy, and favourable impact on student performance and their creative thinking. If there is a way to reliably quantify different learning styles, the field of learning style research could theoretically influence the original thought. Moreover, the adaptability of online learning in terms of both course delivery and student access to materials and contents become popular and easier. Students become independent and adapting with an appropriate learning environment. Moreover, students will be able to exchange ideas and opinions with more ease if they can collaborate and communicate effectively. In the 21st century and the era of the industrial revolution 4.0, one of the required skills is critical thinking and criticism is an important component of carrying out increasingly difficult tasks and applying critical thinking will produce outcomes with great significance and benefits (Mutohhari et al., 2021).

The objectives and dimensions of the Chinese education system are shifting, and the Chinese are attempting to incorporate innovation, flexibility, and creative thinking into the education system. To be effective improving students' creativity, it is necessary to expand the scope of the project beyond the confines of the classroom and organise competitions outside of the school setting. The implementation of projects in the classroom is something students are working hard to implement. Based on these that we could derive genuine education opportunities. Learning in China is becoming increasingly problem-based and interdisciplinary. Teachers can share their knowledge and expertise with their students in a meaningful way through online education. Additionally, the process of learning after Covid-19 changed when teachers introducing the concept, it gives a context that is both recognisable and sympathetic, then students choose examples from their own life in which they can apply the studied topic. This helps students to explore their creativity in more detail while responding to their diverse past knowledge levels and backgrounds.

The fashion industry thrives on the creative challenges between aesthetics and utility, technology and craftsmanship, standardization and uniqueness, conformity and individuality, and realism and fantasy. Its purpose is to benefit others, and it often has far-reaching effects in many areas of both society and the environmental aspects. To obtain results in line with market needs, personalised learning must be constructed collectively in a learning community through teamwork, feedback, and the sharing of numerous viewpoints and skills. The understanding about the entire process of making and wearing clothes, from concept to retail is significant in fashion learning. A deeper appreciation for the visual language of dress, collective identities, and issues such as labour practises, sustainability, and body politics as fashion decision making process. Creative thinking, including innovation and development, can be fostered through online learning, especially when students are allowed to carry out experiments or develop products and then present it to others.

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# **Conclusion and Further Research**

In this research, the effectiveness of online learning for fashion design programme for undergraduate students was explored. The success of online learning in the post Covid-19 continually adapting for creative design activities. Design activities appear challenging on online learning, however the programme structure must focus on strategies to encourage innovation in design, not downstream but upstream, by providing design students with project-based training at enhancing creativity.

It is essential to create teaching materials as well as strategies that enable students feel that they are participant in the class, and to develop an online system with several features and capabilities that improve the sense of a social engagement and allow for two-way communication between students and teachers. In an evaluation of approaches to boost online student happiness, characteristics connected to perceived 'fairness' of assessment and the effect of personal cognition, such as self-efficacy, computer confidence, and locus of control, were identified as contributing to satisfaction and increase level of creativity. Further research is needed to fully appreciate the significance of learning styles as a cognitive style of creativity and its implications for unconventional problem-solving.

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