Learning from a distance: A conceptual teaching framework that supports positive emotions and novelty during independent fashion design processes

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Abstract

The importance of cultivating a creative mindset in fashion design students to eventually thrive in the rapidly changing work environment that demands novelty in design is becoming increasingly relevant from an educational perspective. In addition, the challenges to enhance creative design processes of students have been exacerbated by the COVID-19 pandemic in 2020, which caused a sudden transformation from traditional contact education, to online and later blended learning. This implies that educators are challenged to re-think traditional strategies of teaching creativity to align to the shifting conditions. This paper addresses a possible means to re-conceptualise a creativity framework that has been developed and implemented in a previous study for collaborative face-to-face learning environments, to align with the new learning situation. A framework from this study highlights, firstly, that it is important for students to apply creative problem solving with cognitive fluency, flexibility, and flow, particularly in constantly changing environments where it is necessary for a designer to be agile. Secondly, the role of positive emotions is imperative in students' creative design processes, as experiencing these emotions can ignite an open mind that may enhance the ability to think creatively to produce novelty. It is therefore important that students' positive emotions are supported during independent creative design processes.

The purpose of this paper is to propose a conceptual teaching framework that presents principles to enhance students' positive emotions and novelty during design processes in a blended learning context with a strong online component. A conceptual approach was taken to construct the proposed framework. The inquiry followed reasoned argumentation to synthesise a) the four pedagogical areas of Cronje's (2021) suggested integrated blended learning matrix for decision-making learning contexts, namely Known knowledge, Complex knowledge, as well as the domains of Knowable and Chaos with, b) literature, including previously published papers by the researcher/author of this paper, and c) the researcher's interpretations of how these can be applied to derive a logical framework for the purpose of this paper. The discussion of the synthesis for the proposed framework links Cronje's (2021) model logically to positive emotion theory in terms of interest, pleasure, pride, and satisfaction, and then relates these to aspects of the fashion design process. This synthesis of information is then consolidated into a diagrammatical framework to illustrate how the concepts in the structure relate. The conceptual framework of this paper provides a valuable starting point but needs further investigation and implementation to assess the efficiency of the structure for students' independent creative design processes.

Keywords: Blended learning, conceptual teaching framework, fashion design processes, novelty, positive emotions

Introduction

An open creative mindset is vital for fashion designers to thrive in the rapidly changing work environment today where novelty in design is key, especially in terms of a significant shift in the industry towards niche fashion products sold online, where goods are often selected based on their originality (Choi, Ko, Kim & Mattila, 2014; De Wet, 2016). It is therefore becoming increasingly important from an education perspective to cultivate creative thinking skills in students. In 2019, lecturers (one who is the author of this paper) involved in a tertiary Fashion Design programme in South Africa developed a creativity framework to enhance students' creative flexibility, fluency, and flow that are relevant skills needed to continuously shift personal design perspectives to align with the various needs of clients (De Wet & Tselepis, 2020). This framework is underpinned by Fredrickson's (2004; 2001; 1998) positive emotion theory to enhance awareness and open-mindedness during the design process. This structure was empirically implemented and evaluated in the context of traditional contact teaching and learning, as part of a third-year design project. The findings of this study indicated that the applied strategy had notable positive effects on students' ability to solve problems creatively during the design process (De Wet & Tselepis, 2020). However, the COVID-19 pandemic in 2020 that resulted in online and later blended learning, challenges the effectiveness of the existing framework within this new context.

In a traditional contact class situation, maintaining positive emotions in students and encouraging creativity during the design process of a project was relatively simple to achieve (De Wet & Tselepis, 2020). In this context, the lecturer had a physical space to interact with students and could therefore influence students' emotional state and creativity throughout the design process with personal feedback and guidance. Also, group dynamics between students and with a lecturer could inspire collective creativity that has proven beneficial for triggering new interpretations and discoveries that an individual alone may not have been able to generate (Hargadon & Bhechky 2006; Tadmor, Statterstrom, Lang & Polzer, 2012).

However, observations documented by the lecturer (author of this paper) in a personal reflective teaching journal during 2020, suggested that motivating positive emotions was significantly more challenging in a virtual context where instructors and students were engaging with activities of design projects distantly, independently, and with no/limited physical interaction. The above concern was affirmed in email communications to the lecturer, as well as evaluations of design projects conducted by the institution in 2020 that reflected feelings of anxiety and being overwhelmed by the expectations of the new self-directed learning demands. Fredrickson (2004; 2001; 1998) maintains that experiencing negative emotions such as anxiety caused by circumstances can narrow a person's attentional focus and impede creativity. This implies that positive emotions, on the other end of the spectrum, could then enhance a person's creative thinking ability to create novelty (De Wet & Tselepis, 2020).

Given the above-explained context of the study, the purpose of this paper is to propose a conceptual teaching framework that presents principles that can support students' positive emotions and novelty, during design processes in a blended learning context with a strong online component. The importance of novelty is not new in design (Dorst & Cross 2001; Mitcham & Holbrook 2006, pp. 106), but this paper argues that in the context of COVID-19 that resulted in blended learning, finding a way to support novelty is probably even more pertinent than before. The question is, what a teaching framework should involve, to evoke and maintain students' positive emotions that might encourage creativity and novelty during design processes in a blended learning environment?

The next section presents a review of relevant literature concerning the key concepts of the study. By means of introduction, creativity promoting novelty in fashion design is discussed first. Thereafter, follows a discussion involving a creative environment promoting positive emotions. Following this, the research methods and materials informing the development of the proposed teaching framework, along with the research objectives are presented. The findings and synthesis of theoretical constructs that form the suggested conceptual teaching framework are explained next. This synthesis of information is then consolidated into a diagrammatical framework to illustrate how the concepts in the structure relate. The paper concludes with implications for fashion design education in providing a teaching strategy to support positive emotions and novelty in a blended learning context.

Literature review

Creativity in fashion design promotes novelty

Creativity is a complex notion that can be viewed from various perspectives (Davis, 2011; Demirikan & Hasirce 2009; Montuori, 2010). These views include 1) the creative thinking of a person that is often associated with design thinking and actions (Liikkanen & Perttula, 2009), 2) the creative process applied, 3) the creative environment, and 4) the creative product that embodies the creative ideas of a person (Demirkan & Harisrci 2009; Gemmil, 2011). This paper views creativity as a thinking ability that enables individuals, such as fashion designers, to create novel ideas, insights, or artistic products (Carlgren, Elmquist & Rauth, 2016; Lan & Kaufman, 2012; Proctor, 2018). The importance of novelty in a fashion design is therefore highlighted in this paper.

According to Fiore (2010, pp. 347), novelty in terms of fashion can be defined as the perceived newness of products that are based on a comparison of present items with those of the past. The importance of novelty in fashion design is further reflected in the statement that consumers are attracted to new, unusual, and innovative items when selecting products to purchase (Choi, Ko, Kim & Mattila, 2014; Fiore, 2010, pp. 360). Nevertheless, Fredrickson (2001; 1998) points out that for creative thinking to result in novelty, experiencing positive emotions to ignite an open mind is imperative. The argument can therefore be made that creative thinking requires a conducive environment that promotes positive emotions (Bell & Ternus, 2007, pp. 15).

A creative environment promotes positive emotions

De Wet and Tselepis (2020) link an ideal environment for the application of creative thinking skills in design processes to conditions that promote 1) a person's positive emotions, 2) exploration (Bell & Ternus, 2007, pp. 15), and 3) interaction and collaboration that can spark collective creativity (Hargadon & Bhechky 2006; Tadmor, Statterstrom, Lang & Polzer, 2012). Positive emotions can be defined as situational responses relating to interest, pleasure/joy, contentment/satisfaction, pride, and love (Fredrickson 2001). This author explains, in short, that pleasure ignites an urge to play, interest sparks exploration and to take in new experiences and information, contentment to savour and integrate to derive new views or answers, and pride following achievements, create a desire to share with others. Lastly, love spurs a reoccurring cycle of each of these positive emotions. A creative environment promoting a positive mindset is therefore an important dimension of creative thinking that according to Botha, Tselepis and De Wet (2020) can enhance the ability to create novel ideas and products.

Research methods and material informing the proposed conceptual teaching framework

A conceptual approach was taken to construct the proposed framework of this study, guided by a specific research paradigm to support how information is analysed and interpreted (Mackenzie & Knipe, 2006). The investigation applied a constructivist research paradigm (also referred to as interpretive paradigm) since according to Rehman and Alharthi (2016), the nature of constructivism/interpretivism concerns understanding and making sense of reality and/or ascribing meaning to certain aspects or phenomena. A constructivist research paradigm further implies that individuals construct their own knowledge and understanding of a situation through experience and reflecting on those experiences (Rehman & Alharthi, 2016). In this study, extensive experience in fashion design education guided the researcher's process of understanding and ascribing meaning to the constructs and dimensions from various materials to develop a framework for the specific purpose of this study. The research process to conceptualise and construct the framework was operationalised in two research phases with two objectives.

Research Phase 1

Objective 1: To explore Cronje's (2021) integrated blended learning matrix for decision-making considerations to identify relevant aspects within this author's proposed four learning contexts that can be linked to positive emotions and novelty.

The decision-making matrix for blended learning by Cronje (2021) was deemed appropriate to guide the development of the framework presented in this paper for the following reasons: 1) it is a very recent publication (2021), and 2) works of several authors are incorporated in the construction of the proposed matrix of this paper. As recommended by Cronje (2021), the framework presented in this paper focuses on learning approaches, rather than delivery mechanisms.

Research Phase 2

Objective 2: To compile a framework that can be applied to enhance students' positive emotions and novelty in a blended learning design environment.

In the second phase, the research followed reasoned argumentation to synthesise: a) identified relevant dimensions of Cronje's (2021) matrix with, b) literature, including previously published papers by the researcher, and c) the researcher's interpretations of how these can be applied to derive a logical framework to enhance students' positive emotions and novelty in a blended learning design environment.

Quality of the data

In the process of reasoned argumentation to interpret and synthesise the various constructs, the role of the researcher is central. In this regard, the experience of the researcher in fashion design education and involvement in the scholarship of teaching and learning is important, since according to a qualitative approach, these factors can contribute to the credibility of the data or conclusions (Anney, 2014). The researcher in this study, has over 25 years of experience in tertiary education, particularly in teaching creative design. The researcher also has practical design experience and theoretical grounding in the field of creativity and design. These theoretical and practical backgrounds assisted in identifying and validating the

theoretical constructs, as well as how these could be linked to the purpose of this paper. Another strategy implemented to enhance the credibility of ideas formulated, particularly to obtain 'believability', entailed using a peer to soundboard, and validate initial theoretical ideas on a preliminary framework. This is referred to as peer debriefing (Anney, 2014). To this end, a peer with a fashion education background was specifically selected to validate and interrogate the dimensions, the reasoned arguments, and the proposed framework. This practice enhances the trustworthiness of the data.

Ethical conduct

Ethical conduct to proceed with this conceptual research paper was ensured by acquiring written permission from the relevant institutional research committee to proceed to reflect on observations and confirmations documented in a personal teaching journal that did not involve any participants. Observations and confirmations served to inform the problem and identify a gap for potential future empirical research.

Findings and synthesis of theoretical constructs

This section of this paper offers the findings and a synthesis between a proposed blended learning matrix for decision making, considering the various aspects presented by Cronje (2021), as well as the creative process of fashion design students who want to acquire novelty. Ultimately, from a lecturer's point of view, the aim is to support positive emotions throughout a creative design process. To this end, the argument was made earlier in the literature review that positive emotions could also contribute to novelty and that it might be particularly important in the instance where students must engage with creative design processes more from a distance and not in the face-to-face studio set-ups, they are accustomed to.

Exploring integrated blended learning for positive emotions and novelty

Blended learning is commonly defined as a mode of teaching that combines computer-facilitated instruction via virtual platforms, with traditional face-to-face instruction that requires the co-presence of lecturer and students (Friesen, 2012; Graham 2006; Keengwe & Kid, 2010; Kim & Bonk, 2006). Cronje (2021, pp. 120) refines this definition by placing emphasis on the learning aspect of the term and presents blended learning as a teaching approach that includes the "appropriate use of a mix of theories, methods, and technologies to optimise learning in a given context". The theory and matrix for blended learning offered by Cronje (2021) certainly provide valuable guidance for making decisions in the compilation of the proposed teaching framework of this paper, aimed at supporting positive emotions and novelty during independent fashion design processes. Nevertheless, although Cronje (2021) points out that a positive attitude is a contributor to students' satisfaction and intrinsic motivation in blended learning (Kintu & Zhu, 2016), guiding theory to support these emotions is not offered in this paper.

I start by presenting the comprehensive matrix of Cronje (2021) in table 1 that can guide a lecturer's decision-making for blended learning.

Table 1: Blended learning decision matrix (Cronje, 2021)

Context (Kurtz & Snowden)	Theory (Cronje)	Methods	Technologies
Known	Injection	Tutorial Drill	Lecture Book Video
Complex	Construction	Construction Exploration	Open-ended learning environments Construction kits and tools Spreadsheets
Knowable	Integration	Puzzle Discussion Debate	Games Discussion tools
Chaos	Immersion	Experience Field trip Apprenticeship	Blogs Logbooks Assessment tools

Discussion of the synthesis for the proposed framework

In response to Clark (1994), Korma (1994), and Russell (1999) (cited in Cronje, 2021), Cronje argues that pedagogical context drives the decision of what and how to combine for blended learning. Guided by Kurtz and Snowdens' (2003) Cynefin framework, Cronje (2021) presents four areas of learning contexts, namely Known knowledge, Complex knowledge, as well as the domains of Knowable and Chaos. In blended learning, these pedagogical approaches can be combined to optimise learning, irrespective of the instructional technology (Cronje, 2021).

Known knowledge represents best practices and standard operating procedures, and the blended model would focus here on modes of instruction or *Injection* (Cronje, 2021). In terms of a typical fashion design project involving the application of the design process, *Injection* can be linked to the input provided by the lecturer to guide the process and inform students of project requirements, and for students to apply the information (De Wet & Tselepis, 2020). Guided by Cronje's suggestions, some techniques that are relevant to fashion design that can be delivered virtually include (1) a clear project brief, (2) short live or pre-recorded lectures and video demonstrations, (3) notes/books, (4) regular lecturer interaction involving meaningful communication and feedback on design work to guide students' creative design process. Considering Fredrickson's (2004; 2001; 1998) positive emotion theory, the point is made that appropriate, clear, and meaningful input to fully understand project expectations could provide confidence that can lead to experiencing *pleasure*, which might spark a desire to act.

For *Complex knowledge*, abductive reasoning is applied as students learn how to make sense of complexities and making logical conclusions from their observations. Cronje (2021) proposes *construction* tasks, problem-based learning, and open-ended learning environments as suitable for complex knowledge. This paper links *Complex knowle*dge to design that consists of a course of actions aimed at solving design problems that are often complex, open-ended, and not obviously logical (Dorst & Cross 2001). In this context, the term 'construction' is equated to the term 'creation' in design. One can argue that for students to make sense of these complexities and attempt to create novel design solutions, first require *interest* to engage with a design situation. According to Fredrickson (2004; 2001; 1998), interest opens the mind and creates an urge to explore and 'figure' things out. For fashion design in a contact environment, inspiration due to a change of physical environment, followed by an activity such

as quick sketching to explore many design ideas could evoke interest (De Wet & Tselepis, 2020). In a virtual environment, creation tools can be provided.

The *Knowable* domain requires analytical and reductionist thinking to understand something by breaking it down into smaller parts. This context calls for an *Integration* of learning approaches with the aim to teach systems thinking (Cronje, 2021). *Knowable knowledge* is associated here with design as a procedure that requires synthesising several ideas, elements, and processes into a cohesive whole to achieve a design goal (Dorst & Cross 2001; Mitcham & Holbrook 2006, pp. 106). Cronje (2021) provides some guidelines to support students' understanding of the holistic interrelation of elements within the whole. In a contact situation, peer discussions and sharing of ideas and processes are appropriate. In a virtual environment chat groups and discussion forums for students to contribute towards a larger design issue/idea, and discussions of each other's work could, create a beneficial collaborative ethos according to Kim and Bonk (2006). The argument is made here that *pleasure* and *pride* that might be achieved through shared energy and collective creativity can induce a feeling of *contentment*. Positive emotion theory by Fredrickson (2004; 2001; 1998) indicate that savouring feelings of *contentment* can support sense-making and integration of, in this case, several ideas, elements, and activities to achieve novelty as a design goal.

The domain of *Chaos* relates to experience. Traditionally this might have been known as 'being thrown into the deep end', or what Cronje (2021) refers to as *Immersion*. This typically relates to field trips, experiential learning, and apprenticeship, where teaching is notably absent and "learning is incidental and serendipitous" (Cronje, 2021, pp. 120). This paper relates *Immersion* to flow in creativity, which is a state of complete mental emersion when completing a challenging task (Csíkszentmihályi 1997, pp. 1990). Operating independently in unfamiliar situations, such as noted above, are likely to raise students' anxiety levels, and can impede creative flow (De Wet & Tselepis, 2020). Positive emotions relating to interest, pleasure, and joy may be viewed as opposites of anxiety (Fredrickson 2001) and should be encouraged to counter anxiety. Blogging is a useful technological tool and/or keeping a design journal to document personal design processes. Since the pedagogical focus here is on assessment rather than instruction (Cronje, 2021), students can be given checklists to complete to guide their process.

The next table demonstrates the proposed conceptual teaching framework that appropriates Cronje's (2021) model to the purpose of this paper, which is to support positive emotions and novelty during students' independent design processes.

Table 2: Teaching framework to support positive emotion and novelty during students' independent fashion design processes (appropriated using Cronje's (2021) blended learning decision-making matrix)

Context (Kurtz & Snowden)	Theory (Cronje)	Possible positive emotions that can promote novelty (Author)	Methods (Appropriated by the author)	Technologies (Appropriated by the author)
Known	Injection	Confidence leading to pleasure	Lecture Practice Meaningful lecturer interaction	Clear project briefs Short live or pre-recorded lectures & video demonstrations Notes/books (physical/digital)
Complex	Construction	Interest	Creation Exploration Change of physical	Online creation tools

			environment	
Knowable	Integration	Pleasure, pride, Contentment/satisfaction	Figure-out Discussion Collective creativity	Online discussion platforms
Chaos	Immersion	Opposite of anxiety: Interest, pleasure, joy	Experience Field trip Apprenticeship	Blogs Design journal Assessment tools

The above discussion of the synthesis for the proposed framework suggests that it may be possible to link positive emotion theory in terms of interest, pleasure, pride, and satisfaction in a logical way to Cronje's model for the purpose of this paper. The value of this synthesis is that the application thereof could enhance creative design processes to achieve novelty in students' independent learning processes, as well as to use online learning methods and technologies optimally, such as online discussion platforms to create a beneficial collaborative ethos that could ignite collective creativity.

Conclusions and implications for fashion design educators

The introduction of this paper highlighted that the change to blended learning with a strong virtual component, where students can no longer rely on the benefits of physical interactions with lecturers and peers to support their creative design processes, often causes anxiety that can impede creativity. This paper, therefore, argued that the role of positive emotions to promote creativity and novelty during students' independent fashion design processes should not be underestimated. It is important to note that blended learning is not simply about distance in an online sense, it is also about the distance that students may experience when they are not part of the collective creativity in a studio as they used to be before the 2020 pandemic. To this end, a conceptual teaching framework was presented in this paper that linked Cronje's (2021) blended learning matrix for decision making with positive emotion theory by Fredrickson (2004; 2001; 1998), aimed at promoting creativity, and ultimately novelty in fashion design.

Although the proposed framework is intended for fashion design, the principles offered may provide an opportunity for educators of other design disciplines to pursue and adapt to their situations. Nevertheless, the framework needs further investigation and implementation to assess the efficiency of the structure within its intended context. It is concluded that regardless of COVID-19, tertiary fashion design education will most likely continue to apply a blended learning approach as a long-term teaching strategy since the advantages of self-directed learning for students are too significant to ignore. And therefore, making the distance of independent creative design processes seem less distant for our students is imperative!

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