The Influence of Environmental Concern on Intention of Green Consumption — Moderating Effects of Moral Consciousness

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Keywords: Environmental Concern, Emotional Attachment, Theory of Planned Behavior, Moral Consciousness, Intention of Green Consumption

Abstract:

With the awakening of global green homes and environmental awareness, green marketing strategies have impacted traditional marketing thinking. The public's concern for the environment promotes green consumer behavior. In response to the environmental protection concept of the market, enterprises have launched green products and consumer services, and created a green image with advertising marketing design. Regarding the study of green consumption behavior patterns, many scholars use the Theory of Planned Behavior (TPB) as the basis for exploring consumer's intentions in friendly environmental behavior. Also, Environmental care can also influence behavioral intentions through attitudes, subjective norms, perceived behavioral control and perceived moral obligations.

In light of the concern for environmental protection, and with the conceptual guidance of the theory of planned behavior (TPB), this study examines the effects of consumer's attitude toward green consumption, subjective norm, perceived behavior control, and the individual's emotional attachment to green consumption on consumers' green consumption behavioral intention, by forming an extended TPB mode. The moderating effect of moral consciousness also is examined to explore if any difference in the impact of individual ethical awareness on each path. In the recreation area, the questionnaire is issued for tourists and a total number of 829 samples are collected to carry out empirical analysis. Data analysis is performed using the AMOS 22.0 software, and the results show that: a positive effect of environmental concern on emotional attachment, attitude, subjective norm, and perceived behavior control. These four effect variables in turn are expected to exhibit positive effects on consumers' green consumption intention. The moderating effect of moral consciousness also is analyzed. The study presents management implications and suggestions for green marketing strategy, corporate image and advertising design.

D190004

Study on Design of Female Breast Measuring Stick

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Keywords: chest measurement, measurement tool, measuring stick design

Abstract:

In recent years, with the rapid development of the underwear market, underwear has attracted more and more people's attention. According to studies in different countries, 80 to 85 percent of women wear the wrong bra. When underwear of underwear inn choose and buy, underwear inn clerk can recommend underwear according to the size of fluctuation breast normally. In this study, the service design thinking was applied to analyze the whole process of shopping in lingerie store and optimize the contact points in the service. The purpose of this study is to introduce and design a new measuring ruler for measuring the important parts of the chest related to bra making. It can overcome the shortage of existing measuring tools, more comprehensively reflect the measurement parameters of body parts involved in bra making, so as to help the underwear shop staff recommend suitable bras for customers and improve the comfort of bras.

Firstly, through literature review and questionnaire survey, this paper analyzes the reasons why women cannot buy bras of the right size, and puts forward the core problems: there is no suitable breast measurement tool; Secondly, existing chest measurement tools and materials, including bra products, are reviewed. Introduce the technology to analyze the measurement needed for bra production, as an ideal size comparison, and compare with existing bra products. The measurement tools are classified and their current is analyzed.the size of the measuring tools can be measured and the size of the measuring tools cannot be measured.finally, the design of a new measuring ruler is put forward.

The purpose of this study is to design a female chest gauge to maintain the advantages of the existing measuring tools and to solve the problem that it can not measure the size. By studying the new design ruler, we can directly measure the circumference, distance, small shoulder width, shoulder angle and shoulder width of the chest, and indirectly measure and measure the size of the surface. This is a great progress in chest measurement technology.

D190005

The Quantitative Research of Applying Visibility Graph Analysis Method of Space Syntax Theory to Visual Cost and Access Cost of Evacuation Performance of Buildings

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Abstract:

The phenomena of Spatial Disorientation in indoor environmental conditions creates obstacles for first aid-responders. For the spatial cognition and visual identification of disaster evacuation fields. Professor Jaepil Choi et al. (Choi, Kim & Choi, 2007) proposed the following concept of "evacuation performance of buildings". By applying visibility graph analysis method(i.e., V.G.A.) of Space Syntax theory founded by UCL Professor Bill Hillier. A quantitative evaluation of visual depth, spatial visibility, and evacuation routes. Rather than physical distance and evacuation time factors generally mentioned which Professor Jaepil named as "visual cost". Therefore, V.G.A. method of space syntax theory, which can perform quantitative analysis and evaluation on "human factors information" such as spatial visibility and the accessibility of evacuation routes, was applied as the main research tool of this study. As societies in Taiwan turn into aging societies, the elderly groups' capacity of evacuation couldn't be compared with other groups. Once an accident occurred, it would be very serious. Therefore, there are 12 elderly day care centers located in central Taiwan that have analyzed the main research sites in this assessment. According to the analysis results and the concept of cost quantification. The quantification principle is considering the influence of the turning angle at turning point of directions decision-making (Included angles from the forward direction). Spatial visibility (visual cost) and accessibility of the shortest evacuation routes (access cost) of overall spatial configurations to exit. The numerical values of evacuation performance parameters would be calculated by visual integration and axial line mean depth and weighted by turning angles and length of evacuation routes. The parameter value is calculated on the shortest evacuation routes from the farthest area of overall spatial configurations to exit, defined by this study. When the evacuation performance of the house can be quantified. The evacuation difficulty of each house can numerically be compared and presented, and this is just the important intention of this article.

D190008

Spatial Intervention Method of Commercial Space Design in terms of Pedestrian Flow Prediction through Space Syntax – Case study in Spatial Evaluations of remodeling a mall in Taiwan

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Abstract:

A commercial space undoubtedly needs to have the capacity to attract a crowd of natural pedestrian flow into the shopping area, which is the key point of success for business. Space syntax theory can be deployed to simulate the use patterns before the completion of construction. One can use the analytical software of visual field (visibility graph analysis, i.e., V.G.A.) of space syntax theory to carry out a diagnosis on why a shopping mall becomes a failure. Space reformations will be employed to solve the existing problem of sparse pedestrian flow into the study area. There are " visual integration" of analysis parameter to explain the position of the visibility of shopping stores, and "agent counts" of pedestrian flow analysis parameter to simulate the spatial distribution of the crowd to see whether the mall can achieve pedestrian flow or not applied in this study . The intention of this study is to find ways to lead the pedestrian flow into the shopping space through the fewest spatial interventions. This research obtained the following findings:

1. When space becomes more open, the effect of guiding pedestrian flow may not be higher. It depends on the distribution of visual integration degree penetrating into the mall space or not.

2. Adding the vertical links (the staircase) - the effect of guiding pedestrian flow may not be higher, when a staircase is placed throughout the floors in the center. Placing the staircase on the area of higher value of visual integration (visual analysis) is more effective of guiding pedestrian flow than placing a staircase in the center of the mall.

3. Sometimes the pedestrian flow simulation value (Agent counts) of some part spatial reformation is unchanged, but it might affect the analytical results of other spaces.

4. If one reconstructs an area of higher degree of visual integration (visual analysis), it might have a significant impact on the overall space system, or you will get opposite effects. Even when one recombines several reformation proposals, it may not have the effect of synergy.

Research on animation imagination creation based on Gestalt Psychology Theory of children

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Keywords: Gestalt, Children, Psychology, Imagination, Creation

Abstract:

Although the creation of animation is vigorously cultivated through university education in China, in the process of animation creation, it is difficult for adults to stand in the perspective of children to meet more psychological needs of children. Based on the new theory of children's psychology and Gestalt, this paper will analyze from the perspective of children's psychology. Through a questionnaire survey on 240 children, it uses the regression analysis method to obtain the factors which influenced of animation in children's imagination, including color embodiment, sound elements and character images. Finally, this paper will analyze the problems and corresponding improvements in the creation of modern cartoons. This study provides a certain reference for the creation of Chinese animation, and has certain practical value.

D190014

The Study of Female Tour Guides' Service Quality: Perspectives from Humor Style and Sex Discrimination

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Keywords: Sense of Humor, Service Quality, Sex Discrimination, Tour Guide

Abstract:

Abstract

Sense of humor is important; it can improve interpersonal relationships and enhance work efficiency. However, people have different concepts of humor and it is significantly influenced by traditional gender roles. For instance, in the tourism industry, male tour guides are expected to constantly have pleasant interactions with customers; however, female tour guides are more often relegated to providing minor services, such as giving information about famous locations and dealing with complaints. Often coming from the tourists themselves, these expectations demonstrate that tourists unwittingly discriminate among tour guides based on sex. This study, which proposes a research model from the perspective of humor style and sex discrimination, probes into female tour guides' service quality and tourists' acceptance of them using the Structural Equation Modeling (SEM). Findings demonstrate that female tour guides' can use Affiliative Humor and Self-enhancing Humor to construct a convivial group climate and group consensus in order to enhance interpersonal relationships. By having a sense of humor, female tour guides can actively create harmonious interactions and enhance their professional image in the tourism industry. However, with the influence of traditional concepts of male/female roles, female tour guides still encounter sex discrimination and are suppressed by role positioning and power expectations.

D190016

A study of the effect of text-image relations on learning outcomes in visual arts appreciation within the context of digital game-based learning

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Keywords: Visual arts, digital game-based learning, visual attention, multimedia learning

Abstract:

The purpose of the present study is to examine whether text-image relations affect learning outcomes in visual arts appreciation under the condition of digital game-based learning. Research participants included 32 primary school students. In the initial step of the experiments, students were asked to memorise simultaneously presented text-image stimuli in the particular digital game in four different versions, including general images with general sentences, general images with specific sentences, specific images with general sentences, and specific images with specific sentences. After the presentation step, general and specific images as well as general and specific images were presented in a forced-choice format. Students were asked to recognise whether they previously saw the specific or the general version of the sentences and the images. Questionnaires, observations and interviews were the main research approach within this study. Findings showed that within the context of game-based learning for visual arts education, students seemed to more frequently falsely recognised the specific sentences after seeing general sentences with specific images. Students appeared to incorporated the specific image information with the general sentence information. The implications of the results regarding learning visual arts with digital games are discussed.

D190017

Using service design to develop virtual reality system for the YODEX display practice

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Abstract:

At present, service design has broadly been used in various fields to enhance the uses' experience. This research project, by referring the aspects of service experience and user-center design, employed the four-phase service design (discover, define, develop, and deliver) and took the final year students as the user, and the difficulties they met as the pains of service design during the phase of installation, exhibition period, and dismantle of YODEX. The underline purposes are to develop a VR system providing more visual information to address and represent the scenes of pains, and therefore, to enrich the following students' knowledge about exhibition practice, and go smoothly in their YODEX.

The data collection was firstly conducted in terms of a semi-open interview survey to 12 design students who have graduated recently and served as working section leaders in their YODEX, and 6 teachers who were recently in charge of his students' YODEX exhibition. These interview survey was voice recorded and transcribed into texts that were analyzed in terms of the touchpoints and the levels of pains of the students. In addition, a non-participatory observation was conducted where the researchers joined to the whole process of installment, exhibition period and dismantle of YODEX of the students in the researchers' institute. The process was recorded by panoramic camera as well as digital camera in photo and video clip. In addition, a semi-open interview to the section leaders were conducted. Taking the results of interview and observation survey together, twenty-six touchpoint with pain from the students were identified over the three phase of installment, exhibition period and dismantle. This is then followed by a plot of the customer journey maps of the three phases. Accordingly, service blueprint for each phase is then presented as a base to develop the scenes of VR system, which, being a tool to represent key scene of pains during the exhibition of YODEX, was built by using 360 degree photo and Unity 3D. The research work is then concluded by presenting the contributions of the research, the limits of the study, and suggesting the future works.

D190018

The Application Interactive Design of Virtual Reality: The Case of Tainan City Marketing with 360VR.

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Keywords: Virtual Reality, 360 Photography, Interactive Design, City Marketing

Abstract:

With the rapid-developing technology, the users aren't satisfied with entity and strive for the sense of freshness and experience brings by virtual technology. From the dependence of entity to the desire of virtual technology, the virtual technology and 360 Photography are more and more popular. The most of teaching material and recreation are physical operation. It not only enhances the application of technology, but also affects urban development. It will bring more visitors and help city development through festivals and popular historical sites. Combining traditional city marketing with technology creates new technology platform for cities marketing. This study attempts to create new VR interactive city platform. Through the virtual reality devices, it will guide the viewers into virtual city-Tainan Taiwan. Following the indicators, it will guide viewers into buildings and spaces in Tainan Taiwan. The space will contact and convey viewers' consciousness to spaces. It is the platform for Tainan city marketing. The final part is that the users will test the device and have an oral interview after test. It is expected that through the research verifies the VR and 360 Photography whether enhance marketing cities.

D190019

The Study of interactive 3D virtual exhibition - By Yayoi Kusama Works as an Example

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Keywords: Virtual Reality, Virtual exhibition, Mixed Reality, interactive, Yayoi Kusama

Abstract:

With the era of technological advancements, virtual reality has become an important now mainstream entertainment industry. In recent years, many exhibitions have been converted to digital demonstrations, in a virtual exhibition where the author's works. Therefore, we need to develop a more suitable for modern digital exhibition display. This study collects all kinds of display methods, discusses the works and exhibition methods of Yayoi Kusama, and organizes and analyzes the information to create a new exhibition mode, re-interpretation of the works of Yayoi Kobayashi, so that the audience can better understand the author she wanted to convey the concept. At the same time, this study will be a questionnaire survey, and for the contents of the questionnaire to make conclusions and recommendations.

This creative research will focus on the works of Yayoi Kusama in a Mixed Reality way, which is different from the traditional exhibition mode. It is hoped that through the interaction of the Mixed Reality equipment, the audience will be more aware of the imagery that Yayoi Kusama wants to convey. Simultaneously, provide unlimited space for people with disabilities to enjoy and know works from Yayoi Kusama.

In addition, making a questionnaire survey against this creation, and it is expected to analyze, explore and draw conclusions and recommendations through the results of the questionnaire survey, and serve as a reference for subsequent research.

D190021

Evaluation of grinding wheel wear based on machining sound and deep learning

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Abstract:

Immediate monitoring of the condition of the grinding wheel wear is important because it directly affects the surface accuracy of the workpiece. At present, the timing of the dressing of the grinding wheel is mostly roughly determined by the experienced operators. To this end, this study presents a novel grinding wheel wear monitoring method based on machining sound and deep learning is proposed. A preprocessing method is proposed to automatically segment the target audio signal that the grinding wheel and the workpiece contact during the grinding process. In the feature extraction stage, this study attempts to find the critical feature for effectively monitoring the state of the grinding wheel and reduce moderately the interference of ambient sound in the factory field. Experimental results show that 98% accuracy can be achieved by convolutional neural networks with a cut depth of 10 μm.

D190022

Design Conception of Protectors for Sacred Palanquin Carriers: Thinking about the Demand of Careers Responsible for Old Second Mazu in Xitun District, Taichung City, Taiwan

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Keywords: clan, carrier protector, Mazu, religion, sacred palanquin

Abstract:

Mazu, a Chinese sea goddess, is widely worshiped in Taiwan. Particularly, in Xitun District, Taichung City, Taiwan, Old Second Mazu, a Mazu avatar, is convinced by the Liao Clan that the statue is attached with the soul of their auntie ancestor. Consequently, the event of Old Second Mazu going around the believers' quarters of Xitun once every three years has been treated as the visiting relatives. At that time, the exclusive sacred palanquin is being carried passionately by a group of men came from the Liao Clan. These men do not take heavy burdens usually, some of them are old, they are easy to get hurt while carrying the palanquin. Based on interviews, the carriers are not willing to modify the sacred palanquin. They want to maintain the traditional practice and show their sincerity. Therefore, in this study, the protectors are designed to solve the dilemma of the carriers. Questionnaires and in-depth interviews are adopted to confirm the relevance of the carrier protector design.

D190023

Mental Imagery Rotation Differences for Surgeons on Dimensions and Color

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Keywords: Mental imagery rotation, Physicians color recognition, Rotation

Abstract:

Mental Rotation refers to a rotational transformation of the visual image of an object Many scholars have confirmed that it takes longer for a mental imagery object to rotate at a larger angle. The question is that people who use the body or work with space-related work, for example a surgeon, have a shorter reaction time?

This study examined different physicians of medical departments, surgical and medicine, with different dimensional patterns, and colors as control variables. We analyzed the influence of the main factors and interactions to explore whether physicians in different disciplines have different reaction times and error rates in mental imagery rotation. We also explores whether physicians will lead to different experimental results due to different dimensions and colors.

The result shows that different dimensions have a significant effect on reaction time, and the results are similar with the literature (Shepard and Cooper, 1982). The response time of the rotation of mental imagery of the surgeon (mean=17609.4 ms) was shorter than the response time of the medicine doctor (mean=19379.8 ms) but not significant (F=0.136, p=0.716). The interaction between color and department is more significant, physician's performance on the color pattern (reduced reaction time, RT = 19963.8ms 18795.7ms) is significantly better than the surgeon (RT =16996ms19688ms) (F=6.03, p=0.023).

D190025

A pilot study of an English learning skill using Amazon echo dot and Alexa in Taiwan

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Abstract:

The importance of English is greatly emphasized in Taiwan. To enhance international competitiveness, Taiwan government actively tries to achieve a bilingual nation by 2030. Many parents want their children to win at the starting point, and send their children to cram schools or bilingual preschools to learn English. Hiring foreign teachers to teach preschoolers English not only is expensive but also illegal.

Virtual assistants of artificial intelligence allow people to interact with them using voice recognition technology, such as siri, google home assistant, and Amazon Alexa, etc. Echo dot was one of Amazon's top-selling product in 2017 and 2018, and by 2019, over 100 million Alexa-enabled devices had been sold. Its virtual assistant Alexa activates smart home devices, and provide answers to many questions, including weather, date, time, music, alarm clocks, timer, jokes, recipes, games, etc. In contrast to other virtual assistants, Amazon Alexa has one big advantage which allows programmer to design skills and integrate web services instead of relying on preinstalled programs. Nowadays, Amazon Alexa app is available in app store of apple products in certain countries, but not in Taiwan. Thus, people are less familiar with its use and applications.

Virtual assistant can be applied to education. This is a pilot study of an English learning skill using Amazon echo dot and Alexa. An English learning skill (yoyo English) for young children was developed which had eight simple lessons, including greetings, family members, colors, fruit, animals, body parts, time and seasons, transportation. Each lesson had 3 parts, instruction, practices, and games (as tests). This skill was intended to help young children learn English without stress, and is much cheaper than hiring a Native English-speaking teacher. Students who took a course "English for Young Children" at a private University of Technology tried the skill, and provided their feedbacks about the new technology of artificial intelligence and the skill. Their feedbacks and suggestions will be analyzed and provided. Limitations and future design suggestions will also be provided.

D190026

'Touch' Colors in Artworks

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Keywords: touch, color perception, art appreciation, grating pattern

Abstract:

Colors play an essential role in art appreciation. To perceive various colors within a certain artwork, a normal visual perception is necessary. However, there are many visually impaired people who cannot perceive any color around us. This study is inspired by the idea that the vision might not be the only sensory channel to perceive colors and the sense of 'Touch' could be an alternative.

To date, many efforts have been devoted to find the best way of 'Touch' colors. Most of them have suggested a one-to-one correspondence between tactile symbols and colors. This could be very effective if there exists a golden standard of symbol-to-color correspondence and everybody is already familiar with it. However, it has obvious limitations. An associative learning is compulsory to establish a perceptual link and the more colors are needed to express, the more symbols should be created.

In this study, we proposed a new tactile grating pattern of texture surface that requires no associative learning. Particularly, we developed three different patterns expressing colors by independently changing (1) Orientation (1~180°), (2) Gap width (1.0~5.0mm), and (3) Height (0.8~2.0mm) of the gratings. First, a dissimilarity matrix in various colors within an artwork were computed by calculating Euclidean distances based on HSB (Hue, saturation, brightness) values. Then, a multidimensional scaling (MDS) was applied to this dissimilarity matrix to convert colors (i.e. HSB values) into orientation, gap width, and height, respectively. The most appealing aspect of the proposed method is that grating patterns describe the relative difference of colors, not the color per se. Since the absolute color itself may not be important for the visually impaired, we designed patterns to make them perceive color difference most efficiently. We believe that this method would help the visually impaired recognize the degree of color changes in the artwork and enable them to appreciate arts more colorful.

D190027

Study on Sustainability of Promoting Lacquer Cultural Inheritance in Guangdong Area via e-learning

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Keywords: lacquer culture sustainable development, Guangdong area, e-learning, universal education

Abstract:

This Study performs research concerning the sustainable inheritance of lacquer culture education in modern Guangdong area, draws on the strength of current information technology upon the basis of conventional education dominated by 'folk heritage' and 'university education', puts forward the lacquer art universal education via the e-learning aided mode and features a positive effect on lacquer culture sustainable development in Guangdong. The Study, firstly adopts document analysis method and questionnaire survey for analysis, and afterwards attempts to integrate this learning model into the lacquer art courses in primary school, presents summary and reflection on the teaching achievements, proposes the effective role of this model for lacquer culture education popularization and of great practical significance to sustainable development enhancement of current lacquer culture.

D190029

Research on carbon footprint of interior renovation of apartment building

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Keywords: Interior Renovation, Carbon Footprint, Life Cycle, Sustainable Development

Abstract:

In order to understand Taiwan residential interior renovation and sustainable development of low-carbon design countermeasures, This study uses Low Carbon Building Alliance that established by Interior Renovation Carbon Footprint Evaluation System, to evaluate the carbon footprint of interior decoration projects over 20years life cycle. This study investigated the interior renovation project of ten congregated residences, According to the five major interior renovation projects with fixed furniture cabinets project carbon up to 1014 [$kgCO_2e/m^2$] (45.0%), Second, metope decorate engineering respectively accounted for 394 [$kgCO_2e/m^2$](25.3%), The ceiling decoration engineering accounted for 290 [$kgCO_2e/m^2$](20.0%) , Floor renovation accounfed for 80 [$kgCO_2e/m^2$](5.6%), the lowest for the renovation of the isolation wall accounted for 129 [$kgCO_2e/m^2$] (4.1%). Meanwhile, during the three different stages for life cycle of interior renovation project, The carbon emission in the new construction stage accounted for 54.9% as the highest, demolition stage accounts for 40.5%,the repair and renewal stage accounted for only 4.7%.The results show that the carbon emission of indoor decoration is highly correlated with the decoration area and material selection, indoor area affects the correlation value of carbon emission (R=0.87).The conclusion of this study is, as long as the interior residential project is not over-decorated, maintaining a well-ventilated space can increase the service life of building materials, and choose low-carbon building materials or natural materials, can effectively reduce the amount of carbon emissions. In this era, residential renovation project becomes a trend, put forward low carbon emission decoration guidelines, It is expected to contribute to the sustainable development of the environment.

D190031

Design is like a process of social practice: The development and practice of a community-based design education

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Abstract:

The development of a community-based design education has gradually been given more stress and emphasis in recent years, guiding the students to explore the community environment, discovering community problems, thinking critically about issues, plotting out and selecting feasible solutions, which will finally extend to proposing a complete design planning and execution. This practice has become an important essence and procedure of the current design education.

The primary school which the researcher is working in is located in a remote community in central Taiwan. This community called Tou-Bian Village is old and lacks cultural stimulation. Most of these children's families work mainly in farming or factories, lacking emotional connection and recognition with the community, let alone to expect them to combine their own culture to create new possibilities and to further propose transformation and innovative design plans for the community. Based on the above reasons, the researcher hopes to develop a community-based design learning program and to furthermore stimulate the students to reflect and pay attention to the community through this course. Therefore, the purpose of this study is to:

1. Develop a community-based design education curriculum suitable for elementary school students.

2. Explore the reaction and feedback of these children in this community-based design education process.

3. Explore the impact of this community-based design education on their care for the community, design considerations, and the ability to execute the innovations.

This study adopts the Action Research Method to propose the curriculum development and revision process that is aimed at the context of the community-based design education. It also adopts several methods of data collection and analysis, which included recordings of student interviews and teaching observations, students' study worksheets and feedback forms and works of students' performances and so on, We earnestly hope that this will present the research result in an objective and comprehensive manner.

D190032

Research on Female Sexual Product Design from the Perspective of Sexual Script Theory

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Abstract:

With the opening up of social sex ideology and the rapid growth of female enjoyment-centric consumption, the sex toy industry has gradually digressed from the vulgar grey zone as for the public, meanwhile, female consumers are expected to become key target users for this industry. To provide more systematic design ideas for sexual products, it is important to understand women's differences in sex attitudes, behavior patterns and experience demands on sex toys, as well as comprehend how good design meets the needs of users in different dimensions based on the current social value standards.

Within the theoretical framework of the sexual script, this paper will analyze users and products from three perspectives including cultural scenarios, interpersonal scripts, and intra-psychic scripts to deeper insight into the female experience need in sexual activities based on the contemporary social environment and explore innovation features of existing product and service study cases. Which is aim to provide more enlightenment for sex toys design problems, including: how to promote healthy sexuality cognition for women in cultural scripts, making it an engine to jump-start the market for sexual products; how to facilitate women to develop better intimate relationship with their partners and maintain good communication with female community and sexual counselors to clarify their confusion in interpersonal interaction aspect; how to satisfy users' sense of safety and pleasure in their inner emotion aspect when using sex life products.

For women, the growing process of both sex conception and physical signs is an essential period for them to improve and dominate their sexual scripts. Based on the social-cultural context, understanding female consumers' specific needs for sex toys in physically and psychologically can enable them to shape their own healthy sexual life.

For the sex toy industry, transferring the focus from mere functions and forms design to comprehensive product and service innovation will be beneficial for the industry to systematically develop product eco-system which is more consistent with female preferences.

D190033

The thinking expansion of Motion Graphics in college education

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Abstract:

With the continuous expansion of the application field and market demand of Motion Graphics (MG), the introduction of MG into the practical teaching system of animation education in colleges and universities is conducive to the integration of animation education in colleges and universities with the current commercial needs on the one hand, and on the other hand, it also expands the expression form of data visualization. However, compared with traditional animation forms, MG also has some disadvantages such as flatness and limited style. Therefore, in the animation education practice system of colleges and universities, we need to expand our creative thinking in the teaching of MG.By analyzing the advantages and disadvantages of MG in college practice education, this paper proposes a new teaching idea for college MG education.

D190036

The Influence of Weak Artificial Intelligence Technology on Chinese University Education under the Background of Big Data and Related Technical Ethics Analysis

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Keywords: weak artificial intelligence technology ethics, university education

Abstract:

Based on the perspective of constructivist cognition and weak artificial intelligence technology ethics, this paper comprehensively analyzes the impact of weak artificial intelligence technology on Chinese university education under the background of big data. And put forward the ethical structure and orientation of weak artificial intelligence technology in college education.

D190037

Exploring the science education design for environmental protection - recycled paper

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Keywords: recycled paper, environmental protection, education design

Abstract:

1 Background and purpose

It takes an average of twenty to forty years for trees to grow. The deforestation of humans, the rainforest is currently disappearing rapidly. Reduce the felling of trees and allow the ecological environment to continue to develop. The "environmental protection" science is widely covered and challenging to implement in schools. General environmental education can only use the statement of ideas, bringing into practice and personal experience is still a challenge. This study cuts through the perspective of early childhood education and designs curriculum elements on topics of "recycled paper."

Issues associated with environmental education as an emerging area of importance in early childhood education are also discussed [4].

After the students learned about the production of "recycled paper," they produced picture book materials and teaching manuals and videos to guide children's interest in environmental protection and recycled paper. In the future, we will provide a teaching environment for observation and exploration and enhance children's willingness to care for nature in daily life.

Use waste paper and newspapers to make pulp, and explore the effects of various additives on recycled paper. The pulp whitening science experiment must remove the ink and emphasize the free trial. Additives for the pulp whitening experiment are too white powder, soap, lemon peel. Factors affecting paper quality may include paper/water ratio (pulp concentration), soaking time, mixing time, and additives.

In our experiments, we found that recycled paper is difficult to make, especially when the ink is difficult to remove. This experiential environmental education includes scientific exploration, the introduction of social resources, and also guides new design thinking, focusing on the reduction of ink usage.

Developing a Cognitive-based Collaborative Board Game with Augmented Reality for the New Generation of Seniors

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Keywords: cognitive-based, augmented reality, board game, the new generation of seniors

Abstract:

This study presents a cognitive-based collaborative board game with AR technology for ages 50+ Taiwanese players. Ages 50-59 participants were invited to evaluate the game. The result indicates that the game provides participants with a chance to use cognitive skills because it requires participants' discussion for problem-solving during the play. The use of AR technology in the game is attractive for the participants. Participants' feedback provides the concept to modify the gameplay of this game for further study.

D190040

Retail user experience and design based on artificial intelligence

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Keywords: artificial intelligence, retail, user experience, user experience design

Abstract:

The development of artificial intelligence provides more perspectives and opportunities for the improvement of online and offline user experience, and also puts forward new requirements for the design of user experience. Taking the user's consumption behavior as a clue, the application of artificial intelligence in offline retail industry is systematically sorted out from the stage of causing needs, collecting information, evaluating the plan, deciding purchase and post-purchase behavior. AI also has a significant impact on the design process and methods of user experience. Big data processing, unstructured information analysis and affective computing greatly reduce the difficulty of user research and improve the efficiency of user experience design. In short, AI has great application prospects in the user experience industry and deserves serious discussion.

D190041

Research on basic teaching design of service design

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Keywords: service design, design thinking, teaching, design education

Abstract:

This paper studies the teaching consideration and implementation methods of the basic course of service design in teaching practice. Through the analysis of the reasons for the formation of service design and the high-speed development trend of Internet technology, it is indicated that the teaching characteristics, teaching design principles, feasible teaching methods and teaching research contents of service design should be studied according to the characteristics of the new era. It shows that service design, as a system of design thinking and as a necessity of design method, should be taken seriously in the teaching design of service design.

D190042

The inheritances and developments in info—age of Foshan paper-cuts during service design thinking

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Abstract:

Foshan paper-cuts art which have a long historical standing and distinctive national features. For hundreds of years, Foshan paper-cuts not only represents the people for a better life and the pursuit of yearning but also influences every part of human lives. And more importantly, Foshan paper-cuts art not just count on their own development and the bigger point for the inheritance and development of this art which are in normalizing life. Nevertheless, with the rapid development of the new-media and AI (Artificial Intelligence), traditional spreading way can not satisfy the information receiving and aesthetics judgment of the contemporary people and that serve human life. The new-media technology not only change the spreading scope of Foshan paper-cuts, provider the new way of digital storage, realize the people participation and the interactive platform of experience. It make the folk art presenting diversity and function dimensionality and entrust a mission for Foshan paper-cuts which is the nonmaterial cultural heritage. It make the inheritance and development of this art which is human accepting in normalizing life.

D190043

The Study on Motivation and Job Satisfaction of Community Volunteer

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Abstract:

The "Rural Rejuvenation Act" was passed in response to the massive population shift from rural communities to urban caused by the rapid industrial and commercial development and urbanization. Initial development plans and goals were accomplished for the rural areas; however, due to financial resources limitation, not all the participants were fully funded. For that reason, offering services through volunteering is the common trend in rural communities today. It is worth studying the motivation to volunteer in rural communities especially during today's massive rural-urban migration. Volunteering is essential to maintaining the rural community's sustainability, awareness, construction, and general community service. Thus, the primary objective of this study is to explore the relationships between volunteer motivation and satisfaction. A total of 328 valid questionnaires were collected between April and May of 2019 through purposive sampling. Analyzing with SPSS, we found the types of community volunteers are significantly associated with most volunteer motivations and satisfaction.

D190047

A Study on the Instructional Effectiveness of Design Aesthetics — The Common Curriculum in the College of Design

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Abstract:

This study is an extended analysis of teaching quality assurance by the college of design, Chao Yang University of Technology (CYUT), Taiwan. The purpose is to assess the instructional effectiveness of the common curriculum of the college, analyze and discuss those projects that do not meet the standards, for quality improvement of teaching. As one of the common curricula, design aesthetics has been planned and preset its standard of instructional effectiveness, the relevance with the 4 major teaching core competences of the college. Also, its teaching objectives will be used to assess the instructional effectiveness, if not meet the standards.

The research object is based on the instructional effectiveness assessment of the common curriculum "design aesthetics", 2018. At the end of the semester by questionnaire, there are two data scales for self-recognition of 71 students' learning outcomes, the correlation between the course and the 4 major teaching core competencies of the college, and the agreement with the 4 teaching objectives of the course.

According to the instructional effectiveness assessment questionnaire completed by the students, the result of the correlations between the course and the 4 major teaching core competencies shows that there are 3 correlations which are not up to standard. Aiming to the questions, this study analysis the impact of teaching objectives consent on the relevance of core competencies, by multiple regression analysis statistical method. Finally, according to the quantitative data, it shows the significant impact teaching objectives for discussing and proposing recommendations as a reference for improving instructional effectiveness.

D190049

Information management of order flow under the mode of customized clothing

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Keywords: clothing customization, information management, order management, modular design, similarity grouping principle

Abstract:

With the increase of customized clothing business, information management of order flow has become the key for enterprises to effectively control production costs, improve production efficiency and improve economic benefits. In order to find an effective and feasible information management scheme, based on the current situation and existing problems of the production management of customized clothing business, this paper applies the management idea of ERP system to optimize the traditional customized business process, and redesign the functional module of information management system oriented to clothing customization, and introduce component technology and RFID middleware technology to improve the adaptability and efficiency of this system. In the end, the paper gives three specific information management schemes: establishing a standardized and reasonable product coding system, standardizing the production process with similar group principles, and standardizing the design of production materials. The research results can provide theoretical basis and reference ideas for the information management of order flow and the development of a new information management system for apparel customization enterprises.

D190050

Design of English-learning e-books for young children in Taiwan

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Keywords: English-learning e-books, young children

Abstract:
Taiwanese students demonstrated good performance in international competitions, such as the Program for International Student Assessment (PISA), Trends in International Mathematics and Science Study (TIMSS) and the International Olympiads on mathematics, sciences, computers, robotics, etc. In contrast, English skills of Taiwanese are not as good, according to recent Education Proficiency Index of 88 countries in 2018, Taiwan ranked 48, behind many other Asian countries or regions such as Singapore, Philippines, India, Hong Kong, South Korea and China. English is the most widely learned second language. To enhance international competitiveness, Taiwan government has set the goal to achieve a bilingual nation by 2030. Currently, formal English education starts from third grade in elementary schools. How to motivate young children to learn English in a developmentally appropriate, fun and interesting way is a challenge.

According to the National Literacy Trust, e-books have some advantages; children's reading abilities and attitudes improved as a result of using e-books. However, the range of e-books for children is limited (https://www.theschoolrun.com/are-ebooks-good-for-children). This is an action research of a course named "English for Young Children" in a private university of Technology in Taiwan. Students are taught knowledge and skills of teaching young children English. In addition, students are encouraged to design and create their English-learning E-books using SIMMagic ebook designed by Hamastar. This e-book software has many functions, such as inserting photos, sounds, videos, hyperlinks to google map and youtube, games such as puzzle, and tests. Students will design English lessons such as alphabets, vocabularies, finger plays etc. Then, they will use royalty free images from Pixabay data base, integrate sound of text technology, and create interactive and fun English-learning ebooks. This study is intended to motivate students to apply what they learn in class to design interactive English-learning ebooks, and enhance their second expertise to create educational ebooks which might have potentials to be sold.

D190053

Exploring the HTML5 Form of News in the Media Convergence Environment

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Keywords: HTML5, Media convergence, News, Interactive

Abstract:

Media Convergence refers to the organic integration of traditional media in the context of the information age, forming a media development concept of all-round resource sharing, channel integration, and benefits expansion. In recent years, the HTML5 works of the news category have produced far-reaching effects. The HTML5 technology brings innovation in content and form. It's multiple interactive means and convenient sharing features make the news more breadth and depth than the past. This paper explores the forms, contents and technical means of HTML5 works, introduces the current diversified forms and new interactive means analyzes the template structure of HTML5 news and discusses the way of describing the situational feelings of news in HTML5 works. Summarize some creative strategies and experience enlightenment. It is pointed out that the final competition of the media depends on the content, find a suitable form to match the content of news, and the perfect combination of content and form is the key to innovation.

D190054

The Evolution of Contemporary Animation Film in Mainland China from the Perspective of Consumer Culture

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Abstract:

In the process of studying contemporary animation art in mainland China, this paper uses historical, economic and cultural backgrounds as a reference to discuss the evolution of Chinese contemporary animation film. Trying to infer the regularity and inevitability of it. Especially in the 21st century, accompanying economic, science and technology developing rapidly, cultural diversity has made Chinese animation film open and inclusive, the outstanding works have cut a stringing figure. The traditional rational color, humanistic concept and enlightenment mode in the film are gradually becoming a type of consumerism model with contemporary style. Affected by the wave of consumerism, the style of film convergence is obvious. From the perspective of consumer culture, the theme, creative mode and visual style of works have undergone a series of changes, with shallow thinking and monotonous cultural reflection. By studying the characteristics of animation film, this paper also puts forward the hope and expectation of animation creation.

D190056

The artistic expression of Huizhou style in Buddhist architecture ——Taking JiuuaShan Dayuan Cultural Park as an example

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Keywords: Buddhist architecture, Huizhou architecture, JiuhuaShan Dayuan Cultural Park

Abstract:

Buddhism was introduced to China from the Han Dynasty. With the development in China, its architectural form has undergone tremendous changes. The function of modern Buddhist architecture is no longer used as a sacrifice, but also a modern cultural architecture complex. Pursue breakthroughs in architectural forms and cultural functionality. The JiuhuaShan Dayuan Cultural Park Scenic Spot is located in one of the four famous Buddhist mountains in China. In order to fully demonstrate the Buddhist culture and regional characteristics, the designers boldly innovate on the basis of traditional architectural forms, and Incorporating the majestic style of Han and Tang architecture into it, there is a unique charm of Tang Dynasty architectural style, with strong artistic personality and practical tour function. As a world-class cultural and artistic palace, HongYuanTang is based on the traditional architectural style of WanNan in the architectural form, and boldly innovates, absorbs and breaks through, and embodies many architectural and artistic elements. Through the theoretical analysis of multidisciplinary studies such as culture, history and architecture, this paper explores the aesthetic value of the Great Hope Cultural Park as a Buddhist cultural architecture in the new era.

Back to Reality: The Effect of Traditional Lacquer Art in Modern University Education

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Abstract:

This paper takes lacquer art as a typical example of traditional handicraft art as the actual research object, and further analyzes the new intrinsic value of regional traditional art in modern society, through a series of design and observation on the curriculum of lacquer art in college art education. At the same time, this paper theoretically combines several important points of view on the social characteristics in the new media era. In this way, the important and typical effect of traditional crafts can be re-recognized, especially in the reconstruction of basic self-awareness, the awareness of the other, and even the virtuous circle of social interpersonal relationships.

D190058

Integrating Digital Materials Design in Art Education for Rural Area around the Goal of Quality Education

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Abstract:

This study describes a journey that has lead to the development of a series of apps and e-books designed to support students' self-learning and teachers' lecture preparation on Goal of Quality Education of the Sustainable Development Goals (SDGs). A descriptive case study is using as the approach allowed for a systematic identification of the process and explores design and use of the apps and e-books for primary school students. In addition, the design of apps and e-books is to shorten the urban-rural gap and promoting art education. The case study looks at the processes including the design via ADDIE model (Analysis, Design, Development, Implement and Evaluation), the use and application of the app and e-book editor platforms, as well as the way of encourage students' motivation and interests to sustain learning. The aim is not to examine a hypothesis, but to record and share in-depth knowledge involved in these processes. By recording and sharing the approach, this work is meant to inspire in developing the related and relevant digital teaching and learning materials for art education. Finally, it is hoped that other researchers and studies may be inspired or encouraged to investigate and deliver similar lectures on Quality Education of the SDGs (UN, 2019).

D190059

The concept of sustainability integrated into the interactive shadow play interactive learning system design

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Abstract:

Taiwan's shadow play has a long history, and it belongs to Chaozhou Shadow system. The performance mode is to extend the other side of the plane with two poles and basic movements. Therefore, hand operation skills and coherence of shadow action are more important when operating. Today, this traditional culture is difficult to develop due to the impact of the sound and light effects of science and technology, the aging of traditional technicians and the impact of young people's leave. Therefore, the sustainable development of the value of traditional culture is one of the important issues of the government.

Interactive technology is constantly innovating. The convenience of the Internet also breaks the geographical and time constraints. Combine the unique performance form and interactive technology of shadow play, the shadow puppets will be derived from different performance modes for learning and inheritance. This study analyzes the five basic actions of the shadow puppets and uses leap motion hand gesture recognition technology for interactive design. The digital experience teaching content is designed on the basis of applying the concept of sustainable development, experience learning and experience game theory, and hope to provide reference for future related traditional culture digital textbook design combined with sustainable development related papers.

D190060

User-centered design for wheelchair auxiliary equipment

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Keywords: wheelchair, caring design, accessory design, mechanism design

Abstract:

Public wheelchairs are available in many public places, and are available to those who need them. In airports, hospitals, hotels, and other places, we will find that many people with lower-limb inconvenience need to use a wheelchair to get on and off the car, but all of them need others to help them or lift them and switch between the car seat and the wheelchair, which is difficult to avoid unnecessary troubles such as falling, which is also a problem that many people worry about.

This study aims at caring design and improved design of the auxiliary mechanism, it is also centered on the user experience. The research will adopt the observation method and motion analysis method to improve and analyze the existing wheelchair and propose a set of mechanism that enables people without lower limb mobility to shift from the wheelchair to another sitting surface and reverse translation on the premise of not having to be supported or lifted by others. At the same time, the 3D software was used to construct the model and evaluate the feasibility of the action of the entity.

D190064

The role of Artificial Intelligence in Art Creation

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Abstract:

There is no doubt that Artificial Intelligence (AI) has a profound impact on future work, education and human society. the application of AI has spread to all fields rapidly beyond our imagination. With continuous technology development and deepening understanding, AI are gradually extended to the fields of finance, medical treatment, machinery, electricity and digital communication. Recently, the development of AI in art has attracted more and more attention. AI has greatly enhanced artistic imagination and creativity in art, and enriched artistic forms and creative tools. Actually, the process of AI involves data, symbols, codes, no emotion and no meaning and emotion. It allows AI to avoid and correct the instability of human behavior. The design of AI still lacks the mystery of inspiration, prediction and intuition, as well as other "human" cognitive structures, although the new generation of AI is developed toward to imitate human thinking. Moreover, AI depends on human to connect the computing results of computers with the external world. In this paper, we first analyze the relationship and difference of human art and AI art. We then expect our role in this era when machines are able to perform those similar as we think. We finally conclude that the development of AI artists does not necessarily represent a threat to human artists, but provides us with an opportunity to promote our creative boundaries, and the most exciting artistic creation is the cooperation between human beings and machines. The new cooperation between man and AI machine is expected to be the next technological leap in art and produce works of art that we have never experienced before.

D190065

Research on Interactive Art Design Aided by Artificial Intelligence

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Keywords: interactive art, artificial intelligence

Abstract:

In 1956, John McCarthy for the first time used the term "Artificial Intelligence" (AI) at his organization's Dartmouth meeting, marking the birth of artificial intelligence as a discipline. AI is now involved in many subject areas, and art is not excluded. Note that art design field aided by AI seems late as compared with information field, and thus the related research is now in a bud and requires further exploitation. It deserves studying art design, especially interactive art design, from the perspective of AI. Such a study is expected to promote novel theoretical and practical benefits for future intelligent interactive art design. This paper starts from the current hot topics of AI, and strives to explore the application of AI on interactive art design. In specific, we first give a comprehensive overview of AI and related theories. For AI-aided art interaction, we trace the historical logic, background resources and philosophical thoughts generated by AI. Second, we analyze the influence of AI on interactive art design in time dimension to summarize a new application paradigm with the intervention of AI in interactive art design. We see that AI occupies an important position in interactive art design, which opens up more creative forms for interactive art design by human-machine collaboration-oriented design. Third, from the creator's perspective and user's experience, we state that interactive art design starts to appear as a new art style with AI technology, which emphasizes both artistic form of the work and the aesthetic psychology of the audience, and organically integrates the experience and the psychological needs. Finally, we show the difference and relation between AI and human intelligence based interaction. We explore the prospective changes of artists and users in the current intervention of AI technology, and draws our own views of this article. That is, with its unique interactivity and virtuality, we can form a variety of excellent art forms, providing a better experience for people's life and entertainment as well as the spiritual world.

D190067

Construction and Application of Digital Landscape Design under the Background of Smart Landscape

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Keywords: digital landscape design, technical application, smart landscape

Abstract:

From micro to macro, landscape design has always been inseparable from the dual research of ecology and form. Quantitative research based on artificial intelligence and big data is helping and optimizing decision making of landscape architects. Facing the challenge of smart landscape, this paper will combine the successful application cases in recent years to explain the logic, structure, methods and future prospects of digital landscape design in the era of landscape design 4.0 under the support of science and technology.

D190068

Post- Occupancy Evaluation of Six Tainan Elderly Nursing Homes in Taiwan

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Abstract:

After September 1993, Taiwan has officially entered what the United Nations World Health Organization calls an aging society. With the problem of care for the elderly extended by the aging society and the changes in family structure and filial piety, more families have turned to institutions to replace most of their care responsibilities, thus increasing the lifestyle of the elderly in choosing nursing homes. Therefore, it has become an important topic to study and perfect the building and interior design problems and Indoor space function needs of nursing homes. In this study, the research method:(1) classifying the existing building of Tainan elderly nursing homes in Taiwan and sampling surveyed with medium-sized buildings and 50 beds of indoor space, It includes three buildings in the city center and three in the suburbs;(2) Content analysis studies have explored the literature material qualitative reasoning and samples size of nursing homes quantitative methods for building area, interior space of dwelling unit, facilities planning, etc.; (3) Finally, natural observation, recording of the interview questions and answers, closed questionnaire methods to find a reasonable assumption in the preceding paragraph user problems, induction the importance of elderly users' knowledge and satisfaction for nursing homes facilities planning indoor and outdoor space function needs of attitudes. The research results show various factors in the use of building space and facilities by post-occupancy evaluation, and try to put forward suggestions on the use of research case sample building for reference by architecture and interior managers, designers and researchers in the subsequent design planning.

A Computational Model Refinement for Visibility Graph Analysis

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Abstract:

Visibility Graph Analysis (VGA) is a model on architecture and urban space. Based on a quantitative description of space, numerous empirical studies have demonstrated its effectiveness. In the model described in VGA, infinite visual distance is used to measure the visible locations of a specific location in the environment. Two locations are considered to be visible as long as there is nothing block the sight. However, in a real world, fire, smoke or insufficient illumination will block the vision and cause spatial disorientation.

We proposed a computational model refinement for VGA with a visual distance parameter that can be adjusted. An automatic computation prototype of VGA with dynamic visual distance was created. Floor plans of real buildings were used as input data to test our prototype. The connectivity graph describing the number of visible locations for all locations were generated for experiment and data interpretation. For the experiment of infinite visual distance, the connectivity graph generated from our model and the standard VGA model were identical. This demonstrated that our prototype is computationally correct.

Furthermore, several values of finite visual distances were experimented to find out the influence. The result indicated that when the visual distance is infinite or long, the locations in the center part of a large room usually have higher connectivity value, which means proper places of paths for rescue or evacuation. However, when the visual distance was decreased, smaller rooms also had relatively high connectivity values. It indicated that smaller rooms might be alternative options for rescue or evacuation. More experiments also indicated that visual distance had less influence on floor plans with distributed smaller rooms and long corridors. It was an inspiring observation that our refinement VGA model may provide versatile applications in the case of spatial disorientation.

In the future, the research will be advanced to topics about dynamic visual distance such as variable visual distance concerning smoke or unstable illumination, path finding in dynamic environment, computational model for agent-based evacuation, etc.

D190072

A Framework for the Integration of Immersive Virtual Reality and Multimodal Interactions in Developing 3DP Training Virtual Laboratory

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Abstract:

In recent years, the use of immersive virtual reality technologies in education, and psychological therapies and so on, has increasingly been the object of study in recent years. In this study, we develop an interactive training application prototype of the full-color powder-based three-dimensional printing (3DP). The purpose of the application is to solve the problems encountered in the teaching, training and practicing 3DP in the university. These problems include the complicated operating processes, the discomfort of the respiratory tract caused by dust flying, the insufficient space which is not suitable for multi-person training, the high cost of consumables and etc. These limitations lead to the training stagnation and teaching inefficiency. To overcome these challenges, we develop the 3DP virtual laboratory by integrating immersive virtual reality technology and pedagogical content knowledge of 3DP. In the brief, our main goal is to achieve the objective of that users will be familiar with the whole processes and know the usual troubleshooting techniques as they complete the different quests of the 3DP virtual laboratory before operating the real 3DP machine. Therefore, we implemented multimodal human-computer interactions of immersive virtual reality in the consideration of pedagogical content knowledge of 3DP. In addition, we will discuss the user experiences from students' feedback for the further development of the 3DP virtual laboratory.

D190073

Knowledge Mapping of International Urban Street Space and Residents' Health Research: Bibliometric Analysis Based on Citespace and VOSviewer

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Keywords: Street space, residents' health, knowledge map, Alluvial Generator

Abstract:

In order to map and analyze the current situation of international urban street space (public space, public open space) and health research, the hotspots, frontiers and overall evolution path of this field in the 20 years from 1999 to 2019 are explored. This study uses 4552 relevant research literatures included in the core database of Web of Science as the basis for data analysis, using the advantages of VOS viewer and Cite Space literature visualization software, respectively, through research on national, institutional, document keywords, literature citation networks, etc. Analysis of the content and analysis of the iconic literature in conjunction with the Alluvial Generator. In this research field, the research content is constantly enriched. The street space environment, health system, green space, road traffic, thermal comfort, and vulnerable people in the city are the focus of research. The current research status and hotspots in this field. Trend analysis can provide more reference directions and practical basis for future research in this field.

D190074

Street Space and Residents' Physical and Mental Health: Evidence-Based Strategies in Macao's Street Space

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Keywords: Healthy City, Residents' Health, Street Space, Evidence-Based Design

Abstract:

In the everyday lives of urban residents, street spaces play an important role. However, the situation of high-density and high-heterogeneity in many cities is likely revealing negative impacts on residents' physical and mental health. Based on the existing evidence of medical and spatial association, this paper selects street spaces in the Santo António District of Macao, and uses the PSPL method to conduct field research and data collection assessing the types and frequency of the public activities on the use of street spaces. There is an indirect relationship between street space and public health, in-depth analysis of the street space is likely to induce public physical and mental illness, as well as street spatial elements that can guide the public to improve physical and mental health. Starting from its overall dimension, this research intends to match research form with the method of problem-solving aiming to build up the evidence-based design strategy suitable for street spaces of Macao historical districts.

D190076

Application of characteristics of Book truck based on "Hot and Cold media"

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Keywords: Hot and Cold Media, Cultural transmission, Book truck

Abstract:

With the advent of the Internet era, people's reading habits have changed dramatically.More and more people are willing to use electronic devices and the Internet to acquire knowledge, and young people are more accustomed to reading digital books. Bookstores cannot survive anymore.However, in this information age, the popularization of culture is still unable to penetrate into every corner, the cultural gap still exists, and the paper media still plays an irreplaceable role.Based on the perspective of "Hot and Cold Media", this paper considers book truck as the carrier of cultural communication and with the situation of books loaded on it, which is of practical significance for cultural communication.

D190079

Analysis of the Legal System of Housing Accessibility in Taiwan

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Keywords: housing, accessibility, disabilities rights, disabilities

Abstract:

The investigator explores the evolution of housing accessibility laws and acts in Taiwan. The conclusions are as follows:

1. The current ROC regulations regarding accessible housing can be separated into incentive and mandatory terms. The housing policy emphasizes residential rights and establishment of accessible building and community environments, along with common architectural designs that meet requirements for various users, and improving accessible facilities in public spaces of apartments.

2. The Housing Act emphasizes the safety of buildings. No one is allowed to refuse or disperse others' residency or repairing or accessible facilities in public spaces. Such regulation reflects the concept of the Fair Housing Act of USA. Through Regulations of Grading Housing Performance, the act improves the safety of buildings, and marks the function of buildings clearly. The act also authorizes Design Standard and Incentives Act for Accessible Buildings. The current mandatory content for accessible facilities in shared spaces is regulated in Design Specifications of Accessible and Usable Buildings and Facilities.

3. The Design Standard and Incentives Act for Accessible Buildings has been established to encourage constructors and users. Design Specifications for Accessible and Usable Buildings and Facilities will be used to inspire viability of the residential environment, achieving convenience and safety. The standard is based on the design standards of the Safe Residences of Seniors Act in Japan, while parts of it are based on Design Specifications of Accessible and Usable Buildings and Facilities (2008 version) and Improvement and Recognition of Existing Accessible Facilities in Public Construction. List of Blueprints and Manual of Construction of Accessible Facilities serve as assistance to the standard, requiring architects to provide marked contents on accessible facilities for constructors to work properly without errors. However, the standard was founded without taking the aged society into consideration. Compared to the standard in USA and Japan, ROC lacks interior software for accessible design.

D190080

Discussion on the relationship between patient behavior and nursing stress load in dementia caregivers

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Keywords: dementia caregiver, patient behavior, social support service use, care stress load

Abstract:

OBJECTIVE: The purpose of this study was to explore the correlation between caregiver's behavioral (severity and frequency), care for social support, and care stress load. METHODS: This study was conducted to collect samples from visiting patients and their caregivers from a special outpatient clinic for dementia in a medical center in southern Taiwan from November 2013 to May 2015. During the period, a total of 279 groups and 558 questionnaires were issued for the two, and the recovery rate was 100%. The patient's disease traits include cognitive function (CDR, MMSE), neuropsychiatric disorder (NPI), and daily life function (ADL). Caregivers receive a structured questionnaire that includes demographic characteristics, care relationships, social support services use and care stress. RESULTS: The average age of the respondents was 53.1 years old, and the females accounted for 61.3%. The education level was mostly junior college/university. The relationship with the patients was mostly parents. The average age of the patients was 77.73 years old. Self-narration to care for patients is more than 3 years. There was a significant positive correlation between patient behavior and stress load in the study facet; there was a significant negative correlation between caring for social support and caring for stress load. CONCLUSION: The planning and implementation of policies and services for long-term care in the future should consider the cultural nature of Taiwan, with priority given to home care. When the primary caregiver is caring for or visiting a patient, patient behavior, length of care, number of people at home, and economic issues are all important considerations for social welfare services.

ECONOMIC COMPLEXITY AND ITS EFFECTS ON HUMAN DEVELOPMENT: MODERATED BY GENDER INEQUALITY AND ENVIRONMENTAL SUSTAINABILITY.

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Abstract:

"The only barrier to human development is ignorance, and this is not insurmountable" (Robert H. Goddard). Many indicators have been used to predict human development; one of the most used in the economic area has been economic growth. However, new indicators, such as the Economic Complexity Index (i.e. ECI) should be considered to expand our knowledge and better understand the mechanism of human development. The Economic Complexity Index, developed by Hausmann and Hidalgo, defines economic complexity as "the composition of a country's productive outputs and the structures that emerge to hold and combine knowledge" [1]. The main focus of this paper is to analyze the relationship between economic complexity and human development. However human development isn't only affected by economic indicators. Therefore, Gender Inequality Index (i.e. GII) and Environmental Sustainability (i.e. ES) are included as moderators in our model. Our study used Hierarchical Linear Modeling (HLM) as an innovative methodology, focusing on two groups of countries: developed and developing economies.

D190087

Expressing the Expected Product Images in Product Design of the Elderly Products

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Abstract:
Product form have always been an important consideration for consumers when purchasing. Faced with the advent of an aging society, how to master the preferences of the elderly consumers is an important topic for designers.

To avoid design errors and product wastage caused by designers' misunderstandings of consumer preferences, this study intends to investigate the preferred product image and physical design of products for elderly consumers, with a kansei engineering perspective. Products commonly used by the elderly in their daily lives were used as examples, and a questionnaire survey was adopted alongside product images and interviews to collect participant responses. Statistical regression analysis was then employed to analyze the collected data.

The findings of this study are as follows:
1. Elderly consumers tend to focus more on overall user experience than on a specific characteristic of the product and consider the appearance of the product less important.
2. The results categorized by gender were similar to the collated results. Male participants, however, tended to prioritize the practicality of products more, while female participants were more concerned with the safety of products.
3. The overall preferences of the non-elderly group were similar to those of the elderly group, apart from the finding that, compared to the elderly group, the non-elderly group was more concerned with the functional parameters of products.
4. In terms of preferred visual product design, elderly participants had similar viewpoints overall.
5. The Design Suggestion Table, constructed based on the regression results of the association between the preferred product image and various key design elements and processing methods, was determined to be applicable in real product design decision.

The study aims to investigate the understanding of the elderly consumers about their preferred product image. And to further understand the form preferences elderly consumers, it is conducive to reducing unsuitable product design and helping to meet the consumer needs of elderly consumers.

D190092

Computational Design of Building Block Patterns for Mosaic Images

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Keywords: computational design, building blocks, mosaic, pattern

Abstract:

Computational design is a change in the medium of design expression from geometry to logic. While designers traditionally rely on intuition and experience to solve design problems, computational design is a new design methodology that can produce hundreds or thousands of design permutations.

A building block mosaic is a form of image made of small building blocks with different colors arranged in a two dimensional pattern. A small size mosaic can be designed by intuition. However, a large size mosaic with thousands of block units is a sophisticate artwork requiring detailed preparation and design.

To deal with the complicate preparation of building blocks in the design stage before construction, we developed an automatic program for the mosaic designers. The input can be any image such as a portrait, a drawing or a cartoon character. The program generates an optimized building block pattern with minimal number of blocks. A visual instruction is presented to the designer for constructing the blocks.

The program was used in several mosaic projects for trade shows. The sizes of the mosaics ranging from hundreds of units to tens of thousands of units. There are several advantages of the automatic program we developed for mosaic design. First, machine designs are fast. It will take a building block designer a long time to create a feasible small pattern. Larger mosaics require even more working time. Second, compared to human designs, machine designs are more accurate and realistic. Especially in the case of human portrait mosaics. Many of the building block designers are good at three dimensional models but not two dimensional image pattern design. Third, machine designs helps in material preparation. To save building time for customers and material cost for manufacturers, optimal combination of building blocks is computed to use as fewer building blocks as possible.

Our automatic program for generating building block patterns for mosaic images proved to be useful in practical design cases. In the future, color adjustment and enhancement of input images to match the colors of building blocks will be added to extend the automatic design process.

D190094

Application of Digital landscape architecture in Living Environmental design

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Keywords: digital landscape, parametric, environmental design

Abstract:
Based on digital landscape of parametric method, the study of environmental design of residential area can be visualized and interactive, which focuses on the regulation and optimization of all the elements in the living environment. To achieve the collaborative design of the form and ecology of landscape architecture environment by parametric design, the cases have been analyzed to be understood the significance and feasibility of digital landscape of the environmental design in auxiliary analysis, design, performance, and conservation of resources.

Research on art design teaching based on folk art resources of Nanling corridor

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Abstract:

Nanling corridor is one of the three major national corridors in China. There are more than ten ethnic minorities such as Yao, Miao, Dong and Zhuang. There are rich folk art resources. However, with the advent of the digital era in the 21st century, folk art is facing the dilemma of extinction or transformation. How to effectively use digital technology to establish the folk art resource bank of Nanling corridor and build the folk art resources based on Nanling corridor The teaching system of art design in source and reservoir, which creatively transforms folk art resources in Nanling Corridor into productive forces, has become the focus of teaching research in applied local colleges and universities.

D190096

Endangered status and effective protection of clay sculpture art in traditional villages in southern Hunan

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Abstract:

The traditional ancient villages are the vivid records of our country's five thousand years of history and culture, and a carrier of our excellent traditional culture. There are a large number of villages with profound cultural heritage in southern Hunan. 193 ancient villages have been listed in the list of Chinese traditional villages. The author visited these traditional villages and found that a large number of clay sculpture art has been naturally weathered due to disrepair. This paper studies Hunan Province. The endangered situation of clay sculpture art in traditional villages in South China can find a practical and feasible way for the effective protection of clay sculpture art.

The Construction and Research on Smart Classroom in Colleges and Universities — an example of the course of Furnishing Design

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Keywords: smart classroom, innovative education, interactive learning

Abstract:

With the advent of the digital age and the support of Internet technology, the course of Furnishing Design, combined with Fanya online teaching platform of Superstar company, has created a double track smart learning environment, changed the traditional cramming teaching mode, and explored interactive smart teaching methods. As a result, teaching and learning were integrated in depth, students were taught in accordance of their aptitude, and smart classroom was constructed, which improved the comprehensive quality of teaching and learning and provided new ideas for the cultivation of innovative and entrepreneurial talents.

D190098

The Influence of Co-design Model on Handicraft Innovation Projects——A Case Study of PACC Bamboo-weaving Products

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Abstract:

This paper introduces the manufacture of bamboo-weaving products and Chinese handicraft innovation projects. Three cases of PACC design projects of bamboo-weaving product were discussed according to the related theory of Co-design. The realization of Co-design needs three levels in turn, which including preliminary communication, non-designer influences the "Fuzzy Front End", and non-designers propose design ideas. Co-design requires the designer to give up part of the decision and believe that all members of the team have equal creativity. Once the team can cross the chasm of "mutual translation" successfully, co-construction and sharing will become easier. In terms of the way of cooperation, the three cases all use the method of Co-design. However, the three use different types of collaboration patterns. The first model will be adopted when there are language barriers and cultural differences between participants, the second model will be needed when participants are limited by time and space to gather in one place, the third model can be used when neither of the current two limitations exists.

D190099

Application of Traditional Architecture Decorative Elements in Xiangnan Region in the Design of UI Interface of Smart Phones

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Keywords: traditional architecture in Xiangnan region, decorative element, smart phones, UI interface

Abstract:

With the advent of the intelligence era, smart phones, as mobile terminals for smart life, have become a necessity at hand. The design of UI interface of mobile phones has become an important embodiment of users' personality and taste in addition to fulfilling its function. Generally speaking, almost all of the current designs are dominated by modern Western style, with little Chinese culture imprint. This study attempts to use the traditional architectural elements in Xiangnan region (southern part of Hunan Province) as main elements of creation, tapping the traditional aesthetic energy, which can be used in the design of UI interface of mobile phones. As a treasure of Chinese traditional culture, the traditional architectural elements in Xiangnan region are diverse in form, vivid in shape, rich in color, which greatly appeals to 1.4 billion Chinese people and overseas people who love Chinese culture. The application of traditional architecture decorative elements in Xiangnan region in the design of UI interface of smart phones has actively attempted to promote international cultural exchanges apart from enhancing the humanistic connotation and the aesthetic education functions of smart phones.

D190101

A study on the Development of Cultural and Creative Products - religious tourism at Suxian Hill, the 18th Blessed Land of China

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Abstract:

Suxian Hill, known as the 18th blessed land of China, is located in Chenzhou City, Hunan Province, which is rated as AAAAA tourist attractions of China. Ancient people depicted that it is an appealing place surrounded by green mountains with a springlike scenery filled with verdancy of grass and fragrance of flowers. Moreover, as a hill in the arms of Chenzhou City, it is a modern as well as historic scenic spot with magical religious culture. There are Taoist legends, celestial tales, even Buddhist stories, attracting domestic and foreign tourists to pray and worship, through which they can feel in person the filial piety and Chinese Fu culture reflected in the story of Su Dan. Since Suxian Hill has religious and tourist resources with great developing potential, this thesis is to begin from exploring regional cultural connotations. Taking into consideration of modern aesthetic needs, the thesis attempts to make innovations in cultural and creative products on the basis of myths, legends, Buddhism, Taoism and Fu culture, so as to change the lagging-behind status quo of cultural and creative industry. Religious culture with special disposition of Xiangnan region will be forged, enriching Suxian Hill tourism resources and promoting economic development. What's more, Chinese traditional cultural virtues will be carried forward, creating compound cultural tourism resources.

D190102

Curriculum Reform of Web Design and Production under the Guidance of Innovative Thinking

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Keywords: web design and production, flipped classroom, innovative thinking, cultivation of applied talents

Abstract:
The advent of the intelligent era has opened a new chapter on the rapid development of computer and Internet technology. Web design and production, as a course in colleges and universities, is to cultivate the basic skills of students' web design, as well as focus on fostering students' ability to solve problems through innovation. Taking the web design of the school as an example, this study aims to make a research on educational reform to carry out various teaching activities by making use of online studying platform. With intensified practical training, students are supposed to know how to work in a learning environment, forming an atmosphere in which working and learning are interactive and can be carried out at the same time. Theoretical study and practice interacts and integrates in the curriculum, stimulating students' interest in learning. Students' practical ability and professional quality will be enhanced in an all-round way through studying and training tasks like web interface design, web page beautification, page editing and website management, pushing forward the cultivation of applied and innovation talents.

D190104

Research on psychological characteristics of children's visual cognition and graphic expression through interactive painting

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Abstract:

Based on Jean Piaget's theory of children's cognitive development, this paper analyzes the paintings of children aged 7-12. We conducted the research in the form of interactive creation. The picture and story content in the children's painting were supplemented and completed. We analyzed the psychological characteristics of different ages of children in the process of visual cognition and graphic expression .This research provides a certain reference for the selection of topics for children's art education, and guide the scientific and reasonable cultivation of children's interest in painting and aesthetic ability.

D190106

Sustainability of Taiwanese Food Banks: Potential and Limitations

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Abstract:

Food banks, that collect surplus food and then transfer it to poor people, aim to reduce food waste and help the needy. If food banks can really operate smoothly, they might utilize the earth's resources more fully in order to achieve sustainable goals. In recent years, food banks have developed rapidly in Taiwan, and at present, they have been established in almost all parts of the country. This paper analyzes the potential and limitations of Taiwanese food banking for reducing food waste.

This article begins with a discussion of the literature, analyzes the potential and limitations of globally food banks in solving food waste, and further analyze their operation in Taiwan through qualitative observation and interviews, before examining their ability to avoid food waste.

This paper argues that the potential of governmental food banks to reduce food waste has been limited until now. Food waste can be defined as surplus food which is thrown away before its expiration date. However, most government-run food banks in Taiwan only accept and distribute goods which have a long shelf life. Non-governmental food bank also have long provided dry food as their main mode of operation rather than perishable goods, showing that their scope to solve food waste cannot be overestimated.

In recent years, there have been several encouraging developments in food banking. Some hypermarkets and supermarkets have begun to donate both perishable and dry surplus food items to food banks. Moreover, community refrigerators which provide mainly perishable foods, have been established in many parts of the country. The Taiwanese Food Bank has shown therefore a greater possibility to solve the problem of food waste. However, from the experience of advanced countries, food banking's ability to truly solve the problem of food waste is still extremely limited. Therefore, while emphasizing the aim of reducing the amount of leftover food, food banks should not forget their second main goal, which is helping the needy. Food banks must take into account the dual functions of environmental protection and helping people.

D190107

A STRUCTURE FOR IPTV BASED LEARNING SYSTEM

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Abstract:

This paper proposes a digital learning system architecture, which uses the advantages of IPTV platform to improve user motivation, is based on the IPTV platform. According to the ARCS motivational design theory, the first step in improving user motivation is to attract the attention of users. Therefore, the system has designed a reward mechanism to give appropriate feedback based on the user's learning effects, thereby increasing and maintaining the user's attention. In the beginning, the system allows users to customize the learning plan before learning begins. At the end of the semester, the study achievement report, which will be assessed by the user's login counts, learning time, and course accomplishments, will also be used to evaluate the corresponding bonus points given to the user. Points can be used to redeem videos on the IPTV platform as a reward. This article will provide a detailed motivational algorithm for our IPTV learning system.

D190109

Systematic Review and Discussion on Final Artwork of Prepress Design

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Keywords: prepress design, final artwork , graphic designer

Abstract:

Graphic designers play a key role as a bridge between customers and printers. Designers are most aware of their own creative ideas and customer needs. To ensure that the quality of finished products from the designed work to the print output is minimal, One of the important professional functions is "final artwork of prepress design". The purpose of this study is to review the literature review related to the digital pre-press design and complete the 14 types of graphic design certification exams and 62 journal articles and master's thesis. Through reviewing the relevant licenses of graphic design, understanding and induction and printing Important knowledge and expertise related to the design of the previous draft. This paper summarizes the development history of pre-press design and finalization research in Taiwan in the past twenty-nine years. At present, the research results of pre-press design finalization can be summarized as the related technical research (35%), pre-press process and theory (18%). Pre-press design quality (18%), professional technical ability and assessment (16%), education and training courses (10%) and business management (2%). Suggestions for the professional competence of graphic designers, the professional quality of the design and printing industry, and the follow-up research directions are proposed.

D190110

The Impact of Taiwan's Placemaking Types of Foreign Aid Projects on Local Development: A Case Study of MASAYA

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Keywords: International Cooperation and Development Fund, Foreign aid project, One Town One Product, Placemaking

Abstract:

In the International Cooperation and Development Fund (ICDF)'s technical cooperation project, "One Town One Product Project in Nicaragua" uses Taiwan's "Placemaking" concept and experience to assist Nicaragua in strengthening community development and improving the family economy associated with the craft industry counselors. Through the implementation of the operation mechanism of one township and one specialty product, we will help local governments to develop local specialty products or services, parallelize their cultural identity, strengthen local competitiveness, and explore new market mechanisms to enhance the income of counseling beneficiaries and strengthen human resources. . The Nicaraguan government has activated the craft economic activities of MASAYA in Nicaragua by this project. From this starting point, the Nicaraguan government has been able to achieve local capacity enhancement, innovative handicraft products, improved production techniques and business opportunities. To achieve the MASAYA region: (1) one of the intensive coaching teams to build a special capacity; (2) to assist craftsmen to enter the industrial value chain development process; (3) to implement integrated marketing, to promote local, regional and international Business opportunity.

D190111

Traditional Puppetry Interactive Display New Experience

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Abstract:

Puppetry is the most distinctive opera art in Taiwan. It combines the art of wood carving, embroidery, sewing and literature. With the development of radio wave media, the puppetry gradually lost the mass entertainment and education functions. This study uses digital media to combine programming and display design with experimental research. Develop interactive display installation to replace traditional static and physical display models. The experiencer can experience the performance of the various characters on the stage by picking up the puppet to experience the performance of on the stage. Scenes are projected from the projector to match the background image of the role of the puppet character, and a pre-recorded the oral is played at the same time to experience the role of the traditional puppeteer in character traits and oral performance. This study found that interactive displays provide more knowledge learning content than traditional static displays. By personally practicing the experience, you can understand more of the appearance and structural details of the puppet than watching the still entity. Interactive display is more attractive to the audience than traditional static display. At the same time, there is better cultural learning outcomes.

D190115

The innovative design of villains in animated films

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Abstract:

In the process of shaping characters in animated films, not only the positive characters play a main role, but also the villains are very important. As people's aesthetic level improves day by day, people pay more and more attention to the theme of the film itself rather than the shaping of the protagonist's single-line growth experience, so the role of the villain driving the development of the plot is important increasingly. The antagonistic relationship between the villain and the protagonist not only promotes the development of the plot, but also highlights the character or ability of the protagonist due to the presence of the villain, thus achieving the purpose of foil the theme and enhancing the artistic sense of the animated film. In a certain period of time, most traditional animated films have stereotyped the image of the villain, but in recent years, some new designs have been made for the portrayal of the villain. Based on the methods of textual analysis, case analysis and summarizing method , this paper will analyze and explore the innovative shaping of villain characters in different animated films and the practical significance of the film theme.

D190116

Research on the application of immersive VR technology in the protection of dong opera in sanjiang, guangxi

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Abstract:

Dong opera is one of the typical representative and characteristic cultures of dong nationality in sanjiang of China. Due to the impact of modern economic activities and social trends of thought and the aging of the inheritors of sanjiang dong opera, sanjiang dong opera is faced with serious inheritance and protection problems. Therefore, in order to strengthen the inheritance and protection of culture in this field, this paper aims to apply immersive VR technology to protect sanjiang dong opera, and achieve a new breakthrough in this field for the purpose of inheritance and innovation, so that sanjiang dong opera can acquire new life force.

A Study on the Development of School-based Curriculum on the Basis of Intangible Cultural Resources in Southern Hunan Province

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Abstract:

The inheritance of folk art has been attached great importance by the government and all sectors in the society. It has become an topic of great concern in the circle that how to inherit and bring forth new ideas to folk art so as to form a model of live transmission. In colleges and universities, there are not only research scholars and experts, but also students as fresh blood who are likely to make innovations. Taking advantage of their resources, colleges and universities are possible to take initiative to develop school-based curriculum with local characteristics, injecting vitality into the innovative development of intangible cultural heritage. This will enrich students artistic attainment, as well as find a feasible way to fulfill the innovative development of intangible cultural heritage.

Reflection on Talent Cultivating Through Studio Teaching Model for Art Design

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Abstract:

Art design studios, as an important section in the combination of enterprises, universities and research institutes for art design, are facing the lack of projects among local universities and enterprises. The innovation and development of design studios requires the attention of local governments and enterprises. Furthermore, it requires the initiative of local universities. In the context of the country's advocacy of cultural self-confidence and the transformation and development of local universities, this paper is to explore the dilemma those art design studios in local universities are facing in terms of the positioning of art design studios, the status quo of domestic and overseas enterprises, universities and research institutions, and the significance of this study. This is an opportunity to promote the reform of the visual communication design studios and motivate them to actively bear the responsibility of innovating and passing on local culture, so as to find a accessible and practicable path for the combination of enterprises, universities and research institutes for art design.

D190119

Research on the curriculum reform of illustration design in local secondary vocational schools under the background of cultural and creative industries

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Keywords: Intangible cultural heritage, folk art, cultural creation, illustration design

Abstract:

Guangdong Province is rich in intangible cultural heritage resources, with unique cultural connotation and distinctive artistic modeling characteristics. It is an important branch of Chinese excellent traditional culture. Under the social background of the vigorous development of cultural and creative industries, how to effectively inherit and innovate Guangdong intangible cultural heritage has become the focus of teaching reform in major vocational colleges, that is, to take social responsibility while solving local non relic. The inheritance and development of culture. In this study, the intangible cultural heritage folk art resources in Guangdong Province are excavated and sorted out, its artistic characteristics are systematically studied, and it is introduced into the illustration design course to explore the effective integration path of Guangdong intangible cultural heritage folk art and illustration design course.

D190122

Micro-Reconstruction of Local University Community Service Facilities under the Perspective of Cultural Sustainability

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Keywords: Cultural Sustainability, Old Communities, Facility Renovation, Sustainable Design

Abstract:

Wuhan is an old city, and the college community with a long history is a bright spot in the development of Wuhan. Nevertheless, in the face of urban and regional development and transformation, these colleges and universities will also encounter social difficulties such as development stagnation, lack of context, landscape separation, interpersonal indifference, and how to establish a resource-saving and environment-friendly society.

Under the task, adhering to the principle of controlling the intensity of development, adjusting the spatial structure, and promoting the appropriateness of space and livability, realizing the cultural sustainability, organic renewal and sustainable development of colleges and universities are the key issues to be studied in this paper.The research will be based on the design and empowerment culture, taking the micro-reform design of the old community comprehensive service facilities as the entry point, and taking the old community in Wuhan higher education institutions as the experimental site, in regard to the investigation and research and user interviews.

In this design practice, via the extraction of the old community growth rules of Wuhan universities, the restoration of community historical texture, the maintenance of community organic order and the awakening of the history and culture of colleges and universities, the identification and sense of attributing of the old community in colleges and universities will be reinforced, and the upgrading of comprehensive service facilities will be realized. On the basis of gratifying the living needs of the residents and instructors in the community, the cultural elements and dynamic changes in the Wuhan city-campus community-street area are preserved, and the intelligence is injected into the facility renovation. That would turn the flatness of community facilities into more intelligent, and the introversion of community spirit also can be more open, ultimately achieving the sustainable construction of regional community facilities and the development of community culture sustained.

D190123

Earthquake Shake Detecting by Data Mining from Social Network Platforms

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Keywords: social network, data mining, decision tree, genetic algorithm

Abstract:

This study used posts of the related affect for earthquakes in the social network to derive the seismic scale in regions of Taiwan, and compared with the regional seismic scale reported by the Central Weather Bureau (CWB) of Taiwan. In this study, we are trying to propose a method to monitor posts on the social network platform, PTT bulletin board system (BBS), and to detect the earthquake shake scale by the keywords of the context. To detect the earthquake shake scale, we developed an automatic dictionary in genetic algorithm method and a decision tree model for analysis the semantic words from the context of the target event. Further we are trying to locate the possible epicenter location from the posts on the social network platforms. The result indicates that we can pick out the keywords for using to detect the earthquake shake scale at about 85%. Furthermore, the result of the shake scale shows that the four studied cases are in a good agreement with the announced news from the CWB.

D190124

The Artistic Features of Iron Painting and Its Development Status

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Abstract:
The original name of iron painting is "iron flower". It is a specialty of Wuhu City, Anhui Province, China. It has a long history and is irreplaceable in the history of Chinese culture and art. Wuhu Iron Painting is famous for its unique style, exquisite craftsmanship and superb craftsmanship. However, its development is also facing a huge bottleneck. It is necessary to use the research methods such as field investigation, interview method and participation observation to explore the path of inheritance and development in light of the current background. Therefore, starting from the artistic characteristics of Wuhu iron painting, in the process of exploring its inheritance and development path, it should strengthen the iron painting art propaganda through the Internet communication and social platform, pay attention to the connotative development of Wuhu iron painting, and expand the talent cultivation and training channels of Wuhu iron painting inheritance. Strengthen the creation and innovation of iron painting products.

D190125

The influence of traditional cultural resources on brand development

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Abstract:

Traditional cultural resources are considered to be the basis for achieving sustainable development conditions. They are also recommended to be protected and passed down through branding. However, in the face of today's complex brand competition environment, few studies focus on traditional cultural resources and brand development. The relationship between the two, and this is directly related to whether the two can achieve the goal of sustainable development. In order to try to solve this problem, this paper makes an in-depth analysis of a typical brand case, determines the three levels and five specific performances of the value-added of traditional cultural resources on brand development, and also draws on the traditional cultural resources to intervene in the brand development model. Before and after the impact of the comparison chart, this process not only visualizes the effectiveness of traditional cultural resources, but also provides a new perspective and theoretical basis for the sustainable development of enterprises and brands.

D190126

Bats: the inner structure and cultural code of the "Fu" culture of ancient houses in southern Hunan

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Keywords: bat, ancient houses in southern Hunan, internal structure, cultural code

Abstract:

"Fu" is located in the first place of "happiness, wealth, longevity and wealth" in the five Fu culture of China. "Bat" is the representative of Fu culture. It has rich artistic forms. It dates back to the Neolithic Age (Hongshan Culture) "Hongshan jade bat". It was popular in the Ming and Qing Dynasties. In this period, there were abundant decorative patterns of bats in ancient folk houses, both concrete and abstract. There are a large number of ancient dwellings in the Ming and Qing Dynasties preserved in southern Hunan, among which the "bat" is very rich in decoration. It is not only the finishing touch of architectural aesthetics, but also the psychological expectation of the owner of the house in pursuit of peace and happiness to integrate into the ancient dwellings with its vivid, fresh and various artistic images. This paper studies the inner structure, artistic form and pattern combination of the "Fu" culture of the ancient dwellings in southern Hunan, and comprehensively interprets the cultural code of the "bat" art of the ancient dwellings in southern Hunan.

D190127

A Empirical Study on the Construction of Quality Online Course on Traditional Villages and Residential Buildings Under the Guidance of Golden Lessons

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Keywords: golden lessons, traditional villages and residential buildings, blend learning, online courses

Abstract:

The quality online course on traditional villages and residential buildings for undergraduate students of environmental design major is constructed under the guidance of "Golden Lessons". Relying on national strategies of targeted poverty alleviation and rural vitalization, the course merges the protection and development of traditional architectural culture in southern Hunan Province, and the talent cultivation of design major together, forging a core curriculum with a designing talent cultivation model that serving the social and economic development of Nanling National corridor. In the process of this quality online course construction, emphasis has been put on the improvement of supporting management system, the optimization of curriculum design, the enhancement of teachers' comprehensive quality, and the conduction of blending learning. In this way, teachers' leading role is fully played while the students are motivated to learn independently. It is also possible to set up a scientific evaluation system. All of these measures are beneficial to the reform and development of the quality course on environmental design and the cultivation of the students' comprehensive quality majoring in environmental design, which can improve the quality of cultivating undergraduate students and fulfill the dream of constructing a powerful country in education

D190128

A Study on Crossover Co-creation Curriculum Reform Among Colleges and Universities in Taiwan Province — an example of the Keziliao Fishing Harbor program by National University of Kaohsiung

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Abstract:

National University of Kaohsiung, with the support from "the Training Program for Application of Humanities and Social Science Knowledge" launched by Department of Education of Taiwan Province, organized five schools and departments including department of creative design and architecture, school of management to set and offer courses like Field Research Practice—Stories at Keziliao Fish Harbor, Cultural Landscape, and Special Theme of Creative Thinking and Management. With the theme of crossover co-creation, these courses are attended by students from different majors in different grades under the model of cooperation between enterprises and research institutions. Taking Keziliao Fishing Harbor as research subject, the courses seek to fulfill the sustainable development of local culture and environment by reshaping cultural landscape and activating the culture of fishing villages under the requirement of improving regional culture and manifesting green maritime culture. In the study, students will be grouped across departments and taught by teachers from various majors through micro-courses, lectures, off-campus visits, workshop training, etc., so as to finish different sections in the process of design and construction like core knowledge learning, design concept refining and deepening design, and practical training and producing. consulted with local people, government organs, and experts, which were highly evaluated by the society and the industry. The curriculum reform of crossover co-creation in National University of Kaohsiung has fostered students' interest in and belief of inheriting regional culture research, cultivated students' ability to manage modern creative industries, enhanced their ability of creatively expressing and producing, and ability to figure out and solve problems. It has greatly promoted the cultivation of students' social responsibility. At the same time, it has high reference value for improving the undergraduate education and curriculum reform, for enriching the training mode of applied talents, and for carrying out research on multidisciplinary and interdisciplinary fields among mainland colleges and universities.

D190129

Discussion on the relationship between industrial research and educational development

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Abstract:

The purpose of this study is to explore the analysis of the current situation of industry-university cooperation in an academic institution in the central region. Is there any difference in the industry-university cooperation between the teachers in different colleges, the comparative analysis of the characteristics of the industry-university cooperation among the colleges, and how the school can cooperate through industry-university cooperation. The mechanism establishes partnerships with enterprises and factors that affect teachers' industry-university cooperation. Today, under the severe impact of the declining birth rate, universities are cultivating the talents that enterprises really need through the close cooperation between the school and the industry-university partnership. Only by identifying the strengths, weaknesses, threat and opportunities of the school, it is effective. Transforming and creating the competitive advantage of the school, incorporating the industrial practice education and training assessment into the circle of school planning and promotion, establishing the best mode of teaching quality and quality improvement, continuously improving education and connecting with the international. The cultivation of industrial talents, the integration of enterprises, and the shortening of academic gaps are urgent tasks for school education policies. Enhance the knowledge, skills and attitudes of talents, provide multi-oriented practical training courses, stimulate students to learn independently, integrate regional industrial characteristics, develop industrial talent supply chain, shorten the gap between learning and use, and truly implement the school's technical education and industry integration.

D190131

On the evolution of Chinese traditional kitchenware design

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Abstract:

From the point of view of design art, this paper adopts the research method of combining archaeological materials and literature materials, and holds that the design of Chinese traditional kitchenware is gradually transformed and improved with the changes of production and life style, food type, eating habits, cooking style, etc. In terms of stages, the Neolithic age is its initial stage, the Shang and Zhou Dynasties to the Warring States period is its development stage, the Qin and Han Dynasties is its finalization stage, and the post Han Dynasty to modern times is its maturity stage. On this basis, this paper analyzes the typical design of kitchenware in different periods, aiming to summarize the characteristics and evolution of traditional Chinese kitchenware design.

The Development and Success Factors of Korean POP Music in Taiwan

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Abstract:

Korean wave resulted from Korean drama has been widely survived today from the late 1990s. In recent years, Korean pop music has continued to expand overseas, not only getting super welcome in Asia but also starting to expand in Europe and the United States recently. Surly, Taiwan is no exception to be involved in the new Korean wave led by K-POP.

This paper aims to study the success factors of K-POP and its development in Taiwan. Its main framework is divided into three parts. The first part is the background of K-POP and its situations in various stages when entry into Taiwan. The second part is on the analysis and research for the success factors of K-POP's successful entry into the overseas market. For being objective, this paper specifically conducted a questionnaire survey on the success and development of Korean music in Taiwan, and analyzed the results of the questionnaire in the third part of the article.

According to the results of this paper, Korean pop music has been attracted through Taiwanese covers of Korean songs and the development of Korean singers in Taiwan since the 1990s.

In the late 2000s, the Korean group's sudden popularity brought Taiwan into the unprecedented K-POP New Korean Wave period. However, the success of K-POP is not accidental, but the results of long-term training, careful preparations of songs and dance before the singer's debut, added with the effective dissemination of various media after the launch. The research results of this paper are expected to provide references for Taiwan's music industry.

Battle for Peace Music Game Research

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Abstract:

Each story has its game soundtrack. The game soundtrack could make a game, a drama being more attractive for people, which is a bridge between people and stories. In recent years, Taiwan has been committed to the development of the digital content industry. While in the eight areas of said industry, the animation industry is one of the key development projects and it has become a unique art in the film industry. Although the animated short film is not a compressed version of the feature film, it's narrative bias is also very different from the feature film, but they also tell stories through images, which is a significant role for important industrial upgrading and marketing. In the digital content industry, how to make good use of body language to accurately convey the concept of the story and the emotion of the role is the key to improve the competence of the industry. However, at present, it lacks systematic research to understand. Thus, this study uses Tom and Jerry animated short film as the reference to realize animation production by a large number of data collection and a variety of technical support and to explore how successful animated short films convey the story through actions.

The study found that in 3D animated short films, the characteristics of various actions are extremely diverse. Therefore, various actions are widely used in different situations, stages, and atmospheres in stories. While, the 3D animated short film's scene, camera, shooting angle, etc., it mainly use actions, which are common in human daily life experiences. By using actions that are closer to our daily lives, the viewers could quickly be transferred into the story world, supplemented by numerous objective views and scenic views, allowing the viewers to participate in the story that the animation director carefully arranged and designed from the perspectives of pure viewing and appreciation.

Research on the Industrial Analysis of Taiwan Pop Music

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Abstract:
With the shrinking record market, the development of Taiwan's pop music industry seeks breakthroughs and changes. The importance of the Taiwan market is gradually increasing. When Taiwan's pop music industry ingrates the Taiwan market, the revenues of industry chain and copyright are increasingly large. Except for the particularity of Taiwan market, Taiwan's political, legal and management systems also have considerable relation and influence.

The birth of international political economy aims to watch the ever-changing world, to find better tools for the interpretation and prediction of the current situation. Due to expanded issues for times and development, and the various possibilities like renewed extension and continued enlarge can be realized through the improvements on dialogues with other theories or to correct existing theories.

This paper aims to clarify Taiwan's influence in terms of class, division and numerous projects through deeply discussing the influence of Taiwan's market and the country on the development of Taiwan's pop music industry, hoping to put forward analytical framework, and provides a more complete analysis for Taiwan's government policy and Taiwan's pop music industry research and how the industries in Taiwan respond to the Taiwan market and the political costs.

D190137

The Influence of New Culture Movement on the Design of Shanghai Publishing Industry

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Abstract:

This paper focuses on the influence of the new culture movement on the design of Shanghai Publishing Industry in terms of ideas, methods and specific figures. By studying the important representative designers and their works in this period, in addition to revealing the close relationship among the thought leaders, authors and designers in the publishing industry. What's more, it also points out that the influence of the new culture movement on the design of Shanghai publishing industry includes the absorption and translation of western design from Japan, which is the expression of the introduction of Western learning spreading to the East into the design field.

The Art of Stone Carving and Its Activation in the Traditional Architecture of South Hunan

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Abstract:

the stone carving art in xiangnan traditional architecture brings together the essence of Chinese stone carving, using round carvings, high reliefs and bas-reliefs to carve out the threshold stone, door frame stone and door stone of xiangnan residential houses with exquisite craftsmanship, rich subject matter and changeable shape. Taishan stone, stone pillars, Stone arches, Stone beasts and other large number of stone carving art works are not only the embodiment of the material living standards of the people in southern Hunan, but also the external physical expression of the spiritual culture of the people in southern Hunan. The stone carving art in Xiangnan traditional architecture contains the unique folk culture and art culture in Xiangnan area. Today, the study of the stone carving art in Xiangnan traditional architecture is not only a trace of regional culture. It is also an important way for the protection and inheritance of traditional culture. The activation and application of stone sculpture in southern Hunan has a dual significance in promoting local culture and economic development.

D190139

Wood Carving Art and Its Activation in Traditional Architecture in Southern Hunan

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Keywords: Southern Hunan Wood Carving, Decorative pattern, Activation design

Abstract:

Southern Hunan woodcarving embodies the people's spiritual pursuit and profound Confucianism, Taoism, patriarchal culture and traditional virtues in southern Hunan. It is a cultural treasure on the verge of disappearance. The Woodcarving in southern Hunan takes folklore, opera characters, scenes of work and life, scenery, auspicious patterns of animals and plants, religious symbols and so on as its creative elements. By means of implicit metaphor, it shapes a vision of praise for filial piety, loyalty, etiquette, righteousness and shame, and praying for blessings. To achieve the purpose of moral education, such as respecting the ancestors and enlightening the later generations, respecting the old and loving the young, and cultivating the whole nation, it increases the aesthetic feeling of architecture, strengthens the spiritual and cultural functions of architecture, and highlights the personality characteristics of traditional architecture in southern Hunan. With the development of the times, the woodcarving art in southern Hunan is facing the danger of dating. How to protect and inherit the woodcarving in southern Hunan is our urgent responsibility. We should carry out the research and activation design of traditional architectural woodcarving culture and explore the best way to realize the protection and inheritance of Woodcarving in southern Hunan.

Exploration on the application of the combination of "Endless River and Mountain"and font design

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Abstract:

Landscape paintings and Chinese characters, with a long history with Chinese characteristics, are the landmarks in Chinese culture, which stands for the aesthetic judgement of oriental arts, including distinctive styles, artistic conception and "Heaven and man are one". Chinese Landscape paintings and Chinese characters are both representatives of Chinese culture. That's why I made efforts to combine Chinese Landscape paintings with modern characters to create a unique Chinese font. In this font, try to achieve the visual goal of haziness and layering when designing the style of calligraphy. Based on regular script, integrates the expressiveness and meaning of Chinese traditional culture, fully using the positive factors of shape and color in space construction, and putting the far and near space effect of Chinese ink landscape into the design of strokes. Regular script's skeleton, focusing on the balanced adjustment to the overall relationship, highlighting the tension and relaxation between strokes, is not rigid or deliberate, but combines the movement and static and the characters embody the meanings. Integrating the image beauty of Chinese ink landscape into the design of modern applied fonts makes it more expressive and appealing.

D190142

Research on the Film Presentation Mode of Mongolian "Horseback Culture"

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Keywords: Mongolian, Horseback culture, movie, Cultural communication

Abstract:

Only the nationality is the world.Among the 55 ethnic minorities, Mongolian culture not only has a relatively long history but also spreads widely, and it has always had the reputations of "singing and dancing"and"horseback nationality".The reason why it is called the horseback nation is that the Mongolian people grew up on horseback and have a unique feeling for the horse. The horse is not only the daily means of transportation on the grassland but also the loyal companions of the Mongolians, the sacred animals in their hearts,the material carriers of the grassland nomads, a cultural symbol.There are too many festival customs and artistic images about horses in the culture of this nation. Cultural symbols such as the Nadam Fair a Mongolian traditional fair Conference and horse head string instrument reflect the characteristics and rich connotations of horse culture.The horse is not only used as an image for narrative in the film, but also an important element of the national culture in the Mongolian film.The image of horse is regarded by the Mongolian people as a manifestation of the national spirit. It is also an emotional symbol of the Mongolian people's love of life and freedom. Therefore, it is necessary to spread and carry forward its culture.With the prevalence of social networking, movies are an important channel for the spread of ethnic cultures.In the promotion of the film plots, in order to let more people understand the cultural connotation behind it, the Mongolian theme films have become an important carrier and the most intuitive way to spread the Mongolian culture. From the three classic Mongolian films of "Heavenly Prairie", "Black Horse" and "Genghis Khan", the author selects the action on the horse, the horse's shape, the saddle art design and the sound of the horseshoe. The audio-visual induction and psychological analysis brought to the audience will give the audience a better chance to get in touch with and understand the national culture, and let the Mongolian culture go further and further on the road of inheritance and development.

D190143

Development of a Smartphone App for Tracking Kids Emotions through Heartbeat for Protecting from Kidnapping

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Keywords: Emotion Detection, Tracking Location, Self-powered, Wearable Device

Abstract:

This paper presents the development of a self-powered device that is equipped with pulse monitoring through blood vessels in the legs. The aim is to monitor changes in the pulse due to emotional changes of children to events that endanger them, especially kidnapping and sexual violence. There are two things that are studied from this tool. The first is the optimization of energy harvesting using electrical piezo from foot pressure. The second is observing the change in pulse if the child's emotions change. Furthermore, this data will be sent to the cloud. Tests are carried out on several samples. Emotional changes are detected quite well. This device can dissect when the sample is calm doing some of its activities, and when the sample is depressed. If there is a threatening threat, this tool will send a warning to the cellphone of parents and teachers as well as record the position of the child via GPS.

D190145

Research on sustainable customer value of mass customization based on Internet platform

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Keywords: mass customization, Digital customized platform, Sustainable customer value

Abstract:

Different from traditional high-end customization, this study discusses the latest technology driven mass customization. In the context of supply side reform, mass customization has become an experimental breakthrough in the clothing industry, following the internal driving force of manufacturing transformation and upgrading, and the gradual maturity of industrial 4.0 application. The "customization" in mode, the "flexibility" in production and the "informatization" in technology have created a new form of clothing supply. Relying on big data drive, artificial intelligence guidance and flexible production, the mass clothing customization consumer market is gradually awakened. Therefore, this study uses the circuit of culture proposed by stauart hall and Paul Du gay (1997), through the recycling process of five elements of representation, identity, production, consumption and regulation, combined with the expectation confirmatory theory proposed by Davis (1986). This paper discusses the industrial changes of artificial intelligence after its intervention in the clothing custom market.

Based on the analysis of online clothing customization platform, clothing supply chain and clothing consumption culture, the following assumptions are proposed:

Intelligent manufacturing and flexible production have a positive impact on mass consumer clothing customization.

Customized consumption culture is related to the self-identity of consumers.

Digital customized consumption platform is a derivative form of fast fashion.

D190148

Design of Ceramic Creative Products Based on Macao's Local Culture

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Abstract:

Macao is reckoned as a major global tourist and recreation destination in Asia, with more than 30 million visitors annually, driving a need for cultural creative products. The government of Macao Special Administrative Region (S.A.R.) has launched numerous growth and cultural policies along with cultural creative products to promote the development of the city's creative industries. Therefore, the establishment of cultural creative products with social attributes and unique designs to Macao is essential. In the field of cultural creativity, a market for the design and development of ceramic products is non-existent. Compared to other cultural tourism cities, cultural and creative industry sectors have been developed slowly. Currently, Macao's development strategy takes an economically moderate, diverse and sustainable approach. Within this approach, the creative culture industry sector is undoubtedly vital to Macao's development. The visual arts and design can be crucial to the development of cultural creativity. This research sought to analyze current development of cultural creative products in Macao. With a specific focus on ceramic products and design patterns, the research explores how can local cultural resources be extracted and exploited. By analyzing the research findings, this paper then uses case studies to demonstrate, interpret and draw conclusions from experiences of ceramic product design combined with local cultural characteristics. That is to create a new though of employing cultural creativities by integrating meanings organically and local symbolic characteristics into ceramic products for Macao. Eventually, the paper concludes with the development of a model for the design of ceramic cultural products and brand values. Therefore, it offers suggestions and support to empower the development of cultural creative products reflecting the distinctive characteristics of Macao culture.

D190150

The fishing village culture integrated into the art course materials and applied to the study of creativity

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Keywords: marine education, fishing village culture, Counting of juvenile fish, local art

Abstract:

Taiwan is surrounded by the sea and the fishing industry in the coastal areas is very active. Most fishermen want to make a living from the sea. There are 224 fishing ports across Taiwan. Due to the development of the industrial model, the fishing port has developed into a village and the aquaculture industry has developed accordingly. Annan District of Tainan City has reclaimed land and natural landscape, and has rich cultural history and ecological resources. The area is an important area for fish farming. In the early agricultural fisheries, when buying and selling juvenile fish, the trust between the buyer and the seller was established by singing. This skill is called a "Counting of juvenile fish." However, with the development of science and technology, the decline of fisheries has led to the loss of traditional skills, and people know nothing about this skill.

The study collected past human history in the Annan region and learned about the problems encountered in the modern past and hopes to enhance the next generation's understanding of local communities through primary education. The focus of the art curriculum has shifted from advocating art to developing local local culture, and cultivating community members to empower them to appreciate local culture and art, enhance local awareness, and emphasize environmental awareness. Social contributions are very important and many assumptions can be built to assist in subsequent research.

D190151

The study of preference in dynamic and static visual interface design that used in resume website.

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Keywords: User Interface Design, Dynamic visual, Static visual, Preference

Abstract:

The diversified digital applications develop rapidly with the information technology. Therefore, there are many job seekers show up their resumes and portfolios on the internet. Thus, the content layout becomes important. The dynamic and static visual presentation will have great influence in the receptions of the readers and may even effect the preference in the visual psychology.

In this study, we design two kinds of interface visual effect, which are dynamic and statics mode for the resume presentation. There are 30 students with the age 20-25 years old, and they did the QUIS(Questionnaire for User Interface Satisfaction)test. From the test results, we can understand the preference of the testers between this two kinds of interface Design.

An Empirical Study on the Design and Application of Teaching Materials for Etymology-based Literacy Method under the Guidance of Elaborative Processing Theory

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Abstract:

Aiming at the problem that Chinese pupils in low grades are prone to writing wrong characters, the paper made an analysis of the literature review on Chinese character cognition principles, children's cognitive development of Chinese characters, literacy method and memory strategies in cognitive psychology, then designed teaching materials for etymology-based literacy method based on the elaborative processing theory, which include picture books, animations and instructional games. In the preliminary experiment, 10 preschool children at 5-6 years old in Dalian were selected as research subjects to conduct a comparative teaching experiment between commonly-used teaching materials and the designed materials. The results showed that the long-term memory of target Chinese characters in the experimental group was significantly better than that in the control group. Besides, the migration test revealed that children in the experimental group were able to employ strategies to guess to recognize Chinese characters they had not learned.

D190154

The Application of AR Interactive Picture Books in Children's Cognitive Thinking Development

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Abstract:

The age of 4-6 is the golden stage of children's brain mechanism development and the best time to cultivate cognitive thinking. Therefore, proper and effective cognitive thinking training is helpful to the development of children's brain intelligence and learning ability. To address the problem that paper picture books are constrained and less attractive in terms of cognitive mode and interactive content, this paper makes a systematic analysis of the physiological and psychological characteristics of children aged 4-6 years, makes use of the features of AR interactive picture book such as multi-sense interactive experience and novel operation mode, puts forward the design principle of AR interactive picture book in line with the characteristics of children's cognitive thinking development, and eventually designs AR interactive picture books on this basis, in order to further promote children's cognitive thinking development.

D190155

Research on the Animated Cartoon Production Mode Based on Intangible heritages

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Keywords: intangible culture, cartoon re-creation, dissemination

Abstract:

This paper discusses the application and subsequent promotional mode of regional intangible cultural elements in the animated cartoon production on the basis of the modern dissemination of intangible heritages, researches the animated cartoon production in the form of intangible culture and forms the recyclable cultural dissemination mode. Taking Xiamen Lacquer Thread Sculpture, the intangible cultural heritage in the south of Fujian province as an example, the paper conducts the research on the animated cartoon production, highlights the characteristics and direction of regional cultures in Fujian province by virtue of the digital expression method in cartoons; tells the stories of the inheritance of intangible cultures, links with the new-media communication platforms and creates digital intangible culture communication tools; moreover, it strives to attract the attention of more young people to the techniques of intangible heritages by means of popular cartoon forms, and positively promotes the fusion and dissemination of traditional culture and modernity.

D190156

From the Perspective of Design Thinking, Reflections on the Experience Learning of the Revitalization Design Workshop in Nara-cho, Japan.

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Keywords: Design Thinking, Experience Learning, Design Workshop, Design Education

Abstract:

The conflict between cultural traditions and modern technology has led designers to think more about the perspective of designing cultural fields. The insights and propositions in which the truth of the problem is found are difficult to learn in school design education. In addition, the first experience of education is designed and implemented. Therefore, this study takes the international workshop held in Nara-cho, Japan as an example, and sets the following three questions as the main research directions:

A.Connotation and Experience Learning Achievements of Course Design for Revitalization Design Workshop in Nara-cho, Japan

B. The creative design achievement of the revitalization design workshop of the multinational production and government cooperation and the significance of design thinking in education.

C.The effectiveness of the implementation of the Revitalization Design Workshop in Nara, Japan, and the significance of the activation of the Nara-cho attractions in Japan.

Through the workshop and five design thinking steps, using action research and observation methods, I found that the workshop curriculum design and design thinking promote the relationship between learning and learning, and put forward effective suggestions.The results of this study can serve as the basis for follow-up research, and can provide a reference for those interested in related research.

D190157

The Design and Application of Household Ovulation Monitoring System

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Keywords: ovulation monitoring, smart home, family medicine, system design, physiological health

Abstract:

Accurate and regular grasp of their own ovulation is essential for the physical health of women in the reproductive period. Therefore, to design an effective solution for this goal, the concept of family medicine and smart home can be combined.A study found that the value of LH(luteinizing hormone) in women's urine was significantly correlated with ovulation. Therefore, by measuring the peak of LH, the ovulation status of women could be accurately monitored. In this study, a monitoring system was designed to determine ovulation status by detecting LH value in female urine. This monitoring system was integrated with the household toilet bowl to realize the real-time and accurate monitoring of ovulation status of female individual. In the aspect of hardware, the device appearance, the detection device structure and the micro-control electronic device were designed by applying the Internet of things technology, to help women obtain ovulation information in a convenient and stable manner. Whereas in the aspect of software, the author analyzed the monitoring data based on computer algorithm, developed mobile application, and established the individual longitudinal database with multiple detection values as background data, so as to predict ovulation activity and evaluate ovulation patterns. It would help women track their ovulation more accurately, prevent and indicate gynecological reproductive diseases, and can serve as a supplementary basis for medical diagnosis and treatment results.

D190158

Design Research and Development of Assisted Plant Selection and Collocation Systems

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Abstract:

Phenological conditions (hydrology, climate) and reasonable species allocation of the site are the necessary conditions for the survival of landscape plants, while the hue (color attribute) collocation and seasonal variation (color state of different seasons) of plants are the key factors that determine the design effect. A very important and difficult part of landscape design lies in plant selection and collocation. In most cases, designers have to rely on personal experience, which is short of scientific nature and efficiency. In order to change that, we developed Assisted Plant Selection and collocation System (APCS) to assist designers in plant design. Our approach mainly includes the construction of plant database based on unified standards, quantitative model of natural conditions of the site, data retrieval model, and picture-based plant selection interface. The development of APCS is based on MySQL tools and AutoCAD secondary development platform. The results show that APCS can provide suitable plant selection for plant collocation in the design site and provide suggestions for plant interspecies collocation according to the knowledge of biology. Meanwhile, it can provide guidance for plant hue and seasonal collocation through intuitive color display.

D190160

The Revival Of The Vitality Of The Historic District From The Perspective Of Organic Renewal

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Abstract:

urban historical block, is left over from urban development has important historical value, witnessing the changes of the historical development of the city, affecting the environment and cultural customs of the city characteristics, in today's urbanization development, in reshaping urban landscape in urban context inheritance is of unusual significance, from another point of view, it can be regarded as the soul of a city. Among the preserved historic blocks, many of them have their own historical context and formal features. However, many of them are dilapidated, lack of vitality, relocation of aboriginal people and lack of cultural heritage. In addition to proper control, the activation of the historic blocks in the old city center should also follow the original features and features, inherit the local context, meet the living needs of local people and conform to the development of the current era. Taking the investigation of the west section of the historic west street of quanzhou as an example, this paper implanted the concept of "organic renewal" into the activation and reconstruction of the west section of the west street, so as to enhance the vitality of the block, inherit the historical context and reproduce the life of the ancient and early flavor market.

D190161

Some phenomena of media using during cooperative design field: Interactive tool design for practice

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Abstract:

Following the development of these technologies which are highly dependent on context of use, the information industry has invested more thought into the working space to develop novel product and service. Hence the context of work and work behavior in working space has been an essential issue that designers and researchers should confront and analyze for the development of context awareness in working space. Facing to this trend, explore context and design products conform to context is an issue demand immediate attention. In the first stage of this research, cultural probe and contextual inquiry has been conducted to gather the behavior of communication and work when team workers interact with each other and also with other people for work in their daily working time. We found there would be two types in the cooperative design communication between user-interface designers, which are cooperative participating design and leading cooperative design. The main differences between these two types are, in the cooperative participating design type, designers can use media space or physical space to cooperate with external members, and all designer were invited in the cooperative conference. But, in the leading cooperative design type, only leader can use media space or physical space to cooperate with external members, then bring result back to the internal team members, and lead the design meeting in the physical conference space. Finally, according to the phenomenon of media space using during cooperative work and communication, this paper design two different types of interactive tool for design practice. And the result shows that effective were improved with both tools.

D190162

Constructing a New Service Development Architecture Based on Ethics in Design Practice: Design Cases in Cooperative Viewpoint

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Abstract:

Service design focuses on understanding needs and abilities of members in service system. However, members' experiences and responsibilities with product and service development are discrete, especially when faced with new issues like Ethics. Business ethics refers to applying ethical standards to corporate policy, system, management, and decision-making. Its importance lies in the influence products or services have on people. Hence, enterprises must propose criteria and specifications in line with ethics. Business ethics not only concerns the legitimacy of organizational members' behaviors, decision-making, and action, but also involves the balance of interests among customers, investors, and community. However, businesses often only pay attention to tangible sales, but deem intangible fundamental ethical roles that affect product or service quality as secondary. Only when enterprises attach importance to business ethics before sales and market launch during the development process can they avoid risks and enhance the quality of products or services. Hence, enterprises have started attaching importance to the establishment of an ethic monitoring and control mechanism for development processes. This paper presents the ethical issues in New Product Development (NPD) or New Service Development (NSD) from inner and outside organization. By constructing service blueprint, NPD and NSD process can comply with the ethical principles. The potential benefits and challenges are presented and explored through case studies and focus group interview. These focus on the differences in issue and practice generated by members in the development process. The service blueprint has the potential to provide a better development process for members' cooperating and complying with the ethical principles, and enables the successful longer-term evolution of services.

D190163

True Contemporariness: Professional and Public Design Criticism in the Nanyang Industrial Exposition

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Abstract:

The opium trade in modern times opened the door of China's economy, and the high-quality foreign goods eroded the domestic market and invaded the traditional creative design industry. With the collision between the emerging western design thought and the traditional Chinese creation design thought, the modern Chinese design circle showed a keen awareness of introspection, and the design criticism of domestic products emerged in the modern exposition with the meaning of appreciation. This study is based on the design criticism speech from the official research team, convention and exhibition planners, professional designers, literati politicians, handicrafts, and the general masses, which emerged during the first official Nanyang Industrial Exposition held by China in 1910. Combined with the social, cultural, political, economic and technical background of China at that time, this paper combs and studies the factors that may affect the brewing, conception, completion, influence and depth of design criticism, such as the location and background of the publications, the advertising or other articles in the article layout, the authors' life experience, the readers' knowledge structure and concern, the wording and argument of the text and the background of the original publication. The author divides these critical remarks into two categories: professional and public, and discusses the contradiction, dependence, and influence between the two types of critical remarks. In the process of shaping each other, they influence and show the real characteristics of the times in the society at that time, to find a place for design criticism in the history of modern Chinese design.

D190166

A Study on Wayfinding Design of Museum Docent Chatbot via Gamification Based Curation

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Keywords: wayfinding, gamification, exhibition, chatbot

Abstract:

This paper contributes to the current understanding of museum/exhibition chatbot by providing insights from both gamification and wayfinding mechanisms applied in the research project of self-guided exhibiton in the Museum of World Religions ~ "G.A.M.E.（Gamifying Aware Museum Experience）: the Research on Digital Museum Chatbot Docent".

"Wayfinding" is an information system proposed by Kevin Lynch (1984) to guide people through a physical environment and enhance their understanding and experience of the space. Chatbot's real-time interaction mechanism provides user a guided tour of the exhibition site through the digital communication service. Furthermore, by applying gamification design in the exhibition chatbot can also activate and engage the visitors to experience the extrinsic motivational properties designated on specific items and paths during their visit.

The project aims to apply digital chatbot on generating the museum's solution of self-guided exhibition. Three criteria determine the navigablity of the exhibition chatbot:
1. providing memorable features of a space for visitor to use wayfinding ability and imageability;
2. helping visitor to use the information accesss exhibition to fulfill his information need;
3. creating wll-strutured paths.

D190168

Soy Candle Making and Design - Development of Children's Learning Materials in Sciences and Arts

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Keywords: soybean wax, preschool education, science

Abstract:

The refining process of the soybean candle inspired the knowledgeable fact of science education. This article tries to use wax as a science subject course for preschool education. First, we observe the basic properties of the object. Then, from the two perspectives of art and science, we will explore the possible roles in early childhood teaching. From an artistic point of view, we find low-density and non-hydrophilic properties, and the wax will solidify after melting — two proposals presented through creativity through these traits. Secondly, from a scientific point of view, the wax oil was guided by the sliver through the capillary phenomenon and burned during the combustion process. Black smoke generated during the process, so learn more about the chemical changes inside. After we understand the scientific background of non-hydrophilic, we propose two teaching proposals. The scientific concept of the shape and non-hydrophilicity of the combustion flame is delivered to the child separately.