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## INCULCATING LEADERSHIP VALUES THROUGH CREATIVITY: A HEURISTIC LEARNING PROCESS

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## ABSTRACT

This research intends to expose current youth to the essential philosophy of a great thinker, as well as to preserve traditional virtues. An action research project was carried out to explore and integrate a heuristic structure within an educational learning process that promotes selfawareness through the transmission of the essential philosophy of a great thinker. The aim of applying a heuristic cognitional structure to the learning process is to benefit learners and, ultimately, those who responded to it through their actions. This action research project, based on the four key components of planning, acting, observing, and reflecting, was conducted in the context of a group assignment implemented within an undergraduate multimedia design program at a higher education institution in Kuala Lumpur, Malaysia. The group assignment was to design a greeting card for Parents' Day. The findings indicated that this methodology of evoking positive thinking that is intrinsic to the philosophy of a great thinker within the learning process was beneficial not just for the actual learners (students), but it also inspired a positive response from 72 percent (152 out of 211) of end users, namely those who responded to, integrated, and applied this heuristic cognitional structure. They reacted by writing a few words by hand on the specially designed greeting cards, expressing love for their parents, and sent them out by traditional post. The extending of the learning process would also help to share these values in Malaysia's multicultural context. This would provide a core model for upholding humanistic moral values to sustain future generations and developing leadership qualities.

*Keywords*: Action research, heuristic, leadership values, learning process, Malaysia

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## INTRODUCTION

In the current era of globalization, information can be easily and widely transmitted using the latest technology. As human beings, we each have a responsibility to continue transmitting the essential philosophies of great thinkers as core models for upholding humanist values that will sustain future generations. This project aimed at developing and integrating a heuristic structure (Kuan, 1991) within the learning process by facilitating the introduction and incorporation of a great thinker's philosophy among undergraduate students (Denecke & Wiebke, 2011), based on their own cultural frame of reference.

This could include values, norms, beliefs, attitudes, and customs. The specific objective of this exercise was to integrate the experiences, understanding, judgments, and perspectives of Bernard Lonergan within the learning process (Tsai, 1997) to evoke intrinsic positive thinking and to strengthen self awareness in youths, in order for them to be successfully groomed to become motivated and capable people.

#### LITERATURE REVIEW

#### A. Philosophy of a Great Thinker

The term 'great man' besides the philosophy, may also refer to mores, good poetry and books which inspire and have influence over others. For example, in the essence of Eastern philosophy, the gems of ancient Chinese are *I Ching* (ancient Chinese classic) (1050-256 BC), *Dao De Jing* (c. 600 BC) and *Lun Yu* (Confucian Analects) (551-479 BC). According to the reputed author of the *Dao De Jing*, Lao-Tzu, the philosopher, described a wise leader was to be selfless, honest, carry out appropriate actions at an appropriate time and able to handle conflict (Stephen, 2004). And, *Di Zhi Gui* which is an extract from Confucian Analects (Lun Yu), an ancient teaching emphasizes the basic requisites of being a good person and guidelines for living in harmony with others; the basic standards for being a good pupil and child, all these regarded as the elements of leader traits.

#### B. Cognitive Structure

A cognitive structure refers to the knowledge structure in the mind of a learner wherein knowledge accumulates through psychological assimilation within the learning process. Ausubel and Novak (1978) have pointed out that learners need to process new information and concepts into their existing cognitive structure which then enhances their past experiences by restructuring and systematizing sub concepts of the cognitive structure. The origin of the heuristic concept is Bernard Lonergan's book, "Insight: A Study of Human Understanding" (1957). The ability to retrieve images, regardless of their content or source, indicates that the sources of the images have already been created. These images are collected or created based on past experiences or life experiences which can involve any of the senses of sight, sound, smell, taste, or touch of which an individual is conscious. A heuristic structure emphasizes a dynamic structure that is based on experience, understanding, and judgment (Tsai, 1997). The individual makes a judgment after understanding the concept and its formation, and before deciding whether or not it is practical, or making any other choices A visual model of cognitional structure is provided in Figure 1:



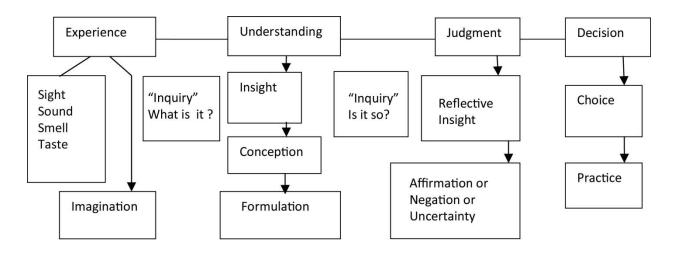


Figure 1. Cognitional structure [Source: Kwan, 1991, p. 31]

## C. Action Research

Action research and cognitive structures share a common goal in generating, communicating, and fostering understanding human ideas and experiences. Moreover, both are forms of educative enquiry and analytical techniques. The four key components of action research are: planning, acting, observing, and reflecting. This research process was developed by Lewin in 1952, and further refined by Kolb in 1984, to identify a focus area, collect data and carry out research, analyze and validate results, and evaluate action (see Figure 2). And this action research project aims to further extend Lonergan's insights and theory (Roscoe, 2004).

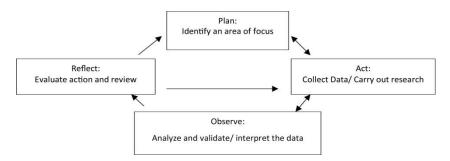


Figure 2. The action research process.



### METHODOLOGY

Leadership is inspiring people to do their best work and it can be done by examples or advocacy. To inculcate leadership values through creativity, design is a powerful tool for creating artificial products or objects of desire (Norman, 1988). And, a designer can be a messenger who transmits good deeds or facilitates mind purification by integrating the highly influential wisdom, intelligence, or charisma of ancient sages and teachers into his or her design concept. That is to say, the goal of applying the philosophy of great thinkers through creativity is deductive with respect to incorporating wisdom, morality, socio-political knowledge, and education to reform the self and others. Therefore, an exploratory investigation of this study to develop a purposeful and coherent leadership learning process through creativity by integrating Lonergan's concepts of self-appropriation and of a heuristic structure was conducted to examine leadership styles.

For this project, action research was applied during the process of design visualization to test the practicality of the proposed theoretical concept. This method allowed for multiple applications without requiring a change in the process methodology which would have affected student learning. The method was progressively applied by the researcher who had over 22 years of teaching experience in tertiary-level design education, and who mentored seven Malaysian Chinese students, whose average age was 19 years old, in their team work. The students were in the second year (fourth semester) of a multimedia design program at an established private higher education institution in Malaysia. The assignment brief was to design a greeting campaign for Parent's Day. Students were asked to devise effective ways of expressing their appreciation for their parents.

The details of the seven steps illustrate the operational mechanism of the research procedure. Following Tsai (1997), these were defined and simplified, as in the following:

- 1. Domain Definition: The key research issues were defined.
- 2. Problem Breakdown (thinking directions): This consisted of a focal point analysis, as well as a literature review,

archival research, observation, and measurement.

- 3. Significance Extraction: Based on the focal issues, points of significance were extracted.
- 4. Induction: A generalized conclusion was inferred from the above three steps.
- 5. Deduction: A conclusion was arrived at through deduction or after induction.
- 6. Goal: Unbiased keys factors were deduced or circumstantially identified.
- 7. Definition: Logical outcomes (see Table 1)



#### Table 1 *Heuristic Structure*

Heuristic Structure							
Linear Reasoning				Correlative Reasoning			
1. Defining the Domain	2. Problem breakdown (thinking directions)	3. Significance extraction	4. Induction	5. Deduction	6. Goal Situation	7. Definition	
Define the key research issues	Focal points analysis, The focal point analysis and literature reviews, archival research, observation and/or measurement	Based on the issues which are being focused on, extract the key points of significance	Inference of a generalized conclusion from the above three steps	Conclusion arrived at by or after the stimulation of induction	Unbiased keys factors are reached through deduction or circumstantially	Logical outcomes	

[Source: Tsai (1997). The Cognitive Resource Laboratory at the National Taipei University of Technology, Taiwan]

The heuristic structure was then integrated into the design process by deriving the topic of filial piety which is regarded as a common root of virtue across diverse races and religions in Asia. Thus, the eighth and ninth steps of the H.S. structure were as follows:

## <u>Step</u> <u>The Visual Communication Structure</u>:

- 8. The Transitioning Stratagem: Digging out familiar items or experiences from memory and reflecting on them.
- 9. Defining other forms of visual communication: This was important to keep up with the current pace of life and trends among the youth, regardless of race, and included social media tools such as Facebook, WhatsApp, and Twitter (see Table 2).

Table 2

From Linear Reasoning to Correlative Reasoning

Visual Communication Structure for Steps 8 and 9			
8.	9.		
The transitioning stratagem of the situation	Other forms of visual communication:		
1. Recalling and looking back on familiar items or	1. Facebook, Twitter, WhatsApp to keep up with the		
experiences;	current pace of life among the youth.		
2. Contextualizing these items or experiences.			



#### ANALYSIS AND PROCESS

After defining the underlying concept, but before making a final decision on which associated ideas to incorporate in their design, the project group decided to apply *Di Zhi Gui* (a standard for students) (1661–1722) as the guiding model for their assignment. *Di Zhi Gui* is a Chinese intellectual heritage, based on ancient guidelines provided by the Chinese philosopher, Confucius, for living harmoniously with others and for cultivating core cultural values within the young generation. The teachings of Confucius on the basic requisites for being a good person, and his guidelines for living harmoniously, center on being dutiful toward parents. The reason for choosing *Di Zhi Gui* as a model philosophy of a great thinker, and as the campaign concept, was explained by the group's members as follows: "...because we did study [most of the Chinese youth in Malaysia] or had exposure to Di Zhi Gui while we were in primary school... We might have forgotten it while we grew up, but we knew that it was good in teaching us our moral precepts...just like we received the love and financial support of our parents, so naturally, we may have taken it for granted." Di Zhi Gui is compatible with any religion and is universally applicable. As the group's mentor, the researcher agreed with the students that in today's world, youth required self-esteem and inner strength to become good and capable persons, and had approved the application of *Di Zhi Gui* within their campaign design.

#### Stage I: Linear Reasoning

This action research exercise attained its objective of guiding multicultural students to recollect the data and experience they had in mind through their engagement in a logical thought process. To test the research methodology, first of all, the brief of the assignment or of the client, and its terms and requirements, had to be understood. For this assignment, students were asked to devise effective ways of expressing their appreciation toward their parents. The outcome of the research design entailed fulfilling the requirement of producing a design that was meaningful, environmentally friendly, practical, and able to create a lasting memory or touch the hearts of those who use the heuristic cognitional structure in learning. The study proceeded with the students reorganizing their own thinking processes by applying the heuristic structure through brainstorming and discussions among themselves in a step-wise process (one to seven), as described in the H.S. template.

#### Stage II: Correlative Reasoning

The concept of *Di Zhi Gui* for transmitting the act of expressing love toward parents was applied by following stage one (steps one to seven) and stage two (steps eight to nine) of the research procedure described in the methodology.

#### Stage One of the Heuristic Structure (steps one to seven)

- 1. Defining the Domain: This included ascertaining whether the title definition was reasonable, and defining parents, generation, and communication.
- 2. Problem Breakdown (thinking directions): The mission of communication
- Significance extraction: The focal point analysis ascertained that a parent could be biologically or nonbiologically related to an individual, and identified a generational gap.
   Communication referred to an exchange of thoughts, messages or information, visually and through signals, writing, and behavior. Communication methods and features were identified, including: vast distances across time and space; sharing; two parties (a sender and a receiver); nonverbal communication; and various transmission methods.



- 4. Induction: The relevant words relating to communication were listed, including: close the distance gap, respect, loving, caring, Facebook, phone, meeting up, and mailing.
- 5. Deduction: A designer can inspire others and create a platform for communication and interaction.
- 6. Goal: Caring and loving between generations, awakening the minds of the youth, and encouraging youth to respect their elders.
- 7. Definition: Promotion of moral values (see Table 3).

### Table 3 From Linear Reasoning to Correlative Reasoning

Heuristic Structure						
Linear Reasoning			Correlative Reasoning			
1. Defining the Domains	2. Problem breakdown ( thinking directions)	3. Significance extraction	4. Induction	5. Deduction	6. Goal Situation	7. Definition
a. Is the title being defined reasonably? b. How to define Parents? Generation gap/ old/ Financial supporter	c. How to define communication d. The mission of communication e. money-finance	Focal point analysis Biological or non- biological related to one and other/ Gap between Generation Communication, exchange of thoughts, messages or information, by visuals, signals, writing, behaviour and etc/ Generation between parent and child Ways of Communication 1. Vast Distance ( times & Space) 2.Sharing 3. Two parties-sender & receiver 4. Nonverbal communication 5.various ways of transmitting	close the distance gap respect, Loving, Caring, Facebook, Phone, Meet up, Mailing, Whatapps	1. Designers can be the person to inspire others 2. Create the platform for communicatio n & interactive	Caring and loving between generation; wake up the mind of youngsters Encourage youngsters to respect oldies	Promote the moral Value

#### Stage Two of the Heuristic Structure (steps eight and nine)

- 8 *The Transitioning Stratagem:* The learners (student designers) handcrafted the point of purchase (P.O.P) using recycled newspapers and papers.
- 9 *Role Definition*: The following products were created for this case study:

a) A handcrafted P.O.P which could be seen by passersby.

- b)A functional and attractive post box
- c) Postcards that enabled people to express their filial love through writing.
- d) To keep up with the pace of life and current trends among the youth, Facebook was included as a medium for promoting the moral values of paying respect to parents and loving them (see Table 4).



## Table 4 The Output of Steps 8 and 9

Visual Communication Structure				
8.	9.			
The transitioning stratagem	Define other visual communication settings			
<ol> <li>P.O.P: This aimed to attract attention, creating a method of communication which elicited a response from the youth.</li> <li>Reflecting on items and experiences that are familiar.</li> <li>Contextualizing these items and experiences.</li> </ol>	<ol> <li>Handcrafted P.O.P: A tree, lovable shape. Enable passersby to see it. Make it out of old newspaper which is ecologically friendly.</li> <li>Creation of a post box that is functional, attracts attention, and is also made of recycled paper.</li> <li>Postcard: a practical design enabling senders to express their love so that receivers are uplifted in spirit and feel happy.</li> <li>Pocket calendar as a token and reminder of the good old days: this can be placed in a purse or wallet.</li> <li>Use of Facebook to keep up with the current pace of life among the youth.</li> </ol>			

## FINDINGS AND DISCUSSION

The outcomes of the greeting design campaign for Parents' Day, which focused on the issue of "communication between generations," were presented by the team of students under the guidance of the researcher in this action research project. This was done through a process of brainstorming, which entailed evoking and recollecting the philosophy that they had learned. The visual image for this campaign was symbolically a tree with deep roots, anchoring the tree strongly in the ground. This represented parents as the pillar of support for their children, and the visual impact was of the roots forming a Chinese character [ $\not$ ] (filial piety), together with a bilingual caption: "*You can't buy time …*" This alerted viewers to not delay in expressing their love toward their parents. It also educated the youth to show filial piety toward their parents through the bilingual sub caption: "*Standard Student Rules: Filial Piety.*"

The background watermark of Chinese calligraphy further encouraged viewers to recall the learned concept of *Di Zhi Gui*, particularly rules relating to parents, in the hope that this would refresh the viewers' memories. The group used old newspapers to create a mock-up display of the tree to attract the attention of passersby. A children's book on *Di Zhi Gui* was also displayed alongside the tree for viewers to read, and on the other side of the tree, a cute little piggy bank was placed along with a note, "*Call for Donations*" in an effort to raise funds for the less fortunate and the elderly (see Figure 3).





Figure 3. Brainstorming session, poster design and display setting.

An A5 size postcard was designed, depicting an ancient Chinese sage (representing a guru), who reminds the user to repay his or her parents' love. The card's caption was: "Standard for Students: Filial Piety for Your Entire Life." The 'students' in this caption was a broad reference to all, and filial piety was to be shown to people older than oneself. In the center of this postcard was a Chinese poem about the duty of a son. The English translation of the poem is as follows: "In the family hierarchy, parents are superior to their children. Respect for parents is the starting point of virtue. Children should model their behavior after their parents. Besides, children should honor their parents without complaint, even when they disagree." On the back of the postcard was a bilingual heading: "MAIL YOUR LOVE," aimed at encouraging people to write a short message expressing their love toward their parents on the postcards.

For the subheading, two encouraging sentences were used: *"Imagine your beloved parents receiving your post card"* and *"Iet's tell our parents 'I LOVE YOU.'"* Chinese ink wash effects and bamboo trees were used to soften the overall message effect. Siek and Chen (2012) have discussed the semiotics of bamboo as a metaphor for moral integrity, purity, and righteousness. The team created two versions of the back design of the postcard. Feedback from their peers revealed that-some preferred more space on the postcard for writing, especially those who were away from their hometowns and only returned during the festive seasons. Others mentioned that they had been brought up in families that did not express love explicitly in words. The simplified version of the design at the back of this postcard carried the headline: *"Standard for Students: Filial Piety for Your Entire Life,"* and Mama." This was because the team observed that in contemporary society, some parents are divorced and live separately. Using the word "and" instead of the slash might have hurt the feelings of either parent, which would then have defeated the purpose and value of this postcard. The caption at the bottom of the left portion was: *"Son/Daughter with respect"* to balance the one-to-one dialogue and create emotional equilibrium (see Figure 4).





Figure 4. Front and back of the postcard

Apart from the postcard, the team also created a Facebook page that users could access by typing "Filial Piety," or the direct link: "facebook.com/FilialPiety" This provided a communication platform for those who were interested in learning more about their campaign as well as about *Di Zhi Gui*. The Facebook page also shared some wall photos or links from other websites. Within a week of being launched on 16 April, 2012, the page had accumulated 70 "likes." These findings suggest that a methodology designed to evoke the positive thoughts and values that are intrinsic to the philosophy of great thinkers within the learning process benefitted learners. Moreover, the learning process of the students inspired a positive response from 72 percent (152 out of 211) of Malaysian Chinese end users, who subsequently handwrote a few words expressing their love on the greeting cards and posted them the traditional way (see Figure 5). This seldom happens among the Chinese in Malaysia. The salience of the final outcome is not so much about the appearance of the final design; rather it is the transmission of traditional Chinese values of filial piety and respect to inculcate the virtuous and service to others as a leadership qualities.



Figure 5. Facebook profile page and postcards ready for mailing.



#### CONCLUSION

One means of developing leadership is to ensure students engage in powerful learning experiences; the educational mission based on truth and traditional values should be encouraged and discussed within the teaching context as ongoing process of integrating great philosophy or theories should occur on a regular basis to align program purposes and content to sharpen their own skills in positive thinking. By the time that they have completed their education, they have developed the ability to reflect inspiration in self awareness.

This action research project aimed at developing a heuristic structure that would evoke intrinsic positive values in young students. In this transmission of traditional Chinese values of filial piety, 132 out of 211 students were attracted by the campaign launched within the mass communications department, motivating them to fill out and send the postcards. Dissemination of the research methodology is particularly important as this helps to share the findings, it also can guide multicultural students in advancing their knowledge of each other's cultural frames of reference, especially in the context of a multicultural nation such as Malaysia. Critiques on the development of this learning process are welcomed as constructive criticism as they would help to share and sharpen the findings and to further explore their implications.

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#### APPENDIX

- The *Di Zhi Gui* had a total of 186 codex, of which a total of 21 rules relate specifically to interactions with parents. These have been extracted and are presented below to provide further clarification and understanding of the norms for students established by these Confucian guidelines. The numbering below correlates with that of *Di Zhi Gui*, and the rules have been translated into English.
- (6). When your parents call you, don't be slow to respond.
- (7). When your parents give an order, take action at once. Don't be lazy.
- (8). When your parents enlighten you, listen respectfully.
- (9). When your parents reprimand you, you must accept this.



(12). When stepping out of the house, you must tell your parents. Upon returning home, you must meet with your parents, face to face.

- (18). Whatever your parents' preference is, you must make an effort to acquire.
- (19). Whatever your parents despise, you should vigilantly discard.
- (20). Disfiguring your body makes your parents anxious.
- (21). Blemishing your reputation makes your parents ashamed.
- (22). When your parents love you, filial piety is effortless.
- (23). When your parents dislike you, filial piety is virtuous.
- (24). When your parents are doing something erroneous, expostulate to make them change.

(26). If your expostulation is not being accepted by your parents, wait until they are in a good mood and counsel them again.

- (35). When siblings are in harmony, they express filial piety to parents
- (40). When an elder is calling for someone, assist the elder to call that person immediately.
- (43). Never show off in front of an elder. Be respectful.
- (44). When meeting an elder on the road, hasten forward in greeting and bow before them.
- (45). If the elder has nothing to say to you, stand respectfully back.
- (47). Only move away when the elder has passed a hundred steps ahead of you.
- (54). Respect the elders of your father's generation just the way you respect your father.
- (56). Be respectful to your parents at home, and when outside, be respectful to your elders.