Needs Assessment of Vocational Education – a study on the part-time design students of VTC in Hong Kong

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Abstract: Vocational education has played an important role of developing the life-long learning in Hong Kong. With the promotion from the government, industry and educational organizations for the "Creative Industries" in Hong Kong, there is a need to foster design-related education and to strengthen the designers' competence to meet increasing competition for local and global needs. However, not many studies have been made to address the needs of the part-time vocational students. Through the survey based on the needs assessment, the purposes are twofold, to identify the actual needs of students in terms of values, attitudes, existing difficulties between study and career competencies and areas of improvement. In specific, to acquire both descriptive and attitude-probing data for designing a new subject or integrated subject as learning Questionnaires were conducted to part-time students, and and teaching activities. semi-structured interviews were undertaken to lecturers and design associations and owners. Then a curriculum is proposed to meet the needs of students. The values of the study will contribute to firstly, to enhance students' self-building skills, confidence for design competencies, secondly, as valuable sources for evaluating new curriculum for students and staff development programme in vocational education, thirdly, to meet the requirements of employers for better-trained and quality designers.

Keywords: needs assessment, design competencies, vocational education, values, attitudes, skills

I. Introduction

A. Designers Competencies – Competent Designers

Part-time adult Design Students in IVE (Shatin Campus)

B. Rationale Statement

Background information

As a teacher's perspective, the curriculum I am familiar with is the Higher Diploma and Higher Certificate of the Design Programme which I have taught in IVE (Shatin Campus) for the past few years. The students were mainly adult students who were working in the design profession, with working experience ranging from 1 to more than 15 years. The minimum entry requirement of applicants is having a Diploma or Higher Certificate in a design-related discipline, except for mature students.

B.1 The Literature Review and Needs Assessment

According to the Chief Executive Policy Address in 2004, it emphasized the Government's support of creative industries in Hong Kong to meet the needs of market¹, will continue to promote the development of creative industries. With reference to Trade Development Council

¹ (see <u>Http://www.policyaddress.gov.hk/pa04/eng/p27.htm</u>) "Hong Kong has been a place where the cultures of East and West meet. This is conducive to the development of creative industries, which have already established a solid foundation. For example, various types of design the SAR Government will continue to promote the development of creative industries, including their linkage of resources and markets......"

Profiles of Hong Kong Major Service Industries, it highlights the role of creative industries and the scope of design services². Besides, its estimates (TDC, 2002) suggested that creative industries as a whole account for 3.7% of Hong Kong's total employment in March 2002, 4.5% of service exports and 2% of GDP. On the whole, it has provided over 90,000 jobs. Over the past 5 years, total employment in creative industries grew by an average of 3.7% per year, which compared favourably with total employment growth of -0.8% per year during the same period.

Regarding the 'push" factors from the government, industrial and marketing needs, Mr. Tung Chee Hwa, the Chief Executive, and Mr. Alan Yip, the former Chairman of the Designers Association, expressed that there was a need to foster design-related education and to strengthen the designers' competence in the face of increasing competition following China's joining the WTO and the signing of CEPA with China. Besides, during the education reform of life-long learning led by the Education And Manpower Bureau, one of the 4 learning tasks which is promoted is Moral and Civic Education listing 5 kinds of values and attitudes, including perseverance, respect for others, responsibility, national/cultural identity and accountability. These are the common values recognized in the professional workplace as well. In other words, there are more and more demand for competent professional designers and it is worthy to explore what are the actual needs of the P/T design students to enhance their vocational education not just in quantity but also in quality of job competence as well.

B2. Rationale and role of IVE in Vocational Education

As mentioned in IVE Calendar and Prospectus, one of the three modes of study that IVE offers is part-time evening programme, subsidized by the government. These courses are designed for working group with the completion of secondary 5 level who are seeking to update or upgrade their abilities.

One of the key features of IVE is the implementation of an integrated curriculum structure for all courses of different modes of study. Starting from 2003, some new changes has been made on the curriculum structure with the adoption of a modular structure for all courses within 2-5 years according to the choice of students' own rate of study. Common modules are shared among Higher Certificate and Higher Diploma courses of the same discipline. This helps to improve the quality of courses and facilitates constant updating of materials to meet the needs of students and industry.

In order to identify the problems more clearly, I would base on Mager (1997) for analyzing the levels of problems beforehand. Needs assessment is defined as the gap existed between current ends and desired/required ends or highest priority for action. After reviewing my assignment, I can approach my assignment is 2 domains of Needs Assessment, including internal and external assessment. As the design programme is a series of vocational study, which is closely to utilitarism (as societal level) and survivalism (as individual needs) based on Goodlad's

² (see <u>Http://www.tdctrade.com/main/si/spdesi.htm</u>) "Creative industries are identified as an important dimension for fostering Hong Kong's future development. The design industry is a core component of HK's creative industries. The government has put forth initiatives in the policy agenda to promote Hong Kong as... and design hub. "Also it also specifies interior design's scope of services as " concept design, space planning, project management, architectural consultancy,...., lighting and furniture design, facilities planning, etc..."

heresies of hidden curriculum (1995). Kaufman et al. (1979) defined the external Needs Assessment required the referent for planning and accomplishment relate to the world outside of schools. Such discrepancies can be furtherly analyzed as :

The selection of contents

As stated from the rationale and aims of the IVE curriculum (2003, 192), the programme includes a combination of practical studio and workshop projects ... and the development of the necessary personal and team-based skills through projects and assignments linked directly to the chosen subject stream. In other words, emphasis is put on a range of transferable skills, knowledge and practices for vocational uses. All the content of subjects should be related to workplace experience and industry-oriented projects which focuses on commercial interaction and a partnership approach to project development with focusing on links between creative, technical, social and organizational skills.

Following the study I have researched on Assignment 1, I would like to explore the actual needs of P/T students taking the Higher Diploma and Higher Certificate courses of Design in IVE (Shatin Campus). Taking a closer review on the courses mentioned, the programme aims at providing a holistic development of design students in design competencies including professional knowledge, technical and language skills, independent thinking, interpersonal skills and creativity etc. However, after comparing the courses offered with their credit hours, clear evidence shows the curriculum focuses more on 'knowledge' and 'skill' than courses on 'attitude'. Despite the aims of courses aims also mention that interpersonal and social skills will be acquired through studio practices, there is no specific training provided both for the P/T teachers, most of them are practitioners in design profession rather than teachers, as well as for students explicitly. In actuality, unlike the day-time students who have flexible access to Students Affairs Office, which is one unique department specialized in providing self-development skills, organizing different activities for helping students develop their moral, intellectual, physical, social and aesthetic capabilities, the P/T students cannot enjoy all these facilities due to the intensity courses and cost-effectiveness of resources presently.

Since there is a shortage of research materials or public report released in this issue, in order to support the significant value of the study, a small-scaled pilot test using questionnaire was conducted by me in early March, who is the P/T lecturer in the Design Department. 28 students were present out of the total 30 enrolled, about 2/3 (16 questionnaires out of 23 returned) of the initial survey reflected their needs for acquiring the job competencies such as self-development skills and creativity into the course. The result findings revealed that there was a general need of developing a new course or adding new course content into the existing structure (see details in Appendix A).

In order to solicit more detailed data for the study, a series of survey in forms of questionnaires and semi-structural interviews were conducted to several parties, including P/T design students, IVE lecturers, Department Head of IVE (Shatin Campus), Students Affairs Office of IVE (Shatin Campus), Design associations and the owners of design firms.

Survey by questionnaires to various parties

The sample was basically drawn from the convenience sampling from the group of P/T

students who I taught before and am teaching currently. There are about 65 students - 35 students from Higher Diploma of Interior and Environmental Design, 30 students from Higher Certificate of Interior and Environmental Design. In the questionnaire, there are basically **4** categories designed with a total of 44 questions.

Feedbacks:

- (a) P/T students: Out of about 100 questionnaires distributed to the P/T design students, <u>65</u> returned from the respondents. The overall return rate is 65%. (see details in Appendix B) shows the whole set of questionnaires.
- (b) 2 in-depth interviews were conducted with 2 students (see Appendix B).
- (c) 1 course leader and 1 P/T lecturer (see Appendix C)

(d) For the other stakeholders, a telephone interview was conducted with the Chairman of the Hong Kong Designers Association (see Appendix D).

Limitations:

Due to the shortage of time, no focus group interviews were arranged as proposed in Assignment 3.

Questionnaires with P/T students, Design Department and Designer Association Several key findings were listed as follows:

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Ranking	Students	Course leader	P/T lecturer	Design Association	Rank/Average Score
	1	-	1 1	Association	
Design	1	2	1	1	1 (1.25)
knowledge					
Computer	4	4	2	2	3 (3)
Technology					
Language Skills	2	3	3	3	2 (2.75)
Attitudes & Values	3	1	4	4	3 (3)
Others				Design	
				missions & philosophies	

Q.2

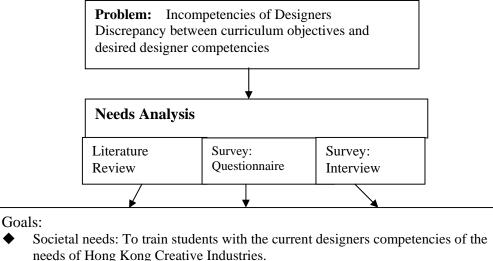
Ranking	Students	Course leader	P/T lecturer	Design Association	Rank/A Score	Average
Self-development	2	1	2	3	2	(2)
Creativity & thinking	1	2	1	1	1	(1.25)
Time management	3	5	3	5	4	(4)
Interpersonal & social skills	4	4	5	2	3	(3.75)
IQ,EQ,AQ	5	3	4	4	4	(4)
Others				Mission		

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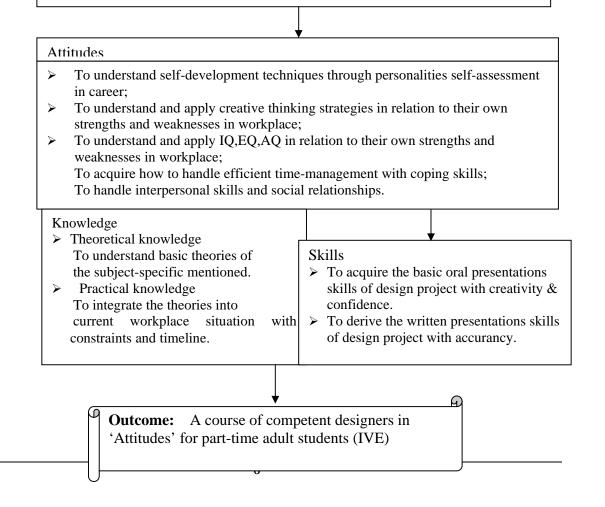
		(Individual	
		& society)	

To conclude, all these data will support my new curriculum design of "Attitudes" in the new curriculum. These topics will be drafted in the Curriculum Document according to their weighing with some modifications based on the logical flow and coherence of the course content and materials.

Fig. 1: Procedures of Needs Assessment



- Employers' needs: To provide more competent designers for the Increasing demand of the design services.
- Institution needs: To provide students basic attitudes, presentation skills and fundamental self-development knowledge in their daily workplace.
- Individual needs: To equip students with more competent education for sustaining their competitive advantages in society.



C. Curricular Goals

With the discrepancy existed between the aims of the courses and the programmes offered, the purposes of this needs assessment are

- (i) In general, to identify the actual needs of students in terms of values, attitudes, existing difficulties between study and career competencies and areas of improvement.
- (ii) In specific, to acquire both descriptive and attitude-probing data for designing a new subject or integrated subject as learning and teaching activities and course materials for students and staff development in IVE.

On the whole, the values of the study will be threefold,

- (i) To enhance students' self-building skills, confidence for career competencies;
- (ii) As valuable sources for evaluating a new course or integrated course for students and staff development programme in IVE ;
- (iii) To meet the requirements of employers for better-trained and quality designers.

The data collected is significant in twofold, to develop as a course of professional development, either as a separate or integrated course within the existing structure and resources. In doing so, the students will benefit to strengthen their professional ethos in their design profession. Besides, this package will be useful as staff development training as most of the P/T lecturers recruited in the Design department are only experienced in their own expertise and hands-on experience more than education training. By integrating the professional knowledge and theories into the practical workplace experience, these case studies will provide abundant sources of transferable knowledge which will benefit both learning and teaching activities in part-time teaching. For further implication, these will provide potential and initial source of new curriculum or trial programme with case studies in local context for day-time Design Programme which needs fine-tuning in the future.

C1 Goals lead to desired real performance of curriculum graduates The aims

1. To explore the needs through planning, developing & designing, implementing and then evaluating the needs of self-development programme into the existing Design programme for the P/T students.

The objectives/goals of the curriculum (See Table 1)

1. To find out the opinions of P/T design students, Head of Design department, Design association, employers of design firms on the importance of putting self-development courses into the current Design programme.

2. To identify the differences of desired and actual levels of P/T students' performance between study and career competencies at P/T design students, Head of Design department, Design association, employers of design firms.

3. To find out the opinions of P/T design students, Head of Design department, Design association, employers of design firms on the planning and implementing of the new curriculum.

In brief, the self-development programme is a combination of several units, including:

(a) Self-assessment personalities in career (2 sessions)

(b) Creativity (CQ) - creative thinking and planning (2 sessions);

(c) IQ, EQ, AQ - how to distinguish the kinds of quotient and maximize the use of the capabilities (2 sessions);

(d) Time management - how to maximize our time and talents to achieve worthwhile goals based on a sound value system (2 sessions);

(e) Interpersonal and social skills- how to build up human relationships and handle conflicts (2 sessions).

C2 Learners' knowledge, skills and attitudes after completing curriculum

Based on Lundgren's curriculum codes, there are 3 major learning outcomes can be elaborated: (see Table 2)

Attitude:

(a) To enhance students' career competencies through better understanding of self-development in characters, potentialities in creativity, abilities and capacities and human relations.

(b) To strengthen the affective skills through building a proper attitude in working environment.

Knowledge:

- (a) Theoretical knowledge: to understand basic theories of the subject-specific mentioned.
- (b) Practical knowledge: to integrate the theories into current workplace situation with constraints and timeline.

Skills:

(a) To acquire the basic oral presentation skills of design project with creativity & confidence.

(b) To present the written skills of design project with accurancy.

C3 Distinguishes between training & non-training problems

Regarding the differences between trained and non-trained students, some relevant information can be referred from the Leadership Competence for Success Programme 2004 (see details on <u>Http://www.polyu.edu.hk/~sao/lcsp/lcspHome.html</u>). Out of the 98% graduates from the programme, there was overall increase in their leadership competence. The findings were derived from the students self-assessment.

Criteria	Pre-training	Post-training	Differences
1. Self-confidence	34%	89%	+55%
2. Problem-solving abilities	39%	81%	+42%
3.Time management	27%	79%	+55%
4. Communication skills	38%	78%	+40%
5. Group co-operation	59%	93%	+34%

Questions		Strengths in study	Areas of improvement in study	Differences
13 & 18	Confidence building	2.30	2.03	-0.27
14 & 19	Creativity & creative thinking skills	2.15	1.70	-0.45
15 & 20	Time management skills	2.30	1.81	-0.49
16 & 21	Interpersonal & social skills	2.10	1.97	-0.13
17 & 22	Language skills	2.18	1.89	-0.29
Questions		Strengths in work	Areas of improvement in work	Differences
23 & 28	Confidence building	2.01	1.80	-0.21
24 & 29	Creativity & creative thinking skills	2.06	2.08	0.02
25 & 30	Time management skills	2.09	1.78	-0.31
26 & 31	Interpersonal & social skills	1.98	1.83	-0.15
27 & 32	Language skills	2.23	1.92	-0.31

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- > To understand self-development techniques through personalities self-assessment in career;
- > To understand and apply creative thinking strategies in relation to their own strengths and weaknesses in workplace;
- > To understand and apply EQ,AQ,EQ in relation to their own strengths and weaknesses in workplace;
- > To acquire how to handle efficient time-management with coping skills;
- > To handle interpersonal skills and social relationships.

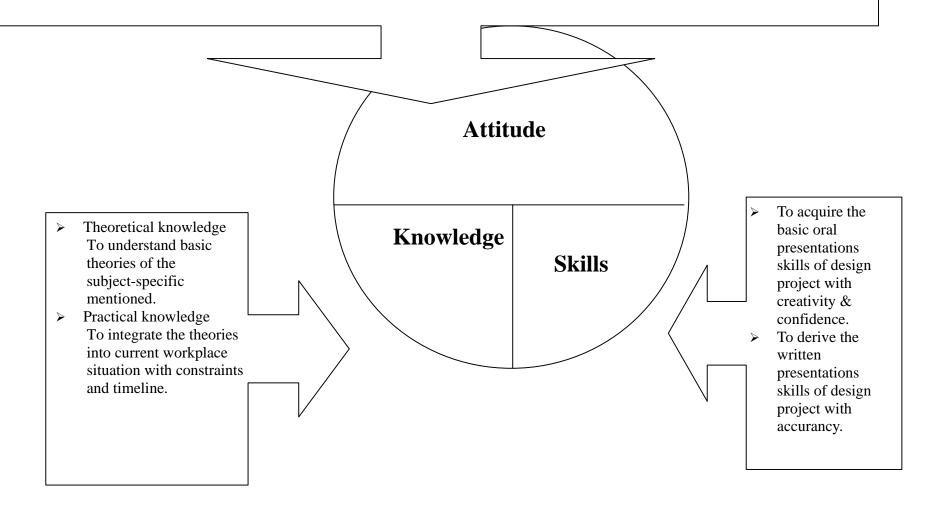


Fig. 2: Curricular Goals

Higher Diploma	Year 2	Credit-based core	30 credit-hours
Advanced Level (II)		10 sessions (30 hours)	
Higher Diploma	Year 1	Credit-based core	30 credit-hours
Advanced Level (I)		10 sessions (30 hours)	
Higher Certificate	Year 2	Credit-based core	30 credit-based
Basic Level (II)		10 sessions (30 hours)	
Higher Certificate	Year 1	Credit-based core	30 credit-based
Basic Level (I)		10 sessions (30 hours)	
Total			120 credit hours

Fig. 3: Curriculum Structure

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II. Overview of the Curriculum

D. Context

1. Intended learners:

P/T design students taking the Higher Certificate and Higher Diploma Design programme in IVE (Shatin Campus) with a modular credit-course.

2. Length of course, program, series

Specific: to acquire data for new course for students & staff development in IVE.

This course is initially proposed as a 10-session course, 3-hour each, either offered as separate or integrated into the existing programme during the regular academic semester. The course will conduct during evening class, meeting once a week. Most of the exercises will be done in class in order to reduce the extra workload of both students and lecturers; moreover, it will encourage more peer interaction and discussion for more effective communication. Attendance is expected throughout the 10-sessions. Other than that, 2 written assignments will be assessed in case studies will be set up for students. The assessment criteria will mainly based on problem-solving skills and techniques, theoretical context, organization of presentation, etc. The reasons behind are more incentives will stimulate the students to take the lessons and assignments more seriously once there is grading (only a pass or fail grade will be given with constructive feedbacks), secondly, through systematic planning and writing, on one hand, it will consolidate the students' thinking for organizing and reflection among themselves, on the other hand, the lecturer can give continual assessment to the written assignment with on-going tutorials.

Curriculum Codes	Courses	Credit hours
Knowledge	Design Studies, Design	90, 90
	Studios, Cultural Studies	30
Skills	English & design	30
	Communication	30
	Modelling &	60
	photography	
	Computer-aided design	
Attitudes	Newly proposed course	Newly proposed
	(individual course)	(30 credit-hour, 10
		sessions)

Here is the tentative table for proposal the new course

3. Place/fit in overall school or organization

4. Institutional Constraints

- (a) Curriculum discrepancies: there is an absence of 'Attitudes' on the actual courses offered;
- (b) Training: there is no specific training for P/T students & lecturers;
- (c) Other sources: no unique department offered such needs to P/T design students;
- (d) Financial situation: a tight budget and changes of IVE policies for more market-oriented courses and cost-effectivenesses.

Needs Impacting on design

Purposes:

(a) General objectives: to identify the actual needs of students in terms of values, attitudes,

differences between study and career;

(b) Specific: to acquire data for new course for students & staff development in IVE.

Unit 9-10: Interpersonal and social skills

- 1. To provide students' core self-development skills with proper self-confidence and self-esteem.
- 2. To build up human relationships through group dynamic.
- 3. To handle conflicts with teams.

Unit 7-8: Time management

- 1. Learn 5 key guidelines of time control, including perspective, purpose, personality, planning and productivity through evaluation exercises.
- 2. Manage and cope with stress and anxiety.

Unit 5-6: IQ,EQ,AQ

- 1. Learn some common kinds of quotients functions, characteristics and application.
- 2. Identify one's own strengths and weaknesses through evaluation exercises.
- 3. Improve one's own quotients through project learning.

Unit 3-4: Creativity and creative thinking

- 1. Introduce basic types of creative thinking strategies.
- 2. Identify one's own strengths and weaknesses through evaluation exercises.
- 3. Learn stages of creative thinking strategies through practice.
- 4. Practice brainstorming, divergent thinking & convergent thinking through project learning.
- 5. Final presentation on the learning outcome: designer guide orally with written project.

Unit 1-2: Career personalities self-assessment

- 1. Overall brief of the self-development course (by lecturer)
- 2. Introduce career personalities self-assessment (by trainer) and understand the strengths and weaknesses of one's own characters for different career.
- 3. Peer discussion on working environment (nature of jobs, expectations, difficulties and degree of satisfaction.
- 4. Introduce research and selection of appropriate jobs in relation to career competencies.

Fig. 4: Curriculum Outline

Fig. 5: Real World Performance Goals Project learning - Presentation of Designer Guide

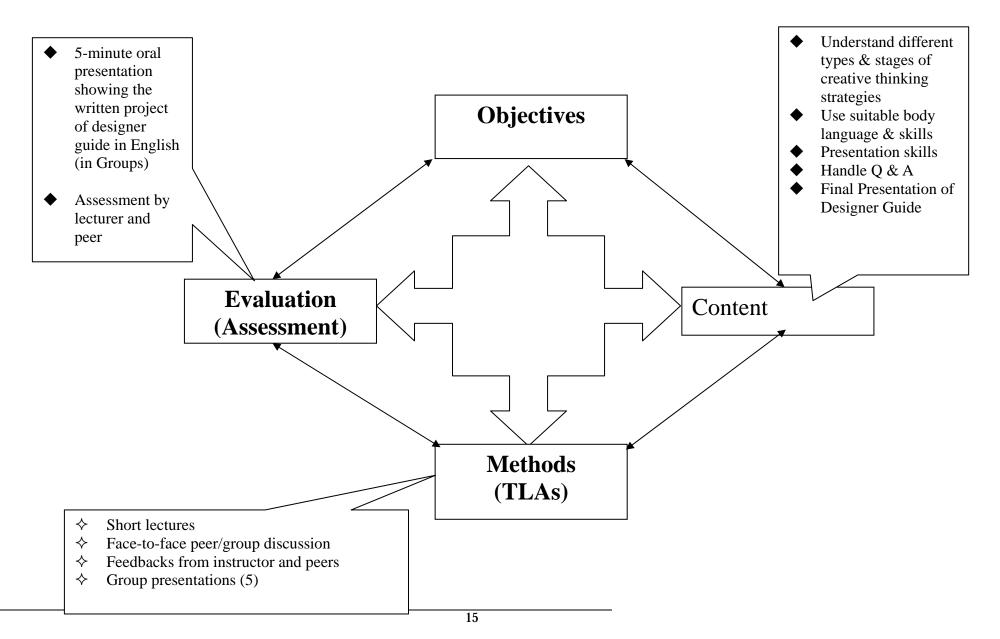
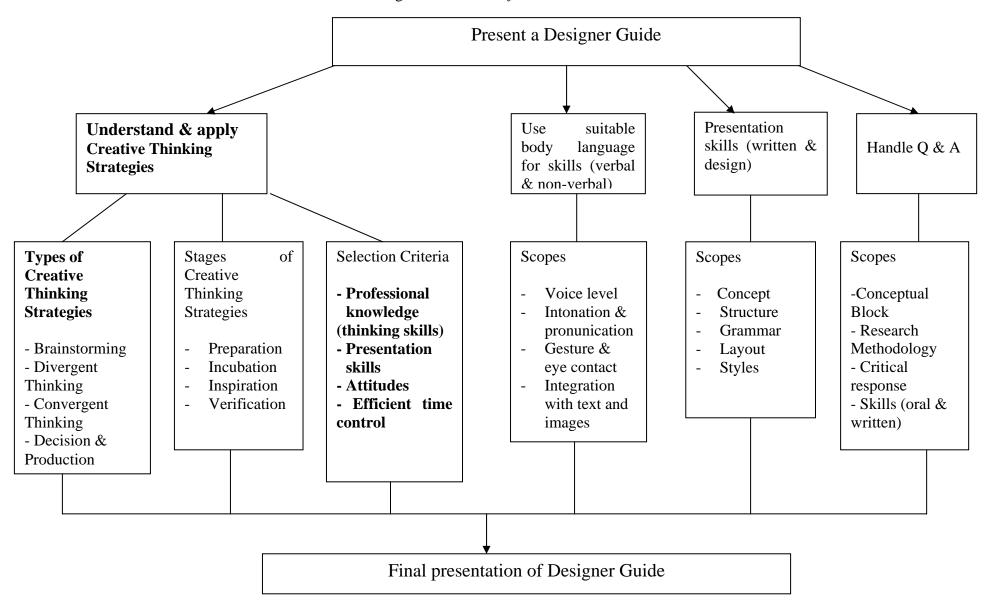


Fig. 6: An Outline of Unit 3



II. Overview view of the Curriculum (see Fig. 4-6)

Content Outline

With the findings derived from the needs assessment, the contents of the course are divided into 5 units. A concept map of curriculum structure (Fig. 6) will show the some more details of the following units. All these units will provide a package of courses with a gradual increase in breadth and depth in theories and practices according to the level of the students (From Higher Certificate Year 1 to Higher Diploma Year 2 level).

1. At the beginning of the self-development unit (2 sessions), the P/T lecturer will give an overall brief about the course objectives, content, learning and teaching activities and assessment of the whole course. Then an experienced trainer or guest speaker (from Student Affairs Office) will explain some key categories of the personalities of individual students through quiz or questionnaires. Afterwards, some peer discussion will be followed describing their work environment, including nature of jobs, their expectations, difficulties and degree of satisfaction in their profession in relation to the competitive design profession nowadays.

2. Understand one's own Creativity (CQ) - creative thinking and planning (2 sessions):

This unit aims at providing basic theories and practices of Creativity Quotient. Moreover, some case studies will be offered for peer discussion in students' workplace through creative thinking and planning to understand the strengths and weaknesses of individual creativity, how to maximize their creative blocks by reducing the thinking blocks

3. IQ, EQ, AQ (2 sessions)

This unit will provide students a general view on how to distinguish various kinds of quotients, which are commonly used and measured in workplace. With the understanding of their functions, characteristics with the evaluation exercises (such as role play, quizs) being used among students, they can maximize their potential capabilities in their design profession.

4. Time management (2 sessions) - how to maximize our time and talents to achieve worthwhile goals based on a sound value system.

This unit will provide students' key self-development strategies and practices through 5 key guidelines, including perspective, purpose, personality, planning and productivity. In-class exercises and discussion are used to encourage interaction among one another.

5. Interpersonal and social skills (2 sessions) - how to build up human relationships and handle conflicts. This unit will firstly provide students a set of core skills that increase self-confidence and self-esteem through internal representation. reframing, SWISH, Thunking.... In doing so, students will strengthen their cognitive approach to developing self-confidence and in resolving conflicts to work on unconscious blocks and resistance to changes. With the increase of self-understanding on social interaction, it will encourage students to have emotion sharing and trust building, increase self-understanding on social interaction and sustaining a long-lasting friendship.

C. Unit Goals

Some goals have been set for the 10-session course. (Please see Fig.4 or slide 31)

III. Sample Unit: Creativity and creative thinking (Please see Fig.5or slide 31) **A. Unit Goal:**

- To understand the common theories of creativity being used nowadays;

- To learn the similarities & differences between divergent and convergent thinking;
- To reduce the blocks to creative thinking;
- To identify the restrictions on our problem-solving ability;

B. Unit Objectives (Please see Fig. 6)

C. Unit Design

a. Course Contents (see Fig. 8)

b. Teaching and Learning Activities of Sample Unit (see Fig. 8)

c. Assessment for Sample Unit

Basically Biggs Constructive Alignment will be used to check whether the Objectives and TLA will be aligned to the Assessment mode or not. Regarding assessment, the production of a designer guide will be graded according to the criteria of the SOLO Taxonomy. (see slide 47-48 for details)

d. Mode of Learning (see slide 47-48 & Fig. 8 for details)

e. Learner Evaluation Methods (see slide 47-48 for details)

IV. Curriculum Implementation Plan

A. An overview of the Implementation Plan

a. Schedule (please refer to slide 49,50 for details)

b. Major Tasks Run: it is divided into 4 stages, including planning, designing & developing, implementing and evaluating. (please refer to slide 51 for details)

c. Related Parties

Basically IVE Academic Board, Course Board, IVER course leader, P/T lecturers, Students Affairs Office trainers, Language laboratory instructors, part-time students.

d. Resources (please refer to slide 53 for details)

B. Pilot Run

Here is the tentative schedule:

Plan	Jan – Early Mar 2004
Design & develop	Early Mar – Sept 2004
Implement	Mid-Mar- Dec 2004
Evaluate	Early Jan –Mar 2005

V. Evaluation

a. Content

Feedbacks will be received from the various stakeholders on the appropriateness and effectivenesses of using course materials, TLA, format, mode of assessment for improving the designers competencies after the course completed.

b. Process

Feedbacks will be received among the co-ordination of various parties, course leaders, Student

Affairs Office trainers, Language laboratory instructors for logistic arrangements, time schedule and related issues.

c. Participants

Two forms of assessment will be involved, for the internal assessment, it will be conducted to course leaders, part-time lecturers, students, Student Affairs Office trainers, language laboratory instructors.

For external assessment, it will be conducted to Academic and Course Board of IVE, employers survey and design professional bodies.

d. Outcomes

Basically, there are threefold:

- To provide a self-development course for P/T students;
- To provide a try-out course materials and developed furtherly into F/T design self-development course;
- To be developed furtherly into staff development programme in Design (IVE).

B. Sources & techniques for gathering the evaluation information

Sources:

-Empirical data from survey will be gathered for compilation and analyzing for appropriateness and effectiveness of course content, mode of delivery and logistic arrangements. In doing so, it will fill the discrepancies between the actual & desired levels of designers competencies.

-Secondary data will be used as evidences to support the Needs assessment (see reference list).

Techniques:

- Survey (Questionnaire and focused group interviews) will be modified from the previous questionnaires for review and modification.

A small try-out exercise had been conducted after the survey for feedbacks:

- Target: 2 students out of 5 responded through email & phone interview
- Findings: Positive feedbacks

Q.1	Both agreed that they were satisfied with their creative designer guide.
Q.2	1 Strongly agreed, 1 agreed that the creative thinking skills were easy
	to follow.
Q,3	1 Strongly agreed, 1 was neutral that thinking skills were systematic.
Q.4	Both were neutral that they had improvement in creative thinking skills
	after the exercises.
Q.5	1 agreed, 1 strongly agreed that they would use the creative thinking
	skills in their future career.

VI. Conclusion

•Kaufman et al. (1971)

'With a clearer identification of problems, it helps to act as the effective foci for action to initiate, review, or configure resources as internal assessment.'

Kaufman et al. (1971) and Mager (1997)

'Needs Assessment was plotted on the basis of the outcomes, rather than the basis of the process. As a result, with proper identification of problems, it helps to evaluate the appropriateness of the needs.'

To summarize, the identification of problems, objectives and goals were set with the new draft of curriculum document is a good exercise aiming at filling the gaps of the actual and the desired needs of designers competencies.

Stages	Period (2004)	Major Tasks	Related Parties/persons	Resources
	Mid-Jan	Theoretical models of curriculum	Dr. Josie Csete	EDU
	Feb	Learning Needs Assessment Problems identification through study	Mr. Wong Chun-kwong P/T lecturer	EDU
	Early Mar	Research – literature review	P/T lecturer	IVE calendars, prospectus, newspaper, internet, journals and books etc.
	Early-Mid Mar	Analyze Needs Assessment	P/T lecturer	(same as above), Pilot test on a focused group
	Mid to end of Mar	Draft of survey	P/T lecturer	Books, newspaper, internet, journals etc.
	End of Mar	Proposal of survey methodology	P/T lecturer	Books, newspaper, internet, journals etc.
	Early Apr to end of Apr	 Issue of Needs Assessment Report Conduct questionnaire and interviews to various parties Design develop curriculum document 	P/T lecturer, students, Head of Design Department (IVE), P/T lecturer (IVE), design firms, design association	Books, newspaper, internet, journals etc, A-V educational aids
	May	Submit CD to the course leader and Department Head (Design) for approval with survey findings	P/T lecturer, Course leader, Department Head (IVE), P/T lecturer (IVE),Students Affairs Office (IVE)	Supporting document, CD & Endorsement
	June	The Dept. submits drafted CD and consults with the Course Board during their evaluation meeting	P/T lecturer, Course Board (IVE)	
		Further approval needs submitting to Academic Board for final approval. Collect comment and	******* (IVE) P/T lecturer, Course	

' CD	
	Leader (IVE)
Arrangement for	Design
administration& logistic	Department(IVE)
Submit details to	P/T lecturer, Course
Course Boards for the	Leader (IVE)
coming academic	
calendar.	
Revised version of CD	P/T lecturer, Course
submitted to Course	Leader (IVE)
Leader for approval	
1 st pilot run of the new	P/T lecturer,
course	trainer, students
Course evaluation –	P/T lecturer,
Collect Feedbacks from	trainer, students
lecturer, students	
Revise course	Same as above
2 nd try-out run	Same as above
•	
	administration & logistic Submit details to Course Boards for the coming academic calendar. Revised version of CD submitted to Course Leader for approval 1 st pilot run of the new course Course evaluation – Collect Feedbacks from lecturer, students Revise course

Fig. 7: The implementation Plan

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Sub-Topics	Contents	Teaching &	Assessment	Mode of	Duration
5 ub-1 opics	Coments	Learning Activities	Assessment	Learning	Durunon
1. Understand different types and stages of creative thinking strategies:	Stages of processes:	- Peer discussion	Deve diamaging		1
(a) Brainstorming	1. Preparation	on case studies	-Peer discussion in class	and case studies	1 meeting (3 hours)
(b) Divergent Thinking (Generative Tools)	2. Incubination	- Project Learning and group discussion	- Peer discussion in class	-Project learning in class	
(c) Convergent Thinking (Analytical Tools)	3. Inspiration	- Project Learning and group discussion	- Peer discussion in class	-Project learning in class	
(d) Decision & production	4. Verification	- Feedback from lecturer and groups	- Assessment from lecturer & peer in class	-Project learning presentation	
2. Use suitable body language for skills (verbal & non-verbal)	-Voice level -Intonation & pronunication -Gesture & eye contact -Integration with text and images	- Class discussion	- Quizs and case studies with class discussion	Face to face: Class discussion Instructor's feedback	¹ ∕₂ meeting
3. Presentation skills (written & design)	- Layouts - Styles	- Class discussion with case studies	- Quizs and case studies with class discussion	Face to face: Class discussion Instructor's feedback	¹ ∕₂ meeting
4. Handle Q & A	- Conceptual Blocks - Research Methodology - Critical Response - Skills (Oral & Written)	- Class discussion with case studies	- Case studies with class discussion	In-class discussion with sample questions Face to face: Class discussion	¹ ∕₂ meeting
5. Final Presentation		- Group presentation of project learning	- Group evaluation by lecturer	5-minutes presentation Face-to-face: Students' presentation, instructor's feedback	¹ ∕₂ meeting

Fig. 8: Sample Unit of Lesson Plan

Theme	TLAS	Time	Duration
Introduce different types of thinking strategies			
Stage 1 Preparation			
- Problem Identification	- Peer discussion on defining a problem	15 min.	6:30 - 6:45 p.m.
- Individual brainstorming	- Individual brainstorming privately for 20 min.	15 min.	6:45 – 7:00 p.m.
	- Round-Robin sharing	15 min.	7:00 -7:15 p.m.
	- Discuss and decide (relaxation in music)	15 min.	7:15 – 7:30 p.m.
Brea	k	10 min.	7:30 -7:40 p.m.
Stage 2 Incubation			
- 4 brain waves	- Short lecture	15 min.	7:40 -7:50 p.m.
	- Doing some physical exercises with students in class	15 min.	7:50 -8:00 p.m.
Stage 3 Inspiration	Project Learn	ing: Designer Guide	
Divergent Thinking	- Group discussion and sharing on project learning	15 min.	8:00-8:15 p.m.
Convergent Thinking	-Group discussion and sharing	15 min.	8:15-8:30 p.m.
Stage 4 Verification	1		
	- Project Learning and sharing in class from groups(5)	30min.	8:30-9:00 p.m.
	- Feedbacks from lecturer	20 min.	9:00-9:20 p.m.
	- Q & A - Feedbacks from students	10 min.	9:20-9:30 p.m.

Fig. 9: Detailed Lesson Plan on Unit 3 (1st meeting)

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Appendix A Pilot Test - Questionnaires with Key Findings from Students

Please give a tick (\checkmark) against the following items with max. 10 things you want to learn the most from the English & Design Communication course:

Part A English Grammar				
1. Articles (A, an, the, some, all, both, each, every)				
2. Nouns (Common, proper, material, abstract, collective nouns)				
3. Tenses				
4. Adjectives				
5. Adverbs				
6. Prepositions				
7. Conjunctions				
8. Interjections				
9. Writing skills				
10. Others,				
Part B English used in Design				
1. Design Terms and disciplines				
2. Design Styles				
3. Material properties				
4. Design management and procedures				
5. Design drawings and titles				
6. Local and Overseas famous design firms				
7. Project presentations				
8. Others,				
Part C Business English				
1. Business English phrases				
2. Memo				
3. Email				
4. Complaint letter				
5. Letter for an order				
6. Letter for providing some service				
7. Others,				
Part D Skills and Attitudes				
1. Self-managed skills (time, work, study, tutorial, family)				
2. Self-images and abilities				
3. Creativity and thinking skills				
3. Social skills and group dynamic				
4. Self-development: Adversity/ Emotional /Creativity Quotients				

Since there is a shortage of research materials or public report released in this issue so far, in order to support the significant value of the study, I recently conducted a small-scaled pilot test using a simple questionnaire during the English and Communication Design course in early March, who is the P/T lecturer in the Design Department¹. The questionnaire was divided into 4 parts. Meanwhile, I would focus on the key findings in Part D, 28 students were present out of the total 30 enrolled, **about 2/3 (16 questionnaires out of 23 returned)** of the initial survey indicated their needs for acquiring the job competencies with the maximum scores on self-development skills and creativity in the Design

¹ The study was conducted on a focused group of P/T students taking second year of Higher Certificate Interior Design and Environmental Design, most of them are working in design or design-related profession during the day-time. Several categories of skills are listed, including professional knowledge, language skills, attitudes (including personal development, creativity, self-management, interpersonal and group dynamic) for their opinions.

programme. The result findings revealed that there was a general need of developing a new course or adding new course content into the existing structure.

Appendix BSurvey- Questionnaires to students with Key Findings from StudentsPart AQuestionnaires

Dear all,

I am conducting a survey on identifying the actual needs of students in terms of values, attitudes, understanding existing situation between study and career competencies and areas of improvement. Your valuable opinions will be greatly beneficial in contributing to the learning and teaching quality through the development of a holistic development in the P/T Design programme. Attached is the list of questionnaires for your reference. We would be grateful if you can spare some time to complete the questionnaire and return to me through purrienghk@emb.gov.hk on or before 2 April 2004. All the information will keep in strict confidential and solicited for academic purposes only. In case of queries, please feel free to contact me at (M) 9011 8967. Thank for your cooperation in this project!

NG Pui-yee, Purrie P/T Lecturer, Design Department, IVE (Shatin Campus)

Please give a tick(s) wherever appropriate, unless specified or write your opinions in the space provided. * 1=Strongly Agree (SA), 2= Agree (A), 3= Neutral(N), 4= Disagree(D), 5= Strongly Disagree (SD)

Part A Values of 'Attitudes':

1. Please rank the orders with 1 is the most important one while 4 is the least important.

- _____a. Design knowledge _____b. Computer technology
- ____ c. Language skills ____ d.
 - d. Attitudes and values

IQ,EQ,AQ

_____ e. Others, (please specify): ______

2. Please rank the orders with 1 is the most important one while 4 is the least important.

_____a. Self-development

- b. Creativity and thinking skills
- ____ c. Time management
- _____ e. Interpersonal & Social skills
 - _____ f. Others, (please specify):

(For Q. 3-7, please give only one tick against the most appropriate choices)

		SA	А	Ν	D	SD
3.	Do you agree that attitudes and values are important in your course?					
4.	Do you expect to develop your skills in problem-solving and planning?					
5.	Do you expect to develop your skills in building up your team work?					
6.	Do you expect to develop your skills in building up your self-confidence?					
7.	Do you expect to develop your skills in building up your time management?					

d.

(From Q.8 - 12, choices may be more than 1)

a. c.	Your strengths Work adjustment		b. d.	ive tick(s) against the choices you like to learn. Self-assessment personalities abilities Your difficulties
9. If you h learn.	ave chosen Creativity and thinl	king skills	in Q.	2, please give tick(s) against the choices you like to
a. c. e.	Divergent thinking		d.	Independent thinking skills Convergent thinking
10. If you	have chosen Time managemen	t in Q.2, p	lease	give tick(s) against the choices you like to learn.
a. c. e.	Problem solving skills Divergent thinking Others, (please specify):		d.	Independent thinking skills Convergent thinking
11. If you	have chosen IQ,EQ,AQ skills i	n Q.2, ple	ase gi	ve tick(s) against the choices you like to learn.
a. c.	Uses Your weakness			Your strengths Maximize productivity
e.	Others, (please specify):			
12. If you hat like to learn.		ocial skills	s in Q	.2, please give tick(s) against the choices you
a.	Team building		b.	Conflict Management
c.	Communication skills		d.	Leadership
e.	Others, (please specify):			
Part B	Differences between study and	d career c	ompe	tencies
(For Q. 13-3	2, please give only one tick ag	ainst the n	nost a	ppropriate choices)
Your major s	strengths in your study.			

		SA	Α	Ν	D	SD
13.	Confidence building					
14.	Creativity and thinking skills					
15.	Time management skills					
16.	Interpersonal & social skills					
17.	Language skills					

The areas you want to improve in your study.

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		SA	Α	Ν	D	SD
18.	Confidence building					
19.	Creativity and thinking skills					
20.	Time management skills					
21.	Interpersonal & social skills					
22.	Language skills					

Your major strengths in your working situation.

		SA	Α	Ν	D	SD
23.	Confidence building					
24.	Creativity and thinking skills					
25.	Time management skills					
26.	Interpersonal & social skills					
27.	Language skills					

The areas you want to improve in your working situation.

		SA	Α	Ν	D	SD
28.	Confidence building					
29.	Creativity and thinking skills					
30.	Time management skills					
31.	Interpersonal & social skills					
32.	Language skills					

Part C The Operation of new course

Please give tick(s) against your appropriate answers

33. Which do you prefer the adding of "Attitude" course?

- _____ a. A new individual course
 - b. An integrated course with the existing course, if so,
 - which course, _____
- ____ c. Others, (please specify): _____

34. How many sessions do you agree? (*Each session is 3 hours each)

_____ a. 5 _____ b. 10 _____ c. 15 ____ d. 20

_____e. Others, (please specify):

35. Learning and teaching activities (Choices may be more than one)

- _____ a.Case study_____ b.Role play_____ c.Project learning_____ d.Quiz
- e. Others, (please specify):

36. Mode of Assessmenta. No assessment

	b.	Have assessment				
	_ c.	Others, (please specify):				
Part	D D	emographic Data				
37.	You	r Gendera. Male			b. Female	
38.	_ a.	Group Between 18 - 25 Between 36 - 45			Between 26 - 35 Above 46	
39. 		ademic level Secondary school, which level?				
	b.	IVE, what level?				
	c.	Others, (please specify):				
40.	Your	working experience, (please spec	ify): _			_years
	a. c.	position in your company? Assistant Designer Design Manager Others, (please specify): _		d.	Designer Draftsman	
	_ a. _ c. _ e.			d. n-de	-	
43.		n services your company special Hospitality	izes in?	b.	Corporate	
	c. e.	Retail Product		d. f.	Exhibition & display Graphic	
	g.	Others, (please specify):				
44. 	a. c. e.	ssional practices your company p Conceptual design Technical planning Contracting/ sub-contractors Materials & products Others, (please specify):			bices may be more than 1) Space and facilities plannin Project management Project Consultancy Furniture design & supplie	-

That's the end! Thank you!

Appendix B - Part BKey findings from Students' questionnaires

Questionnaires Distribution:

In order to increase the sample sizes, which were selected due to convenience samples, questionnaires were sent to 4 classes (Higher Diploma in Product Design and Technology Yr.1 and Yr.2, Higher Certificate in Interior and Environment Design Yr.2, Higher Diploma in Interior and Environment Design Year 2, with the help of the class monitors through emails, then full sets of questionnaires were printed and distributed in class on 2 April (Fri.) and 18 April (Fri.) evening for their immediate feedbacks. There were 2 weeks-Easter holidays in between. The enrolled number of students were approximately 35, 40, 30, 30 respectively. The overall number of questionnaires returned was 65 (65%).

Time and Venue Constraints:

Due to the 2 weeks' Easter holidays, follow-up through emails and in-class survey were difficult to be conducted for students, Department Head or staff of Design Department, Students Affairs Office (IVE) as they did not need to attend class or on leave. However, the same set of survey was sent to the another class last week (Higher Diploma in Interior and Environmental Design Year 2) for greater reliability and validity with the enlargement of the sample size. Follow-up emails and interviews will be conducted in due course.

Questionnaires	Percentage (%)
Distributed	100
Returned	65
Usable	65
Total	65%

Part A Values of "Attitudes"

Q.1 Regarding the ranking of the course curriculum in terms of design knowledge, computer technology, language skills and attitudes and values, findings showed **out of the 65 respondents**, Design Knowledge ranked '1' with the average ratings of 1.43, then Language Skills ranked '2' with average of 2.6, Attitudes and Values ranked as '3' with an average rate of 2.63 while Computer Technology ranked '4' with the average of 2.9 while other rated 0.7.

Q.2 Regarding the ranking of the course content, **Creativity and thinking skills ranked as '1' with the average score of 1.75**, Self-development as the second with the rate as 2.23, Time Management ranked as third with the average as 2.57, Interpersonal 7 social skills ranked fourth with the rate as 2.64 while IQ,EQ,AQ as the fifth with an average rate as 2.66 while others ranked as the last with the rate as 0.3.

Q.3 As far as whether attitudes and values were important in the course, the average rate is 2.23 which indicates 'Agree'.

Q.4 Regarding the students' expectation of developing skills in problem-solving and planning, the average rate is 2 which indicates 'Agree'.

Q.5 As far as the students' expectation of developing skills in building up team work, the average rate is 2.2 which indicates 'Agree'.

Q.6 As far as the students' expectation of developing skills in building up self-confidence, the

average rate is 2.21 which indicates 'Agree'.

Q.7 Regarding the students' expectation of developing skills in building up time management, the average rate is 1.98 which indicates 'Agree'.

Q.8a. For those who have chosen Self-development in Q.2, 26 out of 65 (40%) indicate they like to learn 'Your strengths'.

Q.8b. For those who have chosen Self-development in Q.2, **31 out of 65 (47.7%) indicate they like to learn 'Self-assessment personalities abilities.'**

Q.8c. For those who have chosen Self-development in Q.2, **28 out of 65 (43%) indicate they like to learn 'Work Adjustment'.**

Q.8d. For those who have chosen Self-development in Q.2, 22 out of 65 (33.8%) indicate they like to learn 'Your difficulties'.

Q.8e. For those who have chosen Self-development in Q.2, 5 out of 65 (7.7%) indicate they like to learn 'Others'.

On the whole, the first 3 rankings of the feedbacks are Self-assessment personalities abilities, work adjustment, strengths respectively.

Q.9a. For those who have chosen Creativity and thinking skills in Q.2, 33 out of 65 (50.8%) indicate they like to learn 'Problem solving skills'.

Q.9b. For those who have chosen Self-development in Q.2, **30 out of 65 (46.1%) indicate they like to learn 'Independent thinking skills'.**

Q.9c. For those who have chosen Self-development in Q.2, 22 out of 65 (33.8%) indicate they like to learn 'Divergent Thinking'.

Q.9d. For those who have chosen Self-development in Q.2, 22 out of 65 (33.8%) indicate they like to learn 'Convergent Thinking'.

Q.9e. For those who have chosen in Q.2, 1 out of 65 (1.5%) indicate they like to learn 'Others'.

On the whole, the first 3 rankings of the feedbacks are **Problem solving skills, Independent thinking skills, Divergent Thinking with equal ratings as Convergent Thinking** respectively.

Q.10a. For those who have chosen Time management in Q.2, 25 out of 65 (38.5%) indicate they like to learn Problem Solving skills.

Q.10b. For those who have chosen Time management in Q.2, 22 out of 65 (33.8%) indicate they like to learn Independent thinking skills.

Q.10c. For those who have chosen Time management in Q.2, 16 out of 65 (24.6%) indicate they like to learn Divergent Thinking.

Q.10d. For those who have chosen Time management in Q.2, 14 out of 65 (21.5%) indicate they like to learn Convergent thinking.

Q.10e. For those who have chosen Time management in Q.2, 0 out of 65 (0%) indicate they like to learn others.

On the whole, the first 3 rankings of the feedbacks are **Problem solving skills, Independent thinking skills, Divergent Thinking** respectively.

Q.11a. For those who have chosen IQ,EQ,AQ in Q.2, 16 out of 65 (24.6 %) indicate they like to learn 'Uses'.

Q.11b. For those who have chosen IQ,EQ,AQ in Q.2, 19 out of 65 (29.2%) indicate they like

to learn 'Your strengths'.

Q.11c. For those who have chosen in IQ,EQ,AQ in Q.2, 24 out of 65 (37%) indicate they like to learn 'Your weaknesses'.

Q.11d. For those who have chosen IQ,EQ,AQ in Q.2, **15 out of 65 (23%) indicate they like to learn 'Maximize productivity'.**

Q.11e. For those who have chosen in IQ,EQ,AQ in Q.2, 0 out of 65 (0%) indicate they like to learn others.

On the whole, the first 3 rankings of the feedbacks are 'Your weaknesses', 'Your strengths', 'Uses' respectively.

Q.12a. For those who have chosen Interpersonal and Social Skills in Q.2, 24 out of 65 (37%) indicate they like to learn 'Team Building'.

Q.12b. For those who have chosen Interpersonal and Social Skills in Q.2, 17 out of 65 (26%) indicate they like to learn 'Conflict management'.

Q.12c. For those who have chosen Interpersonal and Social Skills in Q.2, **19 out of 65 (29%)** indicate they like to learn 'Communication skills'.

Q.12d. For those who have chosen Interpersonal and Social Skills in Q.2, 26 out of 65 (40%) indicate they like to learn 'Leadership'.

Q.12e. For those who have chosen Interpersonal and Social Skills in Q.2, 0 out of 65 (0%) indicate they like to learn others.

On the whole, the first 3 rankings of the feedbacks are 'Leadership','Team Building', 'Communication skills' respectively.

Part B Differences between study and career competencies

Q.13 For major strengths in P/T students' study, the average rate is 2.3 out of the findings which agrees that confidence building was their strengths.

Q.14 For major strengths in P/T students' study, the average rate is 2.15 out of the findings which agrees that creativity and thinking skills were their strengths.

Q.15 For major strengths in P/T students' study, the average rate is 2.3 out of the findings which agrees

that time management skills were their strengths.

Q.16 For major strengths in P/T students' study, the average rate is 2.1 out of the findings which agrees

that interpersonal and social skills were their strengths.

Q.17 For major strengths in P/T students' study, the average rate is 2.18 out of the findings which agrees that language skills were their strengths.

Q.18 For the areas P/T students want to improve in their study, the average rate is 2.03 out of the findings which supports that confidence building were their expected areas of improvement.

Q.19 For the areas P/T students want to improve in their study, the average rate is 1.7 out of

the findings which supports that creativity and thinking skills were their expected areas of improvement.

Q.20 For the areas P/T students want to improve in their study, the average rate is 1.81 out of the findings which supports that time management skills were their expected areas of improvement.

Q.21 For the areas P/T students want to improve in their study, the average rate is 1.97 out of the findings which supports that interpersonal and social skills were their expected areas of improvement.

Q.22 For the areas P/T students want to improve in their study, the average rate is 1.89 out of the findings which supports that language skills were their expected areas of improvement. On the whole, the average ratings of improvement of students in their study is less than the strengths in the study which indicates that they strongly support the needs of the 5 aspects surveyed after comparison.

Q.23 For major strengths of P/T students in their working situation, the average rate is 2.01 out of the findings which agrees that confidence building was their strengths.

Q.24 For major strengths of P/T students in their working situation, the average rate is 2.06 out of the findings which agrees that creativity and thinking skills were their strengths.

Q.25 For major strengths of P/T students in their working situation, the average rate is 2.09 out of the findings which agrees that time management skills were their strengths.

Q.26 For major strengths of P/T students in their working situation, the average rate is 1.98 out of the findings which agrees that interpersonal and social skills were their strengths.

Q.27 For major strengths of P/T students in their working situation, the average rate is 2.23 out of the findings which agrees that language skills were their strengths.

Q.28 For the areas P/T students want to improve in their working situation, the average rate is **1.8 out of the findings which supports that confidence building were their expected areas of improvement**.

Q.29 For the areas P/T students want to improve in their working situation, the average rate is 2.08 out of the findings which supports that creativity and thinking skills were their expected areas of improvement.

Q.30 For the areas P/T students want to improve in their working situation, the average rate is 1.78 out of the findings which supports that time management skills were their expected areas of improvement.

Q.31 For the areas P/T students want to improve in their working situation, the average rate is 1.83 out of the findings which supports that interpersonal and social skills were their expected areas of improvement.

Q.32 For the areas P/T students want to improve in their working situation, the average rate is **1.92 out of the findings which supports that language skills were their expected areas of improvement**.

On the whole, the average ratings of improvement of students in their working environment is less than the strengths in the study which indicates that they generally support the needs of the 5 aspects surveyed after comparison.

Part C The Operation of new course

Q.33 **81.5%** (53 out of 65) of the respondents indicated they preferred the adding of 'Attitude' course as a new individual course, whereas 9.2% (6 out of 65) of the respondents indicated they preferred the adding of 'Attitude' course as an integrated course with the existing course.

Q.34 23% (15 out of 65) agreed the new course should last for 5 sessions,
35.4% (23 out of 65) agreed the new course should last for 10 sessions,
18.5% (12 out of 65) agreed the new course should last for 15 sessions,
13.8% (9 out of 65) agreed the new course should last for 20 sessions.

On the whole, 10 sessions is the option with the highest rating among all the choices.

Q.35 Regarding the learning and teaching activities (choices may be more than one), **56%** (**36 out of 65**) **indicated they preferred case study**, **21.5%** (**14 out of 65**) **chose role play**, **58.5%** (**38 out of 65**) **, preferred project learning and 16.9%** (**11 out of 65**) **supported quiz**.

Q.36 Both 44.6% (29 out of 65) of respondents agreed no assessment for the new 'Attitude' course as well as supported to have assessment, whereas 3% (2 out of 65) choice others.

Part D Demographic Data

Q.37 52.3% (34 out of 65) were males whereas 41.5% (27 out of 65) were females.

Q.38 43% (28 out of 65) were between 18-25 whereas 40% (26 out of 65) were between 26-35, 7.7% (5 out of 65) were between 36-45.

Q.39 20% (13 out of 65) chose secondary level, 63% (41 out of 65) chose IVE, whereas 10.7% (7 out of 65) indicated others, for the rest they did not give any answer.

Q.40 Their working experience ranged from 1 to 15 years, with an average of 5.79 years.

Q.41 32.3% (21 out of 65) were designers, 24.6% (16 out of 65) were assistant designers, 9.2% (6 out of 65) were draftsmen, whereas 20% (13 out of 65) did not give any answer.

Q.42 Regarding the nature of design firms they were working, 44 % (32 out of 65)were employed in local firms, 10.8% (7 out of 65) are working in the branch of an overseas firm, 1.5% (1 out of 65) in joint-venture firm, 12.3% (8 out of 65) in partnership, 9.2% (6 out of 65) of in-house design department of a non-design firm while 6.2% (4 out of 65) indicated others.

Q.43 Regarding the design services their companies specialize in, 30.8% (20 out of 65) chose

product, 18.5% (12 out of 65) chose exhibition and display, 13.8% (9 out of 65) of the respondents chose graphics.

Q.44 For the professional practices their companies provide, 40% (26 out of 65) chose technical planning, 36.9% (24 out of 65) chose materials & products, 35.8% (23 out of 65) chose project management, while 32.3% (21 out of 65) chose conceptual design, 13.8% (9 out of 65) chose space and facilities, contracting/sub-contractors, furniture while 6.15% (4 out of 65) chose others.

Appendix C Interview Questions Sent to Design Department and Lecturers

31 March, 2004

Dear all,

I am writing to invite you to fill in a survey or attend a personal interview related to my course titled "Teaching, Curriculum and Evaluation", which is my current Postgraduate Certificate study in the Hong Kong Polytechnic University. The aims of the interview are as follows, firstly, to investigate the needs of the part-time students taking the Design Programme in the IVE (Shatin campus); secondly, to find out what are the differences between study and career competence levels of societal needs; thirdly, what are the strengths, weaknesses, opportunities in the Design Programme (using the institution, lecturer and students' viewpoints); fourthly, how to overcome the barriers and the methods of implementing the new course into the programmes.

Your valuable opinions and suggestions will surely of great help to improve the needs of P/T students as well as to equip better-educated designers which will provide quality services to the Hong Kong design profession. In doing so, more and more competent designers will contribute their expertise including professional knowledge, skills and attitudes to the creative industries of Hong Kong.

We would be grateful if you can spare some time either to attend a personal (telephone) interview at your convenience (Attached Interview Questions). Or complete the questionnaire, and return to me through <u>purrienghk@emb.gov.hk on or before 14 April 2004</u>. (Attached questionnaires - See Appendix B)

All the information will keep in strict confidential and will be solicited for academic purposes only. In case of queries, please feel free to contact me at (M) 9011 8967.

Thank for your cooperation in this project!

Yours sincerely,

NG Pui-yee, Purrie P/T Lecturer Design Department, IVE (Shatin Campus)

Ref. No: (For office use) _____

Name: _____ Interviewer: _____ Date:

Interview questions:

- 1. Please introduce your title, job duties and any related experience of teaching the part-time design students in IVE.
- 2. What are your opinions with the curriculum objectives listed in the existing Design programme in the prospectus? Are there any improvements needed? For example, design knowledge (design theories), skills (computer & technology, language) and attitudes (e.g. self-development, creativity & thinking skills, IQ,EQ & AQ, interpersonal & social skills).

(see attached questionnaires- Appendix B)

- 3. What are your opinions regarding the needs of adding "Attitudes" course of P/T students into the existing Design curriculum?
- 4. What are your opinions of the P/T students regarding the differences between study and career competencies (in terms of confidence building, creativity and thinking skills, time management skills, interpersonal & social skills, language skills)?
- 5. How to implement the new needs into the course?
 - Is it a new course or is it better to integrate into the existing course?
 - No. of sessions required.
 - Appropriate learning & teaching activities.
 - Mode of assessment
 - Any institutional & organizational policies should follow?
 - Any expected difficulties (e.g. budget, human resources & manpower, facilities, equipments, quality assurance & evaluation methods for review)?
- 6. Any other opinions?

Thank for very much for your support!

Appendix D Interview Questions Sent to Design Association and Design Firms

To: Mr. Charles NG Chairman of the Hong Kong Designers Association 16 April 2004

Dear Charles,

I am writing to invite you to fill in some interview questions (or telephone interview) and a questionnaire related to my current Postgraduate Certificate study of "Teaching, Curriculum and Evaluation" in the Hong Kong Polytechnic University. The aims of the survey² are as follows:

- firstly, to investigate the needs of the part-time students taking the Design programme in the IVE (Shatin campus);
- secondly, to find out what are the differences between study and career competence levels of societal needs;
- thirdly, what are the strengths and weaknesses in the Design programme (as the Chairman of the Designers Association and lecturers' viewpoints);
- fourthly, factors of concern for implementing the new course into the Design programme if there is a need being perceived.

Your valuable opinions and suggestions will surely of great help to improve the needs of P/T students as well as to equip better-educated designers to provide quality services to the Hong Kong design profession. In doing so, more and more competent designers will contribute their expertise including professional knowledge, skills and attitudes to the creative industries of Hong Kong.

I would be grateful <u>if you or your staff</u> can spare some time to fill in the interview questions at your convenience (p.2-3 Interview Questions) and complete the questionnaire, and return to me through <u>purrienghk@emb.gov.hk on or before 23 April 2004</u>. (p. 4-7 Questionnaires).

All the information will keep in strict confidential and will be solicited for academic purposes only. In case of queries, please feel free to contact me at (M) 9011 8967.

Thank you for your cooperation in this project!

Yours sincerely, NG Pui-yee, Purrie P/T Lecturer, Design Department, IVE (Shatin Campus)

 $^{^2}$ Since there is a shortage of research materials or public report released in this issue so far, in order to support the significant value of the study, a small-scaled pilot test using questionnaire was recently conducted by me in early March, who is the P/T lecturer in the Design Department². 28 students were present out of the total 30 enrolled, about 2/3 (16 questionnaires out of 23 returned) of the initial survey reflected their needs for acquiring the job competencies such as self-development skills and creativity into the course. The result findings revealed that there was a general need of developing a new course or adding new course content into the existing structure.

28 – 30 November 2006 Hong Kong

Ref. No: (For office use)

Date:

Interview questions:

- 1. Please introduce your title, job duties or any related teaching experience of part-time design students in IVE.
- 2. What are your opinions with the curriculum objectives listed in the existing Design programme in the prospectus? Are there any improvements needed?

(see attached questionnaires –<u>See Questionnaires Part A</u>)

3. What are your opinions (with ranking) regarding the needs of adding "Attitudes" course of P/T students into the existing Design curriculum?

4. What are your opinions of the P/T students regarding the differences between study and career competencies (*See Questionnaires Part B* in terms of confidence building, creativity and thinking skills, time management skills, interpersonal & social skills, language skills)?

- 5. How to implement the new needs into the course (See <u>Questionnaires Part C)</u>?
 - An individual new course or integrate into the existing course?
 - No. of sessions required
 - Appropriate learning & teaching activities
 - Mode of assessment
 - Any institutional & organizational policies should follow?
 - Any expected difficulties (e.g. budget, human resources & manpower, facilities, equipments, quality assurance & evaluation methods for review)?

6. Any other opinions?

Note: Do you want to receive a summary of the P/T students' feedbacks after the survey was conducted?

Yes, ____ No, ____

Thank for very much for your support!

16 April 2004

To the Owner/Director of design firms,

I am writing to invite you to fill in some interview questions and a questionnaire related to my current Postgraduate Certificate study of "Teaching, Curriculum and Evaluation" in the Hong Kong Polytechnic University. The aims of the survey³ are as follows:

- firstly, to investigate the needs of the part-time students taking the Design programme in the IVE (Shatin campus);
- secondly, to find out what are the differences between study and career competence levels of societal needs;
- thirdly, what are the strengths and weaknesses in the Design programme (as the Chairman of the Designers Association and lecturers' viewpoints);
- fourthly, factors of concern for implementing the new course into the Design programme if there is a need being perceived.

Your valuable opinions and suggestions will surely of great help to improve the needs of P/T students as well as to equip better-educated designers to provide quality services to the Hong Kong design profession.

I would be grateful <u>if you or your staff</u> can spare some time to fill in the interview questions at your convenience (p.2-3 Interview Questions) and complete the questionnaire, and return to me through <u>purrienghk@emb.gov.hk on or before 23 April 2004</u>. (p. 4-7 Questionnaires).

All the information will keep in strict confidential and will be solicited for academic purposes only. In case of queries, please feel free to contact me at (M) 9011 8967.

Thank you for your cooperation in this project!

Yours sincerely, NG Pui-yee, Purrie P/T Lecturer, Design Department, IVE (Shatin Campus)

³ Since there is a shortage of research materials or public report released in this issue so far, in order to support the significant value of the study, a small-scaled pilot test using questionnaire was recently conducted by me in early March, who is the P/T lecturer in the Design Department³. 28 students were present out of the total 30 enrolled, about 2/3 (16 questionnaires out of 23 returned) of the initial survey reflected their needs for acquiring the job competencies such as self-development skills and creativity into the course. The result findings revealed that there was a general need of developing a new course or adding new course content into the existing structure.

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	Ref. No: (For office use)
Name of Interviewee:	
Name of Design Firm:	
Date:	

Interview questions (please answer if applicable):

- 1. Please introduce your position or any of your staff are educated in IVE before and now.
- 2. What are your opinions about the Hong Kong designers' competencies? Are there any improvements suggested for the Design Department of IVE ?

(see attached questionnaires –<u>See Questionnaires Part A</u>)

3. What are your opinions (with ranking) regarding the needs of adding "Attitudes" course of P/T students into the existing Design curriculum?

4. What are your opinions of the P/T students regarding the differences between study and career competencies (*See Questionnaires Part B* in terms of confidence building, creativity and thinking skills, time management skills, interpersonal & social skills, language skills)?

- 5. How to implement the new needs into the course (See <u>Questionnaires Part C)</u>?
 - An individual new course or integrate into the existing course?
 - No. of sessions required
 - Appropriate learning & teaching activities
 - Mode of assessment
 - Any institutional & organizational policies should follow?
 - Any expected difficulties (e.g. budget, human resources & manpower, facilities, equipments, quality assurance & evaluation methods for review)?

6. Any other opinions?

Note: Do you want to receive a summary of the P/T students' feedbacks after the survey was conducted?

Yes, ____ No, ____

Thank for very much for your support!

Interviewee: Mr. Charles NG Date: 22 April, 2004 (Thur.) 12:50 p.m. –1:45 p.m. Format: Telephone Interview (Off) 2824-9328 Interviewer: Purrie NG

Interview Questions:

1. Please introduce your title, job duties or any related teaching experience of part-time design students in IVE.

Name: Mr. Charles NG Titles:

-The Chairman of the Hong Kong Designers Association (2004-06);

- The Director of the Design Centre
- -The Visiting Lecturer of the PolyU (SPEED) specialized in brand building and innovation of graphic and product development.
- The part-time Design Lecturer in Tsing Yi Technical College since 1996, then part-time Design Lecturer in IVE (Shatin Campus) subsequently.
- -The examiner of the accreditation programmes of Hong Kong Art Centre, IVE and some private design institutions and judges in various design events and activities.

2. What are your opinions with the curriculum objectives listed in the existing Design Programme in the prospectus? Are there any improvements needed?

- Regarding skills, lots of changes have been evolved since Bauhaus period in 1920s, which put emphasis on arts and craftsmanship. Then the technology was rapidly changed to computer technology and focused more on learning softwares.

Regarding the 'Attitudes', it could be broadly into narrow and broad sense. The former one depends on individual and personal development while the latter one was the broadening the scope and horizon to a worldview perspective. It was crucial to have a proper self-development in building self-confidence. After developing a way of seeing, it was not just cultivate a sense of personal know-how, it was essential to develop a global view through some liberal studies.

- As far as knowledge was concerned, on the whole, IVE was greatly influenced by aesthetic curriculum in the past (meanings and functions). With the rapid changes in technology nowadays, there were lots of room of exploring and developing the technology, R&D in relation to the changing market and industry. In other words, more diversification was required in the IVE curriculum.

Referring to the details of the questionnaires:

- 1. He ranked the order as follows, firstly, Design knowledge, secondly, computer technology or communication, thirdly, language skills, fourthly, attitudes and skills and fifthly, others such as design missions and philosophies.
- 2. He ranked the order as follows, **firstly**, **Creativity and thinking skills**, **secondly**, **IQ**,**EQ**, **AQ**, **thirdly**, **self-development**, **fourthly**, **interpersonal & social skills**, **fifthly**, **time management**, **sixthly**, **others such as building- up individual and society missions**.
- 3. He **strongly agreed** that attitudes and values were important for students in Design.
- 4. He **strongly agreed** that my students, design staff needed to develop their skills in problem-solving and planning.

- 5. He was **neutral** that my students, design staff needed to develop their skills in building up team work.
- 6. He **strongly agreed** that my students, design staff needed to develop their skills in building up self-confidence.
- 7. He **agreed** that my students, design staff needed to develop their skills in building up time management.
- 8. He chose the following choices that students/design staff liked to learn in self-development, including **your strengths, self-assessment personalities abilities, your difficulties**.
- 9. He chose the following choices that students/design staff liked to learn in creativity and thinking skills, including problem solving skills, independent thinking skills, divergent thinking, convergent thinking, others, cross-disciplinary studies such as literature, performing arts, music other than creative design in order to develop open-mindedness to see the world.
- 10. He chose the following choices that students/design staff like to learn in time management, including others, they needed to analyze the problems, able to develop their values towards design profession and able to work with pressure and under deadline in creative design projects.
- 11. He chose the following choices that students/design staff liked to learn IQ,EQ,AQ, including your strengths, others such as able to develop and cultivate self-identity, capabilities, position and orientation with analytical power.
- 12. He chose the following choices that students/design staff liked to learn interpersonal and social skills, including **team building**, **communication skills**, **leadership**, **others such as cultivating one's own openness in scope and horizon in design profession**.

Part B Differences between study and career competencies

- 13. He **strongly agreed** that confidence building was the major strengths of students/design staff in study.
- 14. He **strongly agreed** that creativity and thinking skills were the major strengths of students/design staff in study.
- 15. He was **neutral** that time management was the major strengths of students/design staff in study.
- 16. He **strongly agreed** that interpersonal & social skills were the major strengths of students/design staff in study.
- 17. He **agreed** that language skills was the major strengths of students/design staff in study.
- 18. He **agreed** that confidence building was the major areas he wanted students/design staff to improve in study.
- 19. He **agreed** that creativity and thinking skills were the major areas he wanted students/design staff to improve in study.
- 20. He is **neutral** that time management skills was the major areas he wanted students/design staff to improve in study
- 21. He **strongly agreed** that interpersonal & social skills were the major areas he wanted students/design staff to improve in study.
- 22. He **agreed** that language skills was the major areas he wanted students/design staff to improve in study.
- 23. He was **neutral** that confidence building was the major strengths of students/design staff in the working situation.
- 24. He **strongly agreed** that creativity and thinking skills were the major strengths of students/design staff in the working situation.

- 25. He **strongly agreed** that time management was the major strengths of students/design staff in the working situation.
- 26. He **strongly agreed** that interpersonal & social skills were the major strengths of students/design staff in the working situation.
- 27. He was **neutral** that language skills was the major strengths of students/design staff in the working situation.
- 28. He was **neutral** that confidence building was the major areas you want your students/design staff to improve in the working situation.
- 29. He **strongly agreed** that creativity and thinking skills were the major areas you want your students/design staff to improve in the working situation.
- 30. He **strongly agreed** that time management skills was the major areas you want your students/design staff to improve in the working situation.
- 31. He **strongly agreed** that interpersonal & social skills were the major areas you want your students/design staff to improve in the working situation.
- 32. He **strongly agreed** that language skills was the major areas you want your students/design staff to improve in the working situation.

Part C The operation of new course

- 33. He preferred **an integrated course** with the existing course needed to be added of 'Attitudes' course in the Design programme. Besides, integration can be planned on other disciplines such as business mangement, accounting other the design programme.
- 34. He agreed to **5 sessions**.
- 35. He chose **case study, project learning** were the learning and teaching activities of the new course.
- 36. He chose **some assessments** were required, such as 60% of class assignments, 40% of report based on authentic experience (how to overcome difficulties and seek opportunities in design profession).

Part D Demographic Data

- 37. He is male.
- 38. He started teaching as a part-time lecturer in Tsing Yi Technical College since 1996 and then worked in IVE (Shatin Campus) afterwards till 2003.
- 39. He worked as a part-time lecturer in IVE.

Here are some contributions of his work:

- 1. The Hong Kong Designers' Association (HKDA) provided some scholarships for those students for their contribution to the design proession, who are studying in the post-secondary and tertiary schools in Hong Kong.
- 2. Some design tours were arranged to Italy, Asian and European countries for broadening their scope and horizon.
- 3. Marketing proposal for innovative design projects who are characterized by their cultural identity.
- 4. His association has provided some annual competitions for the designers in the past few years. The weighing criteria put emphasis on holistic development of designers' concepts to production, i.e. process development rather than just portfolios review.
- 5. He set up some innovation plans, including cultivating new designers, learning know-how, interviews and mentorship programme.

APPENDIX E

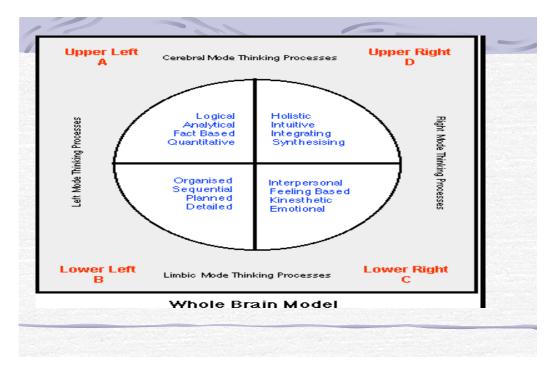


Fig. 1 Source: The Whole Brain Model of Limbic Mode Thinking Processes (Http://www.virtualsalt.com/crebook1.htm)

APERA Conference 2006

28 – 30 November 2006 Hong Kong

Name: ______ Date: ______ Ref. No: _____

Fax to Ms NG: 2764 0507

Email: purrienghk@emb.gov.hk

Note: All the information with the sample designer guide emailed to you are just for suggestions only, please feel free to add or comment your ideas.

<u>Creativity Exercises – Making You own Designer User Guide</u> (please write or draw any ideas on the space provided below)

B1. Preparation

- 1. Subject Matter researched (Objects or video)
- 2. Divergent Thinking (Do a Map-mapping of your ideas, can refer to (a) observation, (b) experience, (c) imagination

- B.2 Incubation (Capture your ideas, write, draw, sketch them down)
- 1. What exercise(s) or method(s) you have used here or in general?

2. What are the strengths and areas of improvement of the method(s) used by you?

B.3 Inspiration

Capture your ideas for making your own designer user guide through writing, drawing, sketching.

B.4 Creation & Execution

Present your ideas in sketches or words (English or Chinese) in complete sentences (The format/style/colour/materials or methods used)

Explain your ways of brainstorming

Explain your ways of divergent and convergent thinking.

Please give a tick against the most appropriate answers.

	SA	А	Ν	D	SD
1. You are satisfied with your creative designer guide.					
2. You find the creative thinking skills are easy to follow.					
3. You find the creative thinking skills are systematic.					
4. You have improvement in creative thinking skills after the exercises.					
5. You will use the creative thinking skills in your future career.					

Any suggestions?

That's the end, thank you!