

Education for Modern Chef – Adding Value through Design

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ABSTRACT:

Modern chefs require creativity in building their competitive edge. In culinary art, creative new dishes are a must in modern world. Ferguson and Berger (1985) proposed that in order to develop the best future chefs, creativity must be the number one goal of culinary education. Modern chefs nowadays must invent new dining experience, the whole experience from branding, menu graphic, dining environment & atmosphere, dining utensil to food.

Jooyeon Ha & Soo Cheong Fang, (2012) stated that environmental components are especially important in the service context because the environment can be used as a cue for judging the quality of the service or product. The physical environment, referred to as “atmospherics” has been considered an important subject in restaurant service management because customers’ emotional responses to a service environment are related to their consumption behaviors at the point of purchase. Design, especially interior design significantly affected the quality perception of service.

Jeou-Shyan Horng & Ti-Chun Lee (2009) mentioned that research in the culinary arts has been limited in as much as “cooking” is still seen as a skill-orient discipline. To break free from this stereotype, the culinary arts must incorporate the study of food science, cultures, consumer behaviour, fine arts and the other liberal arts.

A new Chinese Culinary Arts programme was developed in filling the. The Bachelor of Arts (Honours) in Chinese Culinary Arts and Management Programme is offered by the Faculty of Management and Hospitality at THEi (Technological and Higher Education Institute of Hong Kong) in 2013, will develop students’ practical culinary skills with a forum for intellectual, cultural, technical and managerial inquiry. It aims to produce Modern Chef, who is able to perform traditional duties, but also have capability in planning and managing business operations with a new dining experience and design input.

ADDING VALUE THROUGH DESIGN

An important feature of the Programme is including design modules, which are specially developed to enhance students’ skills in designing and creating new dining experiences. These design modules aim to enrich students’ awareness of the role and function that design plays within contemporary food culture. ‘Modern chefs’ should be well versed in artistic appreciation, aesthetics, critical analysis, creative problem-solving, and design.

This paper share the case on developing this programme and difficulties faced in combining different disciplines including design. Design is not solely a single subject, but a combination of various areas. The programme consists of 3 main areas within design: Culture & Aesthetics, experience design, communication and branding. Furthermore, we also investigate how these design modules work well with the discipline of culinary art, food science and management.

INTRODUCTION

The programme “*BA (Hon.) in Chinese Culinary Art and Management*” was developed based on this idea of Ferguson and Berger (1985). It belongs to the Faculty of Management and Hospitality, Technological Higher Education Institute of Hong Kong (THEi) and was developed in 2012. The overarching concept of this programme is to develop a modern chef adept at exploiting design,

business, food science and the culinary arts. The Faculty of Design (THEi) was asked to provide assistance in the programme development from the earliest stages through to the final programme validation.

THEi is a member institute of the Vocational Education Council (VTC) which is the largest vocational education, training and professional development group in Hong Kong. The VTC provides for some 250, 000 students each year through a full range of programmes with internationally recognized qualifications. Among all the institute within VTC, , the Chinese Cuisine Training Institute and the Hong Kong Design Institute are two of the outstanding one. Our new BA programme naturally made use of expertise from all these institutes and faculties on the programme development.

2. DEVELOPMENT OF THE PROGRAMME

Unlike other Western cuisine, Chinese culinary arts is not well developed as a Degree bearing tertiary education programme. In order to gather support for this new programme with high Design contents, interviews and surveys were conducted with local professional chefs and culinary managers. It was found that there is a specific educational role which Hong Kong can take in creating new Chinese cuisine and dining experience for the industry. Our programme now includes cross-disciplinary influences such as knowledge and skills in culinary and catering management, and traditional Chinese culinary arts, food science and design applications.

Initially six design modules were drafted in response to research findings. They covered dining experience, environment, atmosphere, culture and senses.

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New Design modules developed stressed atmosphere, environment and senses during dining activities. We initially named our programme as "*Chinese Culinary Management with Design*" emphasizing the heavy design content.

The following are the key objectives from the programme related to design:

- To enable students to appreciate and integrate traditional Chinese culinary arts, catering management, design and food science to prepare them as Modern Chefs who are ultimately able to assume managerial and leadership roles in the Chinese catering industry;
- To enable students to develop their abilities and creativities in solving complex culinary challenges and operational management problems with empirical and theoretical approaches

The position of Design is clearly reflected with the programme title and the objectives. Surveys from Chinese catering industry also supported this cross-disciplinary approach. The programme outcome target students in creating new dining experience:

- synthesize knowledge and skills of Chinese culinary arts, catering management, design and food science to create unique Chinese thematic catering events, and generate new dining concepts and total dining experiences for local and international markets;

The allocation of Design content is more or less defined and listed as one of the essential components for nurturing a "Modern Chef" who is on one hand a catering experience designer.

Another research was conducted to understanding the current education programme in culinary art. Five culinary arts programmes were investigated. In our programme, the credits on Design modules are 15% of the whole programme, which is already the highest percentage when compared with similar programmes from Macau, Australia, USA and Taiwan. (Table 1: Curriculum Structure Comparison of Similar Culinary Management Degree courses Overseas). As we found that most of the overseas programmes do not have a complete spectrum of design content in teaching students, we agreed that our high percentage is essential in order to capture the whole experience of food, dining and the culinary arts.

Institute	THEi	Institute for Tourism Studies	William Angliss Institute	The Culinary Institute of America	Johnson & Wales University	Kaohsiung University of Hospitality and Tourism
Country	Hong Kong	Macau	Australia	USA	USA	Taiwan
Program Name	Bachelor of Science (Hons) in Chinese Culinary Management and Food Design (CCMFD)	Bachelor of Arts in Culinary Arts Management	Bachelor of Culinary Management	Bachelor Degree (BPS) in Culinary Arts	Bachelor Degree in Culinary Arts and Food Service Management	Bachelor's Program in Chinese Culinary Arts
Design	Overall 15%	Overall 4%	Overall 3%	Overall 1%	Overall 4%	Overall 1%
Modules	Culture & Aesthetics	Kitchen and Restaurant Design	Wine and Food Design	Menu Development	Principles of Artisan Bread Baking	Menu Design and Cost Control
	Introduction to Design	Menu and Recipe Development			Buffet Showpiece Design	
	Space, Light, Ambience and the Culinary Environment				Designing Contemporary Plated Desserts	
	Research Project					
	Food Styling & Photography					
	Food Service Equipment and Kitchen Design					

Table 1: Curriculum Structure Comparison of Similar Culinary Management Degree Courses Overseas

2.1 FROM PROGRAMME TO MODULES

Modules pertaining to design are incorporated into the Programme to broaden students' capacities in enriching customers' dining experiences from a design perspective. This multi-disciplinary scope informs the conceptual framework from which the Programme Objectives (PO) and Programme Learning Outcomes (PLO) have been derived.

Students are expected to be able to demonstrate their competence in synthesizing knowledge and skills in Chinese culinary arts and management, supplemented with design elements, to create new culinary dining concepts and experiences for local and international market, which is one of the main PLOs. This result is generated by the provision of knowledge and skills in Chinese culinary arts and management, and design, and effective learning and teaching activities developed throughout the Programme, which enables students to appreciate and integrate traditional and innovative approaches to Chinese culinary arts and management, and design elements.

2.2 CULINARY-RELATED DESIGN

The design modules are a unique feature of the Programme, and are specially designed to provide students with a solid grounding in both the theoretical and practical aspect of creative design in the culinary context. Visual impact is the first element in the "sight, smell, and taste" trilogy of the total dining experience. Visual presentation in both food and the dining environment creates the important first impression for the diners. Therefore, the aims and objectives of these design modules will ensure these aspiring chefs are well versed in the role and function of design and how innovation and creativity can help to enhance the dining experience.

	Year 1	Year 2	Year 3	Year 4
1 st Semester	<i>Culture & Aesthetics</i>		<i>Food Photography & Communication</i>	<i>Space, Light & the Dining Environment</i>
2 nd Semester			<i>Dining Experience & the Senses</i> <i>Branding for Dining</i>	<i>Restaurant Design Conceptualization</i>

Table 2: lists the 6 culinary-related design modules developed specifically for this Programme.

These modules are developed and sequenced progressively in the curriculum to enhance the conceptual and technical skills of the students in designing and creating new and innovative dining experiences within the Chinese catering industry.

2.3 YEAR 1 TO FINAL YEAR

In the foundation year module *Culture & Aesthetics*, students will be exposed to the concepts of culture and its relationship with human aesthetic preferences in the context of Chinese culinary systems. This module supplements another foundation-year module *Chinese Cuisine Culture*, and these two modules together provide students with a comprehensive range of knowledge and understanding of the relationships between cultures, aesthetics, history and socio-economic aspects in the development of Chinese cuisine locally, regionally and globally.

In Year 3, students will begin to explore more specialised knowledge, techniques and skills in formulating dining concepts and marketing strategies for the Chinese catering industry. For instance, they will be incorporating ideas and techniques of food photography and typography in creating food promotion materials in the module *Food Photography & Communication*. Concepts supporting the formulation of branding plans with branding strategies and market positioning for various Chinese catering activities are dealt with in the module *Branding for Dining*. The other Year-3 module, *Dining Experience & the Senses*, and the Year-4 module, *Space, Light & the Dining Environment*, will further develop students' abilities in creating and enhancing the ambience for customers' dining experiences and in shaping and creating innovative Chinese dining experiences, as well as the use of creative design approaches to ambient environment and physical structures. The module, *Restaurant Design Conceptualisation*, which is structured in the Second Semester of Year 4, serves to integrate the knowledge and technical skills from previous learning in culinary-related design modules and various

Chinese culinary arts and management modules to create a restaurant design proposal.

Students are often required to integrate knowledge and skills acquired previously from other modules to synthesise a number of criteria-based responses. This is well reflected in the Module Aims, Module Learning Outcomes (MLOs), Learning and Teaching Strategies, and Assessment Strategies of modules in the *Part 1 of Final Year Project*. As a result, graduates are expected to be able to synthesise knowledge and skills in Chinese culinary arts and management, supplemented with design elements, to create new culinary dining concepts and experiences for local and international markets, which is a stated programme learning outcome (ie. Synthesise knowledge and skills in Chinese culinary arts and management, supplemented with design elements, to create new culinary dining concepts and experiences for local and international markets).

The learning from the Culinary-related Design Modules will coalesce into the Final Year project (FYP) which is a major part of the four year course. There are Part 1 and 2 on the FYP which will implement the problem-solving approach provided in the Project Proposal. Innovation, creativity and originality of approach are expected.

2.4 DESIGN TEACHING ON MODULE LEVEL

We take an example of the module *Dining Experience and the Senses* and examine how a combination of design fundamentals, research and user observation informs the commercial and design needs of a modern chef.

The aim of the module is to enable students to formulate informed and creative designs for modern Chinese dining experiences. Students consider the preferences of users as well as the cultural and societal contexts in which modern Chinese dining resides.

More specifically, the learning outcomes for this module are as follows:

- Design memorable dining experiences that consider the customer's sense of comfort and space, the environment, tableware and dining fixtures;
- Reflect a range of design intent through the creation of design proposals on Chinese dining experience
- Categorize Chinese dining experiences by identifying and critically analyzing their regional origins and contexts; and
- Formulate dining experiences that satisfy customer preferences based on design research techniques and methods on customer dining pattern.

In scaffolding students toward achieving the above learning outcomes, certain abilities will be assessed through course work such as an assignment and a project. The assessments will be carefully devised to systematically address each learning outcome and abilities behind them. An example of these abilities assessed includes:

- Ability to identify user needs and preferences;
- Ability to generate a range of directions for the design of a dining experience;
- Ability to justify suitability of proposals for Chinese dining experiences;
- Ability to communicate designs and design intentions;
- Ability to identify and critically analyze Chinese dining experiences and contexts;
- Ability to categorize Chinese dining experiences based upon regional contexts; and
- Ability to conduct and present simple design research as part of justifying design proposals.

We will ensure students are able to demonstrate competence with research in the assignment to contextualize Chinese dining within cultural, historical and trend considerations. Students will start out broad and then narrow down to their chosen region of Chinese cuisine. Once they are fixed in their target, they will then set about to innovate in that particular context.

A project will be used to evaluate students' ability to generate and communicate design proposals that consider the needs and preferences of user groups related to the overall dining experience. Here we will equip students with skills in user-centred research through observations and surveys to find out the motivations and preferences behind observed customer behaviors. First hand research will be conducted on real customers in the specially equipped teaching restaurant run by the school.

In order for students to gain the necessary knowledge and information to complete their learning tasks, the use of scaffolded learning, through the coverage of a wide range of topics, will encourage both self-learning and further independent exploration. The main topics that will be covered in the module includes the following:

- Development of Modern Day Tableware
- Moods and Practicalities
- Globalization, Cross-cultural and Regional Influences
- Formulating the Dining Experience
- Design Research Methodology for Determining User's Preferences

An example for the topic *Globalization, Cross-cultural and Regional Influences*, different Chinese regional and geographical origins of food and dining are examined in detail through lectures and independent research. The influence of cross-cultural and globalization trends on dining experience will be particularly emphasized as it is intended that students reflect upon these contemporary dining trends.

To infuse the design and knowledge building elements into the module, the topic *formulating dining experiences* will also be examined. Here, students are taught the basics of design research and user-centred observations in a real life context. They will be given a chance to examine through first hand qualitative research the preferences and demands of customers within a dining setting. This activity will be supported by the existence of a teaching restaurant which operates as part of the school and serves real customers from the local market. Students will be able to first consider the priorities and design considerations affecting the formulation of their final designs and carry out a series of observations and surveys to real life customers in the context of a commercial dining atmosphere.

Students will consider such things as how to capture the wants, needs and preferences of customers to provide value and delight them. From a marketing point of view they will look closely at the context of the customer needs and how they relate to the dining experience in a holistic way. They will look at the dining experience as part of an overall integrated and inter-related system of offerings to customers. Through encouraging student reflection, they will question and explore the ways which design can translate into customer loyalty and retention.

Through this integration, students will be empowered with creative thinking and problem solving techniques to translate their first hand research data into unique and formulations of dining experiences for customers. Simple techniques such as Brainstorming, SCAMPER, mood boards, scenarios and attribute scoring will form the basis of their creative explorations into the possibilities open to them.

The proposals will be prepared by the students and presented to the class so that students learn from each other and share their experiences. Reflective blogs will be part of the deliverables which helps document their journey from research to idea and through to final proposal formulation.

DIFFICULTIES FACED ON PROGRAMME DEVELOPMENT

As it is a new programme, we faced various difficulties from definition to collaboration. It is a continuous learning experience for both the management and development team.

3.1 BALANCE BETWEEN DIFFERENT DISCIPLINES

The programme title was renamed several times resulting from changes in direction during the development process. The reason behind this is that the programme itself is composed of four main areas: culinary art, management, food science and design. There will be significant differences and biases if the programme was led by each of the different components.

From the name "*BS(Hon.) in Chinese Culinary Management and Food Design*" to "*BA(Hon.) in Chinese Culinary Management with Design*" and finally "*BA(Hon.) in Chinese Culinary Art and Management*", the programme has gone through significant changes during its development.

Two main streams were developed during the process, so as to allow students to ascertain a clear individual career path development. Two programme concentrations were created. Students in their year 3 studies can select either *Chinese Culinary Arts* or *Chinese Culinary Management*. Both concentration areas lead graduates to different career development.

For the *Chinese Culinary Management* concentration, they will study the design modules *Branding for Dining*, and their *Final Year Project* will stress on creating new culinary business model. On the other hand, in *Chinese Culinary Art* concentration, students will have module *Food Photography & Communication* followed with *Final year Project* stress on culinary art. Other than design modules, there are many differences between the two concentration areas in both management and culinary art, but fundamentally they both retain design as compulsory studies. These reflect the importance of design within the programme.

Modules	Final Year Project
<ul style="list-style-type: none"> • Module <i>Branding for Dining</i> • Other Management modules 	<ul style="list-style-type: none"> • Project concentrate on new culinary business model
<ul style="list-style-type: none"> • Module <i>Food Photography & Communication</i> • Other Culinary Art modules 	<ul style="list-style-type: none"> • Project concentrate on culinary art

Table 3: List of two concentration areas

3.2 DEFINITION OF MODERN CHEF

The definition of modern chef became the key issue on this new programme. A Chef traditionally has a clear definition and status, especially so in commercial kitchen operation. Ferguson and Berger (1985) already stated that the best future chefs, creativity must be the number one goal of culinary education. Other than this statement, research findings and survey from the industry suggested that a new generation of chefs should be trained on creativity and management. Modern chefs are not only capable of performing traditional duties and tasks associated with food production operations, but also have enhanced capability in planning, organising and managing business operations at a much higher level from a multi-disciplinary base of abilities. From a design perspective, a modern chef should be well versed in artistic appreciation, aesthetics, critical analysis, creative problem-solving, and design.

Graduates should articulate to roles such as Executive Chinese Chef, Chinese Catering Operations Manager, a Catering Experience Designer, a Catering Consultant, a Quality Management Specialist, and an Entrepreneur.

3.3 STUDENTS TRAINED TO BECOME DESIGNERS?

During the programme development, a team of design educators with various backgrounds worked together on the six design modules. Questions regarding the learning outcome, expectation and learning hours were frequently raised.

Training of design thinking in business and engineering disciplines are not new to design education, but it is new to the culinary arts. The key issue is whether or not graduates are required to finally execute design related tasks after entry into the work force. Discussions led to significant changes on the main direction on the programme. In the end, Design is clearly reflected in the two programme learning outcomes:

- Perform managerial duties in relation to quality assurance, organisation of resources, marketing activities, and provision of appropriate customer experience for the success and sustainability of a Chinese catering enterprise;
- Synthesize knowledge and skills in Chinese culinary arts and management, supplemented with design elements, to create new culinary dining concepts and experiences for local and international markets;

These learning outcomes stressed “performing managerial duties” or “synthesizing knowledge and skills in Chinese culinary art”. The position of design is clearly defined as supplement. Graduates are capable as a catering experience designer, rather than an interior designer, product designer or

photographer. Module outcomes are also developed in line with this belief. Examples of learning outcome like "Evaluate the trends of food photography....", "Plan food promotion materials...." make clear that graduates are design users and master planners, rather than a hands-on professional designer.

3.4 COOPERATION BETWEEN DIFFERENT OPERATION UNITS

A number of units were involved during the programme development. There were colleagues from as many as seven different departments or faculties involved in discussing issues. As such, only efficient and effective coordination could have led to a successful programme validation.

Discipline	Area	Institute	Department / Faculty
Catering Management		Chinese Culinary Training Institute	Management
Culinary Art		Chinese Culinary Training Institute	Culinary Art
Food Science		Hong Kong Institute of Vocational Education, Chai Wan (IVE)	Apply Science
		Technological Higher Education Institute of Hong Kong (THEi)	Faculty of Management and Hospitality
Design	Product design Advertising	Technological Higher Education Institute of Hong Kong (THEi)	Faculty of Design
	Culture Studies Interior Design	Hong Kong Design Institute (HKDI)	Department of Product and Interior Design
	Photographic Studies	Hong Kong Design Institute (HKDI)	Department of Communication Design and Digital Media

Table 4: Distribution of work among operation units

Host Faculty is the Faculty of Management and Hospitality, Technological Higher Education Institute of Hong Kong. Within the Design Discipline, there are two institutes involved and in total three departments / faculty, six staff. Other than the modules writers, Heads of Department and Faculty Deans also took leading roles within their own disciplines. Besides the Dean, the Design modules development team comprised of a coordinator and module writers. There were frequent communication and meetings for each stage. Full support from senior management helped to make clear on the role and responsibilities of members. Professionalism also played a key role in maintaining the overall programme quality and its timely completion.

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