What Makes a Good College Level Culinary Curriculum in the 21st Century

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Abstract

The culinary industry environment has currently attracted youngsters to the chef profession They have moved along industrial changes, constantly changing behavior, competition, and business practices that require a new set of competencies in culinary talents. Accordingly, culinary programs at the college level need to identify their roles to develop mid-level culinary personnel to grow professionally, and successfully create their own business ventures in the international arena. Such culinary programs should be carefully designed for practical implementation to enable graduates to cope well with challenges in the field. This paper reflects professional concerns over the program features and implementation approaches that should encourage students to acquire and develop their competencies to meet with the present and future demands of the culinary industry.

Keywords: Culinary curriculum, college degree, chef schools, chefs, chef education

1. Introduction

College degrees are supposed to prepare future graduates to fit in the employment requirements both in the domestic and international labor markets while equipping them with competencies needed for growth throughout their career. In this regard, the program design and direction of program implementation must seek to foresee how professional environments relevant to such profession need adjustment for the future. The insights into the present and future professional landscapes should serve as a platform for program design and implementation.

Culinary industry has vastly transformed itself in several aspects while the dine-out spending of the public is incessantly increasing despite periodical economic stagnations (DeSoucey & Demetry, 2016). Diversities following globalization and connectedness have prompted new eating publics with very diverse tastes, preferences, and restrictions making the chefs and culinary entrepreneurs to shift their paradigm about their work as well as

business model. The changing environment has led to a new set of competencies expected of college graduates in the area of specialization. This academic paper deals with considerations for a new culinary program design and its implementation approaches. The authors first described the professional landscapes of chefs both in the present and foreseeable perspectives, and then identified major characteristics to distinguish culinary college graduates from their peers. In so doing, the authors discussed conventional practices of program design and implementation to make way to develop the desirable characteristics.

2. Culinary Professional Landscapes

This section describes professional landscapes of a chef to capture a complete picture of the hurdles the chef has to overcome. This is for readers to understand why a successful chef needs new competencies in the current condition and the foreseeable future.

Traditionally, Chef was not regarded as a high status profession but as the team leader of cooks in restaurants or other types of food service establishments (DeSoucey & Demetry, 2016). They usually come from underprivileged backgrounds and start their careers at a very young age as helpers in the kitchen. Little by little, they are trained on the job through an apprenticeship system (Yanal & Kubiena, 2016). Traditional cooks imitate the work of their superiors, the chefs, through observation and sometimes are personally trained in exchange for their hard work, long service years and devotion to the restaurants. Through such a system and working mode, these chefs are experts in a range of dishes and often face difficulties in adapting recipes to changing consumer preferences and market expectations (Yanal & Kubiena, 2016). The responsibilities of traditional chefs are limited in the kitchen, and administrative and managerial works lie in the hands of the restaurant owners. Typical images of traditional chefs are sweating old mustachioed men with pot bellies wearing greyish white aprons working long hours with relatively inferior remuneration and low job security. Because of the work conditions, relatively low pay, and a low success rate as well as the undesirable images, being chefs was not an aspirational job for young people (Yanal & Kubiena, 2016).

Chef professions started gaining social recognition during the 1970s when famous chefs back then introduced the concept of *nouvelle cuisine* and such a concept is widely adopted by both hospitality organizations and consumers (DeSoucey & Demetry, 2016). Nouvelle cuisine is simpler in both taste and preparation, yet more adaptive, modernized and creative in decoration—all showing adaptation of recipes compared to the traditional haute cuisine.

Chef profession has gained higher popularity since the 1980s with advertisement and international expansion of fast food and restaurant chains as well as the diffusion of food and cooking television shows (Muller, VanLeeuwen, Mandabach & Harrington, 2009; Yanal & Kubiena, 2016). Young people aspire to become chefs from seeing cooking shows and media portraying the non-realistic working conditions of chefs (Yanal & Kubiena, 2016). Increasing purchasing power and changing lifestyle toward dual pocket families as well as the 5+2 working mode (five weekly working days plus two days in the weekend) have made eating out in restaurants a normal practice and norms of most urban cultures (Hawkins &

Mothersbaugh, 2010; Jotikasthira & Jotikasthira, 2012). The Chef profession has received its second look from the societies and are accepted to be a trained profession (Yanal & Kubiena, 2016). With higher recognition and more visibility of chefs thanks to media and the heightened standard of culinary work itself as well as the changing lifestyle of cosmopolites, culinary works have earned respect from the society and started to become an aspired job for many young people since then. Professional landscapes of contemporary chefs can be identified as (1) bifurcation of skills, (2) workplace and market diversity, (3) fast changing and globalizing trends, (4) cost-push and competitive economic constraints, (5) changing consumer behavior, (6) yearn for authenticity, and (7) stricter and more internationalized professional practices. These changes in culinary professional landscapes will be discussed in the next part.

Professional Landscapes of Contemporary Chefs
(1) Bifurcation of Skills

Being accepted as a trained profession, there emerged many culinary schools both the state run targeting people with inferior educational and socio-economic status wishing to enter the working life early. The privately owned culinary schools targeting amateurs and people from the middle class upward to either cook as a hobby or pursue culinary works after graduation or after working as white-collared workers for a certain period. Culinary workforce is therefore *bifurcated* (Yanal & Kubiena, 2016). While the culinary schools emphasize training generic culinary skills with limited simple menus, the privately owned culinary schools train their graduates with more advanced culinary skills and other non-culinary knowledge and skills including business, nutrition and basic science which allow them to adapt their cooking skills and manage their works within business settings more effectively. Thanks to their educational, cultural and social capital and language competencies, these new-breed chefs progress their careers vertically quicker and enjoy much higher remuneration (Yanal & Kubiena, 2016). Many of them later became entrepreneurs or high rank executives (DeSoucey & Demetry, 2016; Yanal & Kubiena, 2016). On the contrary, the chefs from vocational schools are easily replaced due to their generic skills, the lack of cultural backgrounds and palette to become autonomous in the kitchen and not adaptive enough to the market demand and customer trends. They are, however, usually recognized by their hard work, patience, and devotion to work (Yanal & Kubiena, 2016). It is clear that culinary workforces are now bifurcated with high and versatile skill chefs highly regarded and remunerated with quick career advancement but lack of commitment and patience; generic skill culinary workers enjoy much less luxury but commit and devote more to their working organization. This situation requires culinary business organizations to manage workforce diversity in terms of socio-economic status, skill diversity and orientation, orientation to work, and career goal. It is obvious that successful food service establishments need both types of culinary professionals. A challenge seems to lie in how to blend them in team synergy consistent with organizational goals and strategies (Bungay, 2011; Jain & Haley, 2009).

Bifurcation of the culinary skills available in the market has led to *workforce diversity* as earlier discussed. However, following business integration at different levels, free flow of

production factors including skilled labor in culinary and hospitality sectors also brought about cultural, racial, and linguistic diversity in an organization (Department of Trade Negotiation, 2012; Economic Ingelligence Center: Siam Commercial Bank, 2011). Despite the fact that all international professional hygienic and food safety standards and guidelines applied to almost all culinary business organizations, cultural and linguistic issues still cause perturbations in the workplace. Culinary talents in a modern business setting need to speak more than one language and be proficient in English as a language of wider communication. Moreover, cross-cultural communication is also indispensable for current culinary and hospitality multicultural workforce (Browaeys & Price, 2015; Tourism Personnel Development Institute: Ministry of Tourism and Sports, 2011).

(2) Workplace and Market Diversity

Not only workplace diversity has caused anxieties for culinary and hospitality managers, but *customer diversities* also has added complexity to the current situation. As cultural value determines how one defines delicacy, delight, cleanliness, morality, ethics, and so on, how restaurants and chefs present their food and ingredients is subjective to different groups of consumers (Hawkins & Mothersbaugh, 2010; Hertzman & Ackerman, 2010; Larsen, Brun, Ogarrd & Selstad, 2007). Like other tourism and hospitality sectors, adaptation and change embracing attitude are integral qualities of new age culinarians that need to serve multiracial clientele with different gustatory norms (Jotikasthira et al., 2014).

(3) Fast Changing and Globalizing Trend.

Globalization, connectedness through communication technology, digital peer pressure and reception of international media through both conventional and digital media, lead to *diversity of market demands* and new eating publics that are more risk-taking, internationally well-versed, brave and adventurous (Yanal & Kubiena, 2016). Culinary delicacy is no longer translated into only fine dining in luxurious venues with formal food service procedures but also alternative myriad types of restaurants and food service establishments including modish restaurants, gourmet food trucks, multi-course tasting menu, molecular gastronomy, and note-by-note cuisine (DeSoucey & Demetry, 2016; This, 2013; Yanal & Kubiena, 2016). In the globalized world where cultures intermingle and influence each other, *influence of indigenous and exotic cooking, ingredients and preparation methods* is quite ubiquitous in western cuisines and these have become the factors that make particular dishes distinctive and creative (Assmann, 2017).

Eating publics that used to be vertically segregated according to their purchasing powers and horizontally according to the types of preferred cuisines, have become highly fluid in identifying themselves (Kotler, Kartajaya & Setiawan, 2017). In the world of horizontality, burgeoning creative classes, flat-white hipsters, consumers of alternative dietary cults, culturally rich but economic poor consumers are few examples of the new culinary consumers (Assmann, 2017; DeSoucey & Demetry, 2016; Yanal & Kubiena, 2016). These eating publics are temperamental jumping from one trend to others, targeting themselves and investing on particular cuisines or restaurant types, and they might not pay off when the trends fade off

(DeSoucey & Demetry, 2016). It is compulsory for *all culinary professionals to stay abreast* with current trends in the market, sieve out fads from trends and have a nimble business knowledge to capitalize on the spotted trends in the malleable culinary world.

Trends that shape the present culinary world including molecular gastronomy, note-by-note cuisines, and alternative dietary cults have strongly signaled the increasing importance of scientific knowledge in culinary professionals especially chefs (Abdulsalam, Condrasky, Bridges & Havice, 2017; This, 2013). *Conventional culinary formal education programs* usually contain few aspects of applied nutrition and food science but the studies showed that culinary graduates have inadequate knowledge to work up to the expected health and nutritional standards, not to mention adaptation of recipes and preparation methods (Abdulsalam et al., 2017). Should a chef need to stay ahead from their peers, the chef should possess a deep-enough science knowledge to understand how food chemical and physical qualities have changed through cooking process, chemical qualities of ingredients and the changes of their effects under the juxtaposition of other ingredients under different cooking and presentation methods, losing or incrementing nutritional values, and toxicology food materials under different conditions (This, 2013). *The science knowledge does not only allow chefs to work nutritiously and healthily but also enable them to adapt the existing recipes or to create new ones, such as dishes of the note-by-note cuisine.*

(4) Cost-Push and Competitive Economic Constraints

Cost and availability of business factors of *culinary businesses* pose serious questions to chefs and culinary entrepreneurs especially when new eating publics value highly attractive venues and sophisticated services, authentic ingredients and finest china and cutleries (DeSoucey & Demetry, 2016). Availability of real-time and user-generated information about restaurants as well as the increasing number of restaurants and eateries, an ever-intense competition persists in most cities around the world. Coupled with fast changing market trends and novelty seeking, *chef entrepreneurs and restaurant owners are pressured to stay profitable and competitive amid myriad of business constraints.* Business knowledge and acumen as well as marketing insight and tact are critical ingredients of success in this regard.

(5) Changing Consumer Behavior

Consumers have radically changed their behaviors in all steps of their restaurant consumption experiences. Eating out is beyond food consumption but cultural participation express class and social distinction, group affiliation, and cultivated taste. With the diffusion of social media, peer pressure worked its way to constantly change the aspiration group of the new eating publics (DeSoucey & Demetry, 2016). Social media and customer generated reviews also play a pivotal role in information search of most customers through social media and other customer review applications, such as the fork, yelps, and Pinterest. Customer reviews have become so crucial for marketing success of restaurants. Digital marketing knowledge is, hence, mandatory for both chefs and restaurant owners. New decision and review criteria of new diners have become motivating factors for decision makers while food quality and gustatory pleasure or even value of money spent for the restaurant experiences have become organic factors or qualities already expected from the consumers. What prompts them to make decisions in favor

of particular restaurants have become factors like authenticity of the food ingredients, personality and appearance of the chefs, types of clientele, and novelty and creativity of menus (DeSoucey & Demetry, 2016).

(6) Yearn for Authenticity

Authenticity has become the core of restaurant business viability these days starting from ingredients and their production, recipes, sources of ingredients, and preparation and cooking methods. Authenticity has been something that consumers yearn for and chefs incessantly seek to provide. Locality in terms of infusing of local ingredients, local recipes and local food products into the menu helps elevate the attractiveness of the restaurants to the modern restaurant goers. Moral authenticity is another aspect of the concept that can trigger positive words both in physical and digital forms. *Moral authenticity* usually involves local community, farmers, and non-corporate community members in the restaurant supply chain (Assmann, 2017; DeSoucey & Demetry, 2016; Yanal & Kubiena, 2016). Cultural knowledge and creativity are two competencies that enable chefs to constantly come up with authenticity and leap imitation from their competitors.

(7) Stricter and More Internationalized Professional Practices

Globalization has also led to *the mutual adoption of professional and operational standards and practices that most restaurants need to comply with especially those related to hygiene and food safety.* Good Manufacturing Practices, Hazard Analysis and Critical Control Points are two basic standards that most restaurants need to adopt. At the individual level, should chefs aim for career opportunities in foreign countries, it is unavoidable for them to meet the competency standard mutually adopted among member states of the economic blocs (Abdulsalam et al., 2017; Hu, 2010; Soydhurum, 2012).

The discussion of culinary professional landscapes on points (1) to (7) above shows what is needed for a chef to stay competitive in the business and labor market beyond culinary skills. Apart from culinary skills which are taught in more or less similar courses across schools of similar standards, chefs need to possess business *knowledge and acumens, cross-cultural skills and mind-set, critical thinking and creativity, cultural and product knowledge of different regions, consumer insight, vigilance and sensitivity on market information, deep-enough scientific knowledge, aesthetic eyes for art appreciation, digital marketing, adaptability for change embracing attitude and curiosity.* These qualities often can be acquired on the job and/or training programs while others take a long time to develop, if not inherent in particular individuals (Defillipi & Arthur, 1994; Soderquist, Papalexandris, Ioannou & Prastacos, 2010). As a typical college degree program takes 3-4 years to complete, the program should include courses and learning activities that support students to develop such qualities in parallel with culinary skills and knowledge. While these qualities enable culinarians to stay keen in the market, college programs should integrate what and how to distinguish their graduates from the rest of the crowd.

Another aspect that should be seriously considered in designing a program is characteristics of the program that *allow graduates to fully benefit from skill migration opportunities* associated with economic integration and globalization. In so doing, graduates are

required to possess competency standards mutually agreed among the member states of the economic blocs or having qualities that are internationally recognized (Tourism Personnel Development Institute: Ministry of Tourism and Sports, 2011). As in the case of the ASEAN Community, food production and food service in tourism and hotel sectors gain benefit from skill migration opportunities. That is, if individual professionals pass the competency test according to the specifications of ASEAN Common Competency Standard for Tourism Professionals (ACCSTP), they can be registered in the mutual recognition arrangement standard (Department of Trade Negotiation, 2012; Petri, Plummer & Zhai, 2012).

3. Qualities of Distinguished Chefs

The most valid proxy of a chef's success is Michelin star awarding and the scheme of the award is largely based on particular chef's creativity and synonym of quality in the gastronomy world (Aubke, 2014). Given capabilities in culinary skills and superb food knowledge and respective charismatic leadership and impeccable managerial skills with staff and suppliers, distinguished chefs outpace their peers through their creativity (Aubke, 2014; DeSoucey & Demetry, 2016). However, the concept of creativity needs to be discussed. For one to be creative in professional realms, apart from having critical thinking and creativity, one needs firm knowledge and high level of skills for creative work in any field (Bleedorn, 1993; Pohl, 2013). Besides, professional creativity is usually judged within the community of practice. Professional community norms and culture must be thoroughly understood unless one's creative work will be labeled an outrage (Aubke, 2014). Immersing oneself in the professional peer group is highly important for a chef to start creating something in his/ her work.

Apart from learning how norms and cultural value of the community of practice work, being a part of a professional network yields various benefits for chefs. It is advisable that chefs should mingle with people from different networks at different levels of expertise and professional experiences in order to gain new fresh ideas and turn creative ideas into innovative results. Instead of being at the center of the networks which consume too much time and resources, chefs need time to reflect and experiment on their creative ideals in actual professional settings. Maintaining membership of the networks at the peripheral level is believed to be profitable for the chefs to improve their creativity (Aubke, 2014). Like other businesses, being part of networks proves to be highly favorable to work performance and is believed to be the determining factors for mediocre performers and the distinguished ones (Jotikasthira, Phakdeephirot & Teeranoot, 2016). In this regard, college culinary programs should be designed and implemented in manners that encourage students to be part of different networks including industrial placement, invitation of guest lecturers and guest speakers as well as arranging professional forums in which students and lecturers can exchange their ideas and discuss with culinary professionals.

4. Current Situation versus Proper Characteristics of College Degree Culinary Programs in Non-English-Speaking Countries

The discussion under section 3 on desirable qualities of both high and distinguished performers in the culinary world must be taken into consideration for the curriculum design and implementation process. While *technical skills* are found to be obligatory for learners in similar standard institutions and can be easily trained for work performance both on the job and through different modes of training, *soft skill competencies* including human, communication, and business competencies tend to be more crucial in identifying exceptional performances from merely good ones (Hertzman & Ackerman, 2010; Kay & Rusette, 2000; Muller et al., 2009; Pratten, 2003; Weber, Finley, Crawford & Rivera Jr., 2009). The actual situation of the college level culinary program in terms of curriculum design and program implementation to be adjusted for the needed characteristics of contemporary chefs is given in the next section.

5. Curriculum Design

To meet with demands of competent chefs for now and in the future, the existing culinary degree programs need to bring in adjustments in eight areas: (1) International versus Local Language Program, (2) Business Knowledge, (3) Applied Science Knowledge, (4) Human Skill and Leadership, (5) Culture Knowledge and Cross-cultural Competencies, (6) Foreign Language Proficiency, (7) Industrial Placement as Opportunities for Knowledge and Skill Applications and Network Establishment, and (8) Double Degree as a Value Added Factor and a Risk Reduction Tool.

(1) International versus Local Language Program

Currently, college degree culinary programs are provided in both local languages and in English in international programs. Despite the fact that the program operation cost for all culinary programs is relatively high by nature, international program tuition fee is much higher than the ones offered in local languages. The cost would be even higher when the programs integrate another program of well-recognized international culinary schools as it involves royalty fees and annuity fees paid to the franchisers. However, the international program mode with the use of English instruction currently serves well for its promises of future high profile chefs for three reasons.

Firstly, culinary, like other globalized businesses, rely on English as the common language of communication. Recipes, using instructions of equipment, work order, and other communication materials are mainly available in English though the language is not spoken in the context of the offered program.

Secondly, English, just like other languages, is acquired through frequent use or immersion in the language over a sufficiently long period. People usually acquire languages through daily *interactions* with locals and native speakers outside language classes. As a result, a number of language courses offered in the program cannot help students master the needed language skills. International programs, therefore, need to provide students with immersion opportunities to interact and acquire English communication skills at the expected level.

Thirdly, since culinary or non-culinary information is usually available in English and other major world languages, those who are proficient can benefit from information access and use the obtained information to be creative in their work as seen in innovative dishes. Aubke (2014) asserted that high level of information reception usually results in higher creativity in the culinary professions. It is therefore important to assure that students feel natural in receiving and sending information in English. Mastery of the language commonly used in the culinary international communities of practice, enables chefs to network with their peers and benefit from information and idea sharing among the network members.

(2) Business Knowledge

At the college degree level, most culinary curriculum include five areas of the subject contents, namely product, culture, management, aesthetics, and technology, where product knowledge and culinary skills are the focal point of the program design and implementation (Hu, 2010; Muller et al., 2009). However, the study of Muller et al., (2009) contended that managerial skills and attitude shaped in graduates especially quality and work commitment did not match the need of actual professional context and employers' expectation. Considering the increasingly tighter business constraints and competition as earlier discussed, business knowledge content should be high enough to help chefs to visualize their work as an independent business unit and to be autonomous in business performance of their own businesses or the business under their purview. Given an increasing importance of small- and medium-sized business enterprises worldwide, business content should be intensive enough to develop students into entrepreneurs sooner or later in their career.

(3) Applied Science Knowledge

Most of the college level culinary programs have few science-related culinary courses including applied nutrition and general sciences that explain food contamination and effects of simple chemicals on ingredient preparation and cooking process at a very cursory level. Students are not encouraged to adapt the recipes, cooking and presentation methods. Certainly, without deep-enough science knowledge, chefs cannot adapt and create their work according to the demand of the market and trends. For a culinary program to ensure their graduates' professional success over their career life span which is often characterized by uncertainties and unpredictability, sufficient science content should be a vital component of the program for future culinary talents to explore, experiment, adapt and create dishes to surprise their customers and get recognition from the community of practice (Abdulsalam et al., 2017; Hertzman & Ackerman, 2010).

(4) Human Skill and Leadership

Most college degree culinary programs include human resource management as a specific course usually for final year students. In fact, chefs need not only human resource management knowledge, but also skills to work as a team under high pressure and demanding situations in creating team synergies. Culinary students should therefore be trained to be dynamic team members and charismatic team leaders from the beginning of the program, for all

soft skill competencies take years to develop (Holton III, Coco, Lowe & Dutsch, 2008; Koenigsfeld, Perdue, Youn & Woods, 2011). Looking at the competency list for chefs in various frameworks--both Australian Qualification Framework and ACCSTP, working as a team and leading/ inspiring others in the team are found to be one of the critical aspects in working one's way toward professional advancement in chef and culinary careers.

(5) Culture Knowledge and Cross-cultural Competencies

Most of the degree programs tend to overemphasize culinary knowledge, especially the product knowledge while neglecting the fact that food is part of culture and consumed under cultural contexts and culture is really dynamic (Hawkins & Mothersbaugh, 2010). Without a profound knowledge of one's own culture in relation to other cultures often leads to limitation in work adaptation and creativity. How recipes are created, extracted, presented, served and named can be meaningfully done through cultural discourses and profound understanding of both local and international cultures.

A cross-cultural communication course is often found in most degree programs. Cross-cultural competency depends largely not only on cultural knowledge at both culture-specific and culture-universal levels, but also other transferable skills that can be acquired over a long period through numerous practicing opportunities. Having only one cross-cultural course gives inadequate exposure to multicultural context and diversity (Jotikasthira, Bhutiphunthu & Chuaychoo, 2016). Worse still, cross-cultural communication courses usually teach students using the culture-specific approach by which students are taught customs of different major cultures in comparison to those of their owns instead of how to overcome cultural barriers and how to cope with actual professional situations. Moreover, most courses entirely neglect important aspects of cultures--professional, generational, and racial, and socio-economic status sub-cultures which would affect future educated chefs working in a bifurcated labor pool. To effectively equip students with both sufficient time in the right context, the course should (1) adopt the culture universal approach to teaching, (2) embrace other aspects of culture apart from the national cultures, and (3) expand the appraisal of cross-cultural competency to other courses and community time. It is apparent, therefore, that program chairs and instructors need to reorient their cultural perspective to be able to train and appraise students efficiently.

(6) Foreign Language Proficiency

As mentioned earlier, English fluency is a must for culinary workers in all chef positions, as it serves as the main medium of communication in the world of hospitality. English communication skills are included in most relevant competency standard as well as ASEAN Common Competency Standard for Tourism Professionals (ACCSTP): the language is prerequisite for skill migration and international employment opportunities (Department of Trade Negotiation, 2012). English communication mastery is, therefore, compulsory in this profession. Additional foreign languages, especially French (most gastronomic terms are rooted in French and its culture), add to competitive advantage to chefs as media reception in broadening the cognitive horizons and fuel chefs with novel

ideas. Besides, speaking more than one language usually allows chefs to take part in several professional networks where precursors show their creativities.

It should be noted that college level culinary programs in the non-English speaking context are often offered in local languages with a specific number of English language courses. The results often show that graduates from such programs can neither fluently communicate with colleagues and customers nor effectively search and digest information available in English and other languages. To the authors, certain international programs can use English as the main medium of instruction and should offer the third language as an advantage for their graduates in future professional contexts.

(7) Industrial Placement as Opportunities for Knowledge and Skill Applications and Network Establishment

Industrial placement for the period of 3-6 months is usually the case of college level culinary programs that require students to work under the apprenticeship system with prescreened high standard local food and beverage organizations. The industrial placement provide students with good opportunities to apply what they have been trained throughout the program in actual professional contexts. In reality, students barely have chances to work directly under the supervision and mentorship of the professional chefs with distinguished work experience. Instead, trainees are usually assigned to demi or sous chefs to supervise and work side by side with kitchen aids who have only learned their cooking skills on the job. Working with such staff, students have no chance to create new dishes. Certain programs allow students to pass their apprenticeship in foreign countries, usually in large hotels that need a lot of trainees for their simple labor-intensive works during the peak seasons. Apprenticeship aboard, however, has one major advantage in students experiencing time in self-adaptation, practicing of cross-cultural competency, and problem-solving skills. Students usually socialize only with their immediate job supervisors and their peers—thus limiting their development and network opportunities. Unfortunately, working in this type of establishment does not add much to skill mastery needed in students, as they are usually assigned to perform the same tasks repeatedly.

Ideally, apprenticeship for college level culinary programs should be with international small-scale, well recognized (Michelin-starred, for example) food and beverage establishment in foreign countries. In this way, students have actual opportunities to work side by side with chef entrepreneurs or chefs in a cross-cultural context with comprehensive perspective and job scope.

(8) Double Degree as a Value Added Factor and a Risk Reduction Tool

The last important point to students and parents alike is the choice of enrollment. Enrolling in an upscale culinary program in a labor intensive context of volatile demand in the discretionary sector like fine cuisine, might sound somewhat risky in terms of return of investment in human capital in the long run from parents' perspective. To parents, investment in children's education is for a reliable future career and professional growth overtime. In this light, college culinary programs can ensure parents' sense of security with a double degree program which grants to graduates *a general business administration degree,* along with *a degree in culinary arts and technology*. As an example, such an option has currently been offered at

Rattanakosin International College of Creative Entrepreneurship at the University of Technology Rattanakosin, Thailand to meet with the needs of students and parents for job security.

6. Program Implementation

Program implementation is vitally important to work out the designed curriculum into effective program implementation. Program operations focus on course instruction, class size in practicum training sizes, nature of interactions between lecturers and students in class and outside, interaction among students in class and outside, community time activities and student appraisals. As shown in this section, considerations for conventional and desirable program implementation practices are in four topics of concern: (1) Lecture versus Enquiry-Based Learning, (2) Class size in Practicum Training Sizes, (3) Separated or Connected Lesson Planning, and (4) Networking Assistance Activities.

(1) Lecture versus Enquiry-Based Learning

Course instruction greatly affects how students internalize the knowledge and skills taught in classes. In the conventional lecture-based approach, lecturers initiate one-way communication for students to capture the importance the topics, but students may see no relevance to their professional goals. On the contrary, the enquiry-based approach could be a better alternative in that questions given are to link students' career goals to the topics under study and encourage them to research into particular topics and exchange or share information and ideas with lecturers. The lecturers can shift their roles from lecturers to *facilitators* guiding discussion and information search in the areas of the latter's interest. Learning by the inquiry-based approach can challenge learners to relate what they have learned to what they will encounter in their career.

(2) Class size in Practicum Training Sizes

The primary goal of the practicum training is both to educate and practice the culinary skills through empirical experiences with food products, equipment, and the cooking process. Therefore, it should be both on an individual and group basis. Individually, students should be able to perform all steps of the menu preparation and they should, collectively, perform different roles in a team as they need to perform in actual working situations.

Most college degree culinary programs currently let students work in groups of 3-5 members to develop the practicing menus without allocation of clear roles and responsibilities. Usually, there are, in a group, one or two members who take lead while the rest are taking advantage of the situation as free riders. At the end of the course, it often turns out that not more than a half of the class can perform the tasks up to the expected standard. To remedy such a limitation, culinary programs need to impose individual basis to ensure that each student be able to take responsibility for the whole process from the planning stage of the work process, preparation of the menu, and cooking, to presentation of the finished menu. Through this approach, the programs can spot the underperformer and act upon with closer attentions or even remedial lessons.

For students to know how to lead and follow in a team and interact with team members constructively, they need to be assigned with simulated roles and duties in actual professional kitchens. Practicum training appraisals therefore should include not only culinary skills mastery and food knowledge, but also the soft skills in team work and stringency of practice of hygienic and food safety standards.

College level culinary instructors need to shift their expectation from students' learning from culinary skills and food and menu knowledge to other aspects of the culinary work in actual professional contexts; they need to set a new goal on producing future culinary talents who will grow professionally and would one day become entrepreneurs or high-ranking executives. As emphasized by Koenigsfeld et al. (2011), when people climb up the managerial ladders, the less they depend on technical skills but more on transferable skills

(3) Separated or Connected Lesson Planning

It is true that all subject courses in a college level culinary program contribute to the formation of students' competencies but the current practice in teaching tends to separate them in a series of the courses offered. Continuity in a chain-like sequence should be observed by course lecturers and thus team planning of lessons or topics under study should be done in a connected or community mode. Without a common goal in mind like developing students into contemporary chefs or entrepreneurs, course lecturers will plan their course as they see appropriate from their academic and professional perspective. Unfortunately as it often happened, lecturers of the college level culinary programs tend to use their separated approach in lesson planning. This would take the program chair to put things straight for them as a team to link topics, contents, and even appraisal activities together. With this approach, the study of different subject areas can be meaningful to students and they would know that they cannot neglect any subject course after examination. At the end of the study program, they will finally be able to integrate knowledge, skills and other attributes acquired in different courses together and will be ready for their professional challenges lying ahead.

(4) Networking Assistance Activities

Due to limited number of chef lecturers with high academic degrees as required in Thailand's Qualifications Framework, college level culinary programs have to rely on guest lecturers and guest speakers in the field. Guest lecturers and guest speakers can provide not only their teaching services but also industrial insights and network possibilities for certain students who are proactive in making social connections.

Participation in several professional networks and community of practices by arranging professional forums for guest lecturers, lecturers, and invited professionals to meet with students, is a major advantage in program operations. Students will regularly update themselves with the market information and industrial progress in relevant networks; this can also benefit lecturers in the program.

Taking the changing professional landscapes of chefs into account, college level culinary programs, with the primary objective to produce graduates for the employment market and ensure their fruitful career path, need to take all considerations of concern as discussed so far as

the focus of their curriculum design and implementation; this is for them to be able to have their graduates who can function and cope well with new challenges in the field of culinary art and technology.

7. Conclusion

The culinary profession has tremendously changed and been exposed to continually change throughout a professional's career path. Bifurcation and diversity of skills, workforces, and customers, much sought-after authenticity, changing behavior, higher business constraints, increasingly stringent enforcement of international standards and professional standard for skill migration, have shed a new light on curriculum design and the direction for program implementation. This academic paper intentionally serves as signpost for cautions to those who have ventured into curriculum design and program implementation of college degree culinary programs. Relevance and practicality are the keys to success in program implementation with an ultimate goal on the graduates as highly qualified chefs and successful entrepreneurs in the circle of the culinary profession.

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