

A Proposed Curriculum Framework for A Bachelor's Degree in Culinary Arts in Egypt

Kadria Ali Abdel Motaal

American University in Cairo, Egypt. Former Chairman and CEO of the Egyptian Company for Biotech Industries (Vacsera)

Prof. Heba El Deghaidy

Professor of Science Education, and the Chair of the Department of Educational Studies at the School of Humanities and Social Sciences at the American University in Cairo

Abstract

Historically culinary arts education was considered a vocational discipline without an academic base. Culinary arts education is used to have a narrow focus that forewent its richness and ignored its infiltration into economic, political, and cultural aspects within society. Recently the world witnessed an evolution in this field of study as it reached tertiary educational institutions. However, in Egypt, culinary arts studies are integrated into hospitality education and are still confined to a shallow concept. This study aims to explore the perception of the culinary arts community in Egypt on their higher education programs from a sociocultural perspective. It also explores the possible new concepts, frameworks, and core competencies that could improve culinary arts higher education curricula in Egypt. The study uses a qualitative research methodology based on a case study strategy for inquiry. Data were collected via focus group discussions based on semi-structured open-ended questions, and individual interviews. Data analysis relied on a combination of deductive and inductive approaches to classify the results under five main themes. The findings confirm the literature review on many points like the social connotation of food as well as the divided perception of the culinary arts' higher education in Egypt between the traditional mind-set that considers it a vocational field and the emerging experts who

see the potential of this field as an academic discipline based on scientific knowledge. Also, the gap in Egyptian higher education in culinary arts is confirmed, where the field is addressed from a narrow perspective that does not equip the student with the necessary skills and competencies. The participants in the study called for an education that promotes creativity and innovation. As a result, the study proposes a multidisciplinary curriculum framework for culinary arts higher education to serve as a guiding reference for the future development of this discipline.

Keywords, culinary arts, higher education, curriculum framework, Egypt

Background of the Study

Culinary art is a complex field that needs technological and operational inputs. It is grounded on scientific principles from multiple disciplines like education, anthropology, history, chemistry, microbiology, thermodynamics, physiology, nutrition, food safety, and visual design (Jones, 2004). As it is based on knowledge from various disciplines, it is a multi-disciplinary field, and simultaneously it can be also considered transdisciplinary as it integrates the social, natural, and health sciences in a humanitarian context, crossing the boundaries between these disciplines (Choi & Pak, 2006).

Historically, culinary arts education was viewed as a technical skill without academic knowledge. It was associated with the hospitality industry. Since the Middle Ages, culinary arts education has been traditionally delivered through a master-apprentice model (Miles, 2007).

At the beginning of the 21st century, culinary arts became recognized as an academic field of study. The world started to witness an expansion of independent

culinary arts programs and degrees in higher education (Gresh, 2016). However, the field still holds some ambiguity; it needs a clear definition of its scope and purpose (Harrington, 2005; in Dalton, 2020).

Culinary Arts Education in Egypt

In Egypt, culinary art is not considered an independent field of study, it is embedded in the hospitality field that is addressed in the higher educational institutions for tourism (Agwa et al., 2017).

In 1962, tourism education started in Egypt with a two-year program that was offered in two small institutions until the faculty of tourism at Helwan University (FTH) was established in 1975. It was the first of the kind in Egypt and the Middle East (Afifi & Wahab, 2010). In 1983, new public and private institutions appeared, which are classified according to their ownership and scope of activity. They comprise eight public colleges, two private universities that have colleges of tourism, five public colleges within the part-time and open public education system, sixteen private higher institutes, in addition to the initiatives guided by the Ministry of Tourism. All of them offer 4-year bachelor's degree programs in tourism, hotel management, or tourism guidance, each covering 43 courses (Mahmoud, 2017; Ministry of Higher education, 2019).

These institutions attract almost 5% of all the higher education students, although the mismatch between the number of graduates and the market needs is still sizable (Agwa et al., 2017). Abdel Hamid (2010) stated that these educational institutions require a variety of special logistics and infrastructures such as laboratories, kitchens,

restaurants, buildings, equipment, and facilities for accommodation which are not easy to provide.

As claimed by Baker et al. (1995), food and beverage courses represent a good indication of how culinary art is addressed in the hospitality management curricula. It was difficult to find academic research that investigates the culinary arts curriculum or evaluates the quality or number of food and beverages courses in Egyptian Higher Education. Nevertheless, a research by Agwa et al. (2017), entitled “Evaluating Food and Beverage Courses based on the perception of professional experts”, was conducted in the faculties of tourism in three Universities in Egypt – Mansoura, Fayoum, and Alexandria – concluded that the course content is not well-structured toward clear intended learning outcomes, which does not build the competencies required to meet the market demand. The curricula are not keeping pace with the new developments in the field, and students do not receive a deep theoretical foundation or knowledge in the field. There is also a clear mismatch between what is delivered on the practical and theoretical parts. Training is basic and does not enhance creativity or innovation.

The curriculum of the faculty of tourism at Helwan University also shows the limited space that culinary art is occupying in the Egyptian educational sphere. The time dedicated to culinary arts courses comprises an average of three hours of theoretical teaching/study plus two practice hours per week in the first three years only.

In conclusion, the place and scope of culinary arts education in the curriculum of the tourism faculties are very limited and narrow. It does not give credit to this

discipline as an independent academic field grounded in knowledge and science. This reflects the perception of culinary arts within the Egyptian educational sphere as a marginal field.

There is a pressing need to have a deeper conceptualization of culinary arts within the Egyptian higher education system to be able to supply the market with graduates who can compete on an international scale. Mastering this domain can open new opportunities in the tourism industry in Egypt, where tourism is one of the main sources of the notional income.

Theoretical Framework

To contextualize this study within a specific research paradigm, two research approaches were considered.

Interpretivist / Constructivist Theory

This is also referred to as the phenomenological approach. According to Babie (2008), it is used to attain a better understanding of a social phenomenon. Interpretivism claims that everything is subjective and depends on the perception of the community involved in the research. While the positivist approach attempts to confirm reality, the interpretive approach claims that there could be more than one reality (Babbie, 2010), it also highlights the role of experience in the interpretation of reality and the different points of view that contribute to the construction of social perception. This approach is usually based on a qualitative method of inquiry in collecting and analysing data. The interpretivism approach is suitable for exploring the perception of culinarians participating in this study. Its ontology and epistemology

which rely on inner reality and individual experience made it a good theoretical framework for the study.

However, the main objective of this study was to identify the gap in the current culinary arts education curricula and recommend an improved curriculum framework. Therefore, the critical theory was considered as an additional research framework for the study.

Critical Theory

While the interpretive approach aims at understanding societal facts, the critical approach is focused on transformation. As argued by Henning et al. (2004): positivists are concerned with prediction; interpretivism tries to understand; and critical researchers attend to societal challenges through research. Critical theory is usually associated with a sense of power and freedom. It is about development and positive change. Research must be transformational. It does not have to stop at understanding; rather, it should aim at inducing a change in people's lives (Boru, 2018).

The application of the critical theory in the context of this study can be explained by the carrot cutting experience described by Woodhouse (2015). He argued that chopping a carrot into a "brunoise" (2 mm cubes) is common practice as a tool to assess students in a traditional French-based culinary curriculum. The mastery of a knife is an indication of a good chef; they must be able to cut the vegetables speedily, according to standards, and without wasting the ingredient. This simple chore of cutting the carrot could be a case study that we can explore from an educational and pedagogical perspective (Woodhouse, 2015). According to Friere (1970), the way students are instructed to produce

this “brunoise” following the French standards symbolizes the principle of knowledge banking, where the French technique is imposed on the students. He added that this is a cultural invasion. As Schön (1983) argued, this is espoused knowledge, a kind of knowledge banking that only serves the purpose of assessment. Sometimes the students have work experience through which they learned how to cut the carrot differently and using other tools, and, as a result, as Bourdieu (1984) claims, they are obliged to move between the standards imposed by two different worlds. The students are not allowed to question or challenge the ultimate authority of the master; they are taught to say “yes, master” but never ask “why” (Deutsch, 2014). There is no opportunity for innovation, imagination, or inventiveness as if they are in the military (Shewry, 2012). This leads to the indoctrination of the cultural ideologies of the masters into the students (Friere,1970).

As argued by Apple (1982), the hidden curriculum, referring to the school and social environment where education takes place, plays a role in defining the place and identity of people in society. The environment and the place of a chef in the kitchen impacts their identity and how they perceive themselves: simple labourers, entrepreneurs, business executives, or artists (Fine, 2008). Woodhouse (2015) argues that to make the artist's identity prevail in the classroom the educator must release the knowledge power and give it to the learner; the lecturer could say "take this carrot and create with it what you want" (p.68). This leads to a democratic engagement in classroom dialogue.

In conclusion, this humble task of cutting the carrot could be the job of a professional, a worker, or an artist;

this identity is determined based on the lecturers' behaviour and their educational practice in a classroom (Woodhouse, 2015).

Culinary art education is suffering from the perception that considers it undeserving of intellectual status. The concerns of perception and poor intellectual classification can be handled through critical theory. The reconstruction of reality within the culinary world, and the induction of change and empowerment, are conducive to the application of the critical theory as a theoretical framework for this study. This study will be guided by both interpretivism and critical paradigms.

Methodology

This study was based on a qualitative research method. A case study strategy of inquiry was followed. The research method and strategy of inquiry were designed to answer two research questions:

RQ1: How do the professors, students, and graduates of the Faculty of Tourism at Helwan University perceive culinary arts higher education from a sociocultural perspective?

RQ2: What new framework, concepts, and core competencies could be recommended to change the culinary arts higher education curricula in Egypt?

The Faculty of Tourism at Helwan University was the place for the fieldwork in this study. The participants were students and academic staff from this Faculty, as well as graduates who pursued a professional career in the culinary field, hospitality, or food-related industries to add a real-world perspective to the collected data.

Different data collection instruments were used. The study started with focus group discussions (FGDs) in phase one, followed by in-depth semi-structured individual interviews in phase two. The target participants and focus of the personal interviews were determined based on the results of the focus group discussions.

Data Findings, and Analysis

A total of 12 participants were selected for the study (five males and seven females). From these, two focus groups were formed. Each group consisted of the following: one academic member, one senior student from Helwan University, three graduates from the related professional fields (a chef in the hospitality industry, a representative of the food industry, and a food entrepreneur), plus one career changer who was not originally part of the culinary arts profession and decided to make a career shift toward this domain. The discussions in both groups revolved around four pre-defined themes: (1) the role of food in society; (2) the perception of culinary arts higher education in Egypt and the definition of the existing gap; (3) the recommended focus areas for the proposed curriculum framework; and (4) the competencies and skills that must be promoted.

The researcher resorted to a mix of both inductive and deductive data analysis approaches. The deductive approach relies on a framework of themes to guide the coding process (Bradley et al., 2007). This framework is known as ‘a start list’, which is to be used in the analysis to predict some central concepts in the data (Miles & Huberman, 1994). On the other hand, in the inductive approach, the participants’ experiences drive the data analysis completely. Thomas (2006, in Azungah, 2018)

argued that the inductive approach relies on the thorough reading of collected data to develop themes.

The researcher started with the deductive approach, deriving codes from the reviewed literature about the topic under discussion considering the research objectives and questions, as well as the focus groups and interview questions. Categories were developed to form a start list.

Afterward, the inductive approach was used. The researcher started the analysis by organizing the data from the focus group discussions. The main ideas in the transcripts were highlighted, and similar ideas were linked and labelled to create codes and categories.

This combined approach generated two sets of categories and, subsequently, similar ones were merged to form an integrated list of categories that was then used to develop the themes.

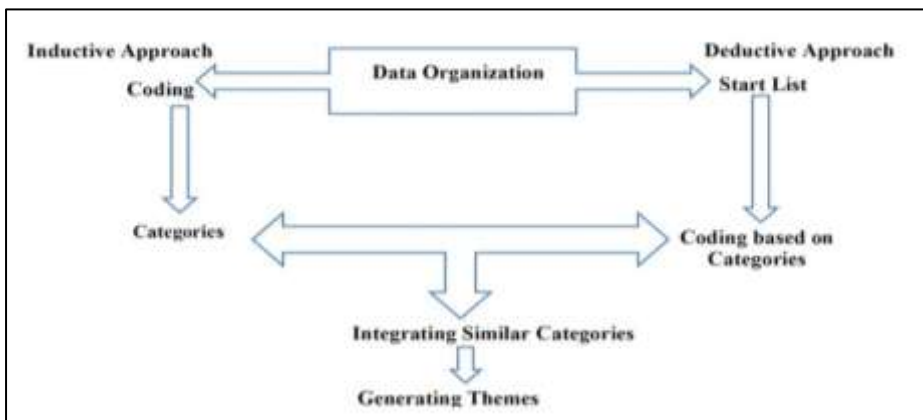


Figure 1
Process of Data Analysis

The process of data analysis led the researcher to present the findings under five main themes: (1) Social and Cultural Connotations of Food; (2) Perception of Culinary

Arts Higher Education in Egypt (3) Culinary Art Higher Education in Egypt, a Call for Change; (4) Required Skills and Competencies; (5) Proposed Curriculum Framework.

Discussions

The modernization of culinary arts higher education started at the end of the 20th century, when it progressed to become an academic discipline and reached tertiary education institutions. An advanced holistic multidisciplinary approach to culinary arts higher education emerged, blending vocational and liberal art education (Dalton et al., 2020). However, it is still at an early stage and not sufficiently acknowledged in many countries worldwide (Dalton et al., 2020). In Egypt, culinary arts education remains to be a minor component of education in the hospitality field, addressed in the higher educational institutions for tourism (Agwa et al., 2017).

Discussion in view of the Research Questions

The first research question is ‘how do the students, graduates, and professors of the Faculty of Tourism at Helwan University perceive culinary arts higher education from a sociocultural perspective?’

The findings in relation to this question agreed with the literature review on the main arguments: (1) food is related to all aspects of our lives, according to the literature, as its function goes beyond survival and necessity and it infiltrates all the aspects of our lives: cultural, economic, political, and societal (Mitchell et al, 2013); (2) there are many sociocultural connotations of food; it embodies memories, it is a social indicator, it is an icebreaker, it builds a nostalgia immersed in maternal savour, and the binary relation between food and culture. These examples

are reminiscent of what was argued by the famous anthropologist Lévi-Strauss, “[f]ood is good to eat and good to think with” (Ameilda, 2017, p 1); (3) the findings pointed out to the traditional perception of culinary arts as a vocational field that is not highly valued as an academic field of study nor as a stable dignified profession. This conclusion aligned with that of Miles (2007), who argued that since the Middle Ages, culinary arts education was considered a vocational field that has been traditionally delivered through a master-apprentice model; (4) the research exposed the tension between the traditional mind set led by the old guard that considers culinary arts a vocational field and the emerging new experts that can see the potential of this field in becoming an academic discipline; and (5) the findings and the literature aligned on the fact that, in Egypt, culinary art is not considered an independent field of study; it is embedded in the hospitality field that is addressed through the higher educational institutions for tourism (Agwa et al., 2017).

On the other hand, contrary to what was stated in the literature about females avoiding tackling research in the field as they correlated culinary arts with oppression (Avakian, 2014), several female chefs participated in the research, expressed their dedication and enthusiasm for the profession, and were determined to fight for a better career path within this field. This represents a noticeable evolution of the female’s perception of the field.

From a socio-cultural perspective, another issue to consider is the fact that the role of a cook/ chef in oriental culture is still under-appreciated. Many still view these professionals as representing blue collar work with limited prestige. The profession is also associated with lower

societal classes. This, however, has been evolving with the advent of "star chefs" who have gained worldwide recognition for their culinary achievements. The advent of the star chef could change societal perception and help propel culinary arts into a fully recognized academic field and discipline. At the same time, it seems clear that this is a field that women want to conquer, and that there is an appetite for them to excel in the field. In other words, we have not yet heard the last word on the issue of gender balance in the culinary arts. The situation will undoubtedly evolve as this field grows in importance, gains official recognition as an academic discipline, and women will continue to break the glass ceiling that has limited their prospects in this field.

The second research question explored the new concepts, frameworks, and core competencies that could be recommended to revolutionize the culinary arts higher education curricula in Egypt.

The findings, in agreement with the literature review, confirmed that there is a gap in Egyptian higher education in the culinary arts; it is being addressed in Egypt from a narrow perspective. A limited number of courses are offered, using a recipe-based pedagogy that relies on the master-apprenticeship model. The curriculum contains some basic general outline of the subject, but it does not equip the student with the necessary skills and competencies required for the field (Agwa et al., 2017; Abdel Hamid, 2010; Baker et al.,1995).

The participants called for a credible education in the field, combining a strong theoretical foundation (liberal) plus hands-on application (vocational). Research,

creativity, and innovation must be engrained within the curriculum. This agreed with the literature review; there is a need for a critical shift in the field toward a deeper understanding of culinary education, and a more flexible and creative pedagogy (Lugosi et al., 2009).

The findings also pointed out several issues related to this field of education, such as the undefined scope of culinary arts in higher education. There is a disagreement between researchers, professionals, and intellectuals working in the food production and hospitality industry about the scope of culinary arts education. This field of education is trapped between science-based models versus vocational-based models (Wilk, 2012 in Erin, 2018). It is important to give the student in the culinary field a food-science foundation in addition to the applied training in kitchen laboratories; a hybrid curriculum is needed (Cheng et al., 2011). This mixed approach can stimulate further research in culinary arts and help to bridge the gap between culinary art and food science. Culinary arts education, besides focusing on the role of the culinary profession in world society, must cover the essential components of culinary sciences, which have been defined by Hegarty (2005) as “the knowledge of food design, manipulation, and processing to make food suitable for human consumption” (p. 10). Even though culinary arts education can play an important role in the tourism industry, culinary education programs are still rooted in a limited and narrow perspective (Sharpley, 2011 in Eren, 2018). This is due to the influence of the traditional perception of the field and the old-school mindset that resists the infiltration of more scientific paradigms in the field.

Results from both the focus group discussions and interviews pointed out the importance of internships as an essential component of the educational pathway in culinary arts. It exposes the students to industrial experience and is, therefore, an exemplary model of experiential learning (Lin et al., 2017). As argued by Kolb (2014), experiential learning is a repetitive cyclical process based on reflection on a specific experience to create a hypothetical concept that can be further investigated. It is becoming more evident in education that exposing students to actual situations gives them the chance to relate theory to real-life experience (Ruhanen, 2005). It also exposes the students to new opportunities for their future careers. Professional employers and educators in the field must cooperate to ensure the success of these internships. The lack of internship-inclusive standard guidelines leaves room for uneven experimentation. The design of the internships should be based on pre-defined outcomes and the expected skills of the graduates. A favorable work environment and work-directed social assistance are required to guarantee the efficacy of the internship (Stansbie and Nash, 2016). The involvement of industry professionals and educators in the design of those internships can increase the chances of their success.

The study showed that the facilities, infrastructure, and logistics of institutions providing culinary arts education in Egypt are basic and do not support good learning practices. Capar (2002) claimed that in culinary arts education, the amenities, the tools, and the condition of the educational kitchen and facilities are critical in shaping the practical experience of the student. Culinary arts higher education institutions must be equipped with facilities capable of

offering the student a real-life experience that covers the full work cycle. As mentioned by the participants in this study, this must be compared to providing equipped hospitals to medical school students.

The lack of specialized educators was a point of concern among the participants. This confirmed what was stated in the literature review about the lack of specialized educators who have applied industrial experience (Agwa et al., 2017). The participants stated that, in Egypt, educators in this field are divided into two groups: academic experts or professionals in the field. On very few occasions we can find educators with well-rounded experience who can master theory and practice. Furthermore, the lack of industrial experience among educators is a challenge that needs to be surmounted. As suggested by the participants, training support of educators is a key issue for the success of this modernization attempt. They recommended the enrolment of culinary professionals in higher educational institutions that train teachers and prepare them to become qualified educators. In addition, continuous training of educators must be an established principle.

This study attempted to address the absence of a specialized approved curriculum in culinary arts higher education in Egypt. It aimed at developing a shared understanding of a standardized curriculum framework to serve as a base for higher culinary arts education.

The results of this study are a step towards designing the way forward for this educational field in Egypt. The researcher synthesized the collected data and the literature review concerning curriculum design to propose a curriculum framework that could be a "guiding reference"

for culinary arts higher education in Egypt. As argued by Stabback (2007), the curriculum framework defines the guidelines for the curriculum and the context (the existing resources, the available human expertise, and the operating system) within which the syllabus will be developed by specialists. It also sets the criteria that allow an array of curricula to be developed. Thus, it offers flexibility and diversity among institutions and countries, which allows adapting the curriculum to a specific identity. The outline of the proposed curriculum framework is provided in the following sub-section.

Proposed Curriculum Framework for A Bachelor's Degree in Culinary Arts

In designing this framework, the main components of a curriculum as described by Carl (2002) were considered. These are needs assessment, identification of objectives and outcomes, the organization of content, selection of delivery methods and techniques, identification of learning activities, and assessment and evaluation. The researcher adhered to the fact that curricula are not static, they must reflect society. The framework does not address specific subject matter within culinary arts higher education; rather it proposes a set of objectives and goals, learning outcomes, and suggested core content.

Overview, this program will cover fine dining art, palate training and taste refining, and will promote innovation in cooking using a freestyle. It will introduce the student to the binary relationship between food and culture. Life and food sciences will be combined. Nutrition and food safety standards will be included as well. It will also address the business perspective,

covering marketing, menu design, and strategic hospitality business planning to enable the student to apply what they learned and to develop their private business in the hospitality or food catering field. Graduates will be qualified to hold senior positions in the food service industry.

Vision, to develop a holistic curriculum framework in culinary studies, integrating culinary arts with life and social sciences, while mastering modern and ICT technologies.

Values, our essential values are integrity, loyalty, commitment to society, continuous development of culinary professionals, respecting lifelong learning, and creating an enabling work environment.

Contextual Analysis, it is important to consider the context within which this new curriculum will be implemented, as well as the different stakeholders acting in the field. These include: (1) ***higher education institutions, which*** are required to acknowledge culinary studies as a higher educational discipline and define the qualifications and programs for under- and post-graduate degrees including research in the field; (2) ***private training institutes***, which must initiate specialized accredited training programs in the field and develop benchmarking curricula to evaluate their program; (3) ***hospitality industries and associations***, which are required to enforce best practices throughout the industry by adopting skills and qualifications standards in their employment policies (Jooste, 2007). Collaboration between these stakeholders will generate a unified vision for a new approach to this field of study. It will also assist in the development of

expertise and work practices that place the profession in the global arena. This cooperation is important for the definition of the goals and objectives of the proposed curriculum framework.

Goals and Objectives, the table below presents the different goals and their related objectives.

Table 1
Goals & Objectives

Goals	Objectives
<p>Goal 1: Market-based Driven Graduates</p> <p>To develop highly creative and competitive graduates, capable of addressing market demands.</p>	<p>To develop a multidisciplinary curriculum to equip the students with the competencies needed for the rapidly changing market.</p> <p>To develop futuristic, creative, and flexible pedagogies and teaching strategies.</p>
<p>Goal 2: Quality Education</p> <p>To apply quality standards throughout the educational process.</p>	<p>To enforce quality standards in teaching and assessment.</p>
<p>Goal 3: Evidence-based Innovation</p> <p>To promote research and innovation so as to reinforce the place of culinary arts in the academic sphere and the hospitality industry.</p>	<p>To create an enabling environment for research and entrepreneurship.</p> <p>To provide research opportunities for students and faculty.</p> <p>To support demand-driven research projects.</p>
<p>Goal 4: Internationalization</p> <p>To follow the international guidelines and best practices of the profession.</p>	<p>To enhance international engagement and knowledge exchange through partnerships, mobility programs, and internships.</p>
<p>Goal 5: Community engagement</p> <p>To consider the Egyptian context and involve the main stakeholders to drive the development of the field.</p>	<p>To collaborate with public and private-sector stakeholders to contribute to the advancement of the profession.</p> <p>To conduct a needs analysis that identifies the market needs.</p> <p>To sensitize the Egyptian community to the importance of the field.</p>

Content, it will be a 4-year program, consisting of 8 semesters with 5 courses (3 credit hours each) per semester, targeting 130 credit hours in total. The guiding principle in the elaboration of content is the combination of new, innovative culinary trends with the well-established traditional fields of science like natural and life sciences. Addressing the multi-disciplinarity of the field represents a challenge in building the contents of the proposed framework. This framework will help in building a foundation for placing this field of study in the rightful place as an academic discipline not confined to basic technical skills.

As this is a field under development, it is still taking early steps in selecting and combining the different subjects to strike a balance between the theoretical and applied parts. In other words, the discipline is struggling to adopt a holistic approach.

From the data gathered and analysed during this research, and the review of the programs offered in various international culinary-oriented institutions, the researcher identified four focus areas of knowledge: (1) culinary arts and gastronomic sciences; (2) life and food sciences; (3) management and business practices; and (4) arts and modern technologies. The table below presents the proposed topics within each of these areas of knowledge and the suggested workload and modality.

Table 2
Content of the Framework

Domains	Suggested Topics	Credit Hours	Theoretical	Applied
Culinary Art and	Basic cooking; cooking techniques;	Total 72 credit hours	25%	75%

<p>Gastronomic Sciences</p>	<p>baking principles; food production methods; food components; studies of food and beverages; kitchen equipment, design, and organization; food hygiene and safety standards; different cuisines; food crafting and design; new cookery concepts and technologies</p>	<p>18 credit hours per year (6 courses) divided into two semesters.</p>		
<p>Food and Social Sciences</p>	<p>Food science (refers to a multidisciplinary area that combines microbiology, chemistry, biochemistry, engineering, and nutrition, to offer solutions to several food system challenges). Social sciences (history of cuisines; sociology and food cultures; anthropology of food; philosophy of food; food heritage; sustainability of the agroecosystem; psychology</p>	<p>Total 27 credit hours 9 credit hours per year (3 courses) for the first 3 years</p>	<p>100% theoretical</p>	
<p>Management and Business Practices</p>	<p>Hospitality industry management (hotels, restaurants, food production companies);</p>	<p>Total 15 credit hours 5 courses distributed in 4 years.</p>	<p>100% theoretical</p>	

	<p>marketing and finance; entrepreneurship; legislations and food laws; leadership; innovation</p>			
<p>Arts and Modern Technologies</p>	<p>Arts (Music, painting, Drama); media tools; journalism and photography in food; information and communication technologies</p>	<p>Total 18 credit hours 6 courses distributed in 4 years</p>	<p>25% theoretical</p>	<p>75% applied</p>
<p>Internships</p>	<p>Two internships (two months each)</p>	<p>6 credit hours</p>	<p>One local & one international internship in a well-established hospitality business.</p>	
<p>Graduation Project</p>	<p>Final year individual project</p>	<p>4 credit hours</p>	<p>Guided individual applied projects based on creativity and innovation according to pre-defined criteria.</p>	

This list of suggested topics offers a wide range of selections for the different programs, both in undergraduate and postgraduate degrees in the field. It can ensure the flexibility and possibility for adaptation of the programs according to the needs of society and the institution.

Learning outcomes, after completing this program the learners will be able to: (1) link culinary arts to culture, history, and life sciences; (2) apply the nutritional principles in cooking; (3) respect the health and safety standards as applied internationally; (4) master different cooking principles and techniques; (5) be oriented to different cuisines; (6) manage and market a hospitality

enterprise; (7) identify the required tools and equipment in the kitchen; (8) deploy entrepreneurial approach in work; and (10) communicate effectively within the institution and with the external world.

Personal Characteristics, Competencies, and Skills, these programs will help in developing the required competencies and skills for future culinarians.

Graduates will be (1) resourceful, creative, and imaginative; (2) responsible, loyal, and committed; (3) efficient, competent, and perceptive; (4) able to perform in stressful conditions and deploy a constructive approach in problem-solving.

They will (1) have a sound base of knowledge related to the discipline in theory and practice; (2) have capabilities of effective management (plans, staff, facility, and challenges); (3) have good organization skills; (4) be able to use science to innovate; (5) have the ability to manage budgets and make projections; (6) be capable of marketing his business; (7) be able to support, guide, train, and motivate people; (8) have an entrepreneurial spirit; and (9) be well oriented to modern and ICT technologies.

Pedagogy and Teaching Methods, teaching methods will be premised on a constructivist approach, where critical thinking and problem-solving are applied. The students will be involved in group research and engaged in synchronous and asynchronous assignments. Pre-set activities will be combined with self-directed ones. Educators will support the students and provide them with all the required knowledge and material. The multidisciplinary nature of the field necessitates the use of a variety of learning and instructing strategies ranging from

face-to-face to virtual encounters; from theoretical lectures to applied hands-on practice; and from reflective to experiential learning. In this field, there is a large component of demonstrations, applications, experimentation, and internships. Assessment will include individual self-assessment through feedback mechanisms.

Involvement of tutors from the industry is recommended. One of the concerns raised during this research is the availability of qualified staff that can deliver these recommended programs. Providing the institutions with proper infrastructure and facilities should happen alongside the development of these new programs, as their application requires well-designed and equipped kitchens, attached restaurants, broadcasting facilities, and kitchen laboratories.

Assessment and Evaluation of the Framework, this study proposes a double assessment of this curriculum framework. An internal assessment that each institution can undertake to assess its ability to realize its goals and readapt the curriculum accordingly, and an external assessment run by an external body of experts to determine the quality of the curriculum framework.

The scope of this study is limited to the design of a proposed curriculum framework. The framework presented here is theoretical; it is generated out of the literature review and the research findings from the collected data. Therefore, it will need further assessment and evaluation after its implementation. As further research work needs to be done, a multistakeholder planning committee should be put in place involving the higher education institutes, the industry, and the government to develop a final complete

curriculum ready for implementation and evaluation. The application, implementation, and evaluation of the curriculum should be subject to future research through an action research project. A suggested conceptual framework for future studies is proposed based on Kolb’s learning cycle (Kolb, 1984). This is a cyclical process that may require several cycles of implementation, reflection, evaluation, adaptation according to the assessment results, and re-implementation to reach the right curriculum.

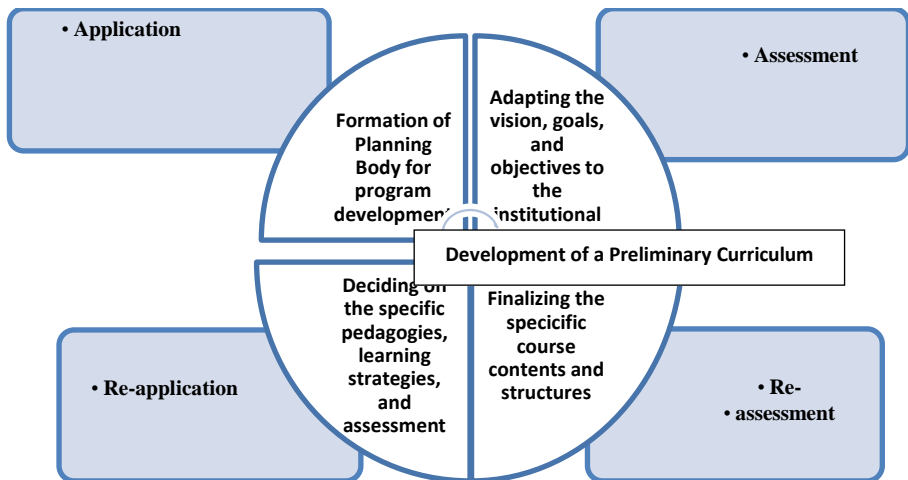


Figure 2
Conceptual Framework for Future Studies (Own Construct)

Challenges

The application of the proposed framework in Egyptian higher education may face the following challenges: (1) acknowledgment of the field as an academic discipline; (2) the official approvals of the proposed program; and (3) the provision of the necessary funds to establish an equipped culinary educational institution according to international standards.

Recommendations

The study recommends the formation of a culinary arts education council that includes policymakers, representatives of the tourism and hospitality industries, educational and training institutions in the field, culinary professionals, non-governmental organizations, and associations. This council must have a mandate to continuously update the culinary arts higher education programs to be holistic, comprehensive, and future-oriented, keeping pace with global development and promoting critical thinking and innovation.

A second recommendation is to create specialized post-graduate degrees: master's and Ph.D. programs to support the development of the field and produce qualified educators.

Conclusion

Traditionally, food science and culinary arts in higher education were offered separately at different institutions. Educators were focusing on theoretical science-based knowledge, while culinary practitioners developed their techniques and repertoire with a minimal scientific foundation. It is timely to have culinary educators and professionals start a reconciliation of sciences and culinary arts in a common framework that combines vocational and liberal perspectives (Hegarty, 2005). Understandably, this merger was a challenge as there was a lack of theoretical foundation to support the consideration of the field as an academic discipline, according to Barham (2001). This is an area for potential future research in culinary arts education. Additionally, the tension between the needs of the industry from an applied standpoint and those of the

subject matter education concerning science and theory was challenging.

This study was conducted to explore the gap in culinary arts higher education in Egypt. A situational analysis was performed through focus group discussions and interviews. The major issues identified through this study are the complex multidisciplinary nature and the ill-defined scope of the field. There was a unanimous agreement on the need to conceptualize this field of education more profoundly and determine its scope and boundaries. A proposed curriculum framework was designed to fill the gap and make this field of education in Egypt globally competitive. This framework tried to offer a holistic multidisciplinary perspective based on a strong scientific foundation while being oriented to creativity and innovation. Also, it promotes moral values and develops technical skills.

In Egypt, tourism is a major contributor to the gross national income, GPI, which generates about 12% of the Gross Domestic Product (GDP) (Central Bank of Egypt, 2019). Putting culinary art in its rightful place at the heart of the tourist industry could have a valuable impact on promoting this industry (Ramadan, 2020).

References

- Afifi, M., & Wahab, A. (2010). Benchmarking the Egyptian tourism higher education scheme. *Anatolia*, 21(2), 363-378. <https://doi.org/10.1080/13032917.2010.9687109>.
- Agwa, Y., Aziz, W., & Khalifa, G. (2017). Evaluating of food and beverage courses in higher private tourism and hotels institutes in Alexandria: The students' perspective. *International Journal of Heritage, Tourism and Hospitality*, 11(2), 111- 122. <https://doi.org/10.21608/ijhth.2017.30204>.

- Almeida, M. G. (2017). Beyond beliefs about food and the flavors of nature. *Mercator*, 16. <https://doi.org/10.4215/rm2017.e16006>.
- Apple, M. (1995). *Education and power* (2nd ed.). Routledge. 14(1), 1-16.
- Avakian, A. (2014). Cooking Up Lives: Feminist Food Memoirs. *Feminist Studies*, 40(2), 277–303. <http://www.jstor.org/stable/10.15767/feministstudies.40.2.277>.
- Azungah, T. (2018), Qualitative research: deductive and inductive approaches to data analysis, *Qualitative Research Journal*, 18(4), 383-400. <https://doi.org/10.1108/QRJ-D-18-00035>.
- Babbie, E.R. (2010). *The Practice of Social Research* (12th ed.). Thomson/Wadsworth.
- Baker, M., Cattet, A., & Riley, M. (1995). Practical food and beverage training in the UK: A study of facilities and a debate on its relevance. *International Journal of Contemporary Hospitality Management*, 7(5), 21-24.
- Bradley, E.H., Curry, L.A. and Devers, K.J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Services Research*, 42(4).
- Barham, P., (2001). *The Science of Cooking*. Springer. SBN 10: 3540674667 / ISBN 13: 9783540674665.
- **Boru, T. 2018. Chapter five: Research design and methodology. ResearchGate. <https://www.researchgate.net/publication/329715052>.**
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Harvard University Press.
- Çapar, B. (2002), Tourism Sector-Tourism Education Institutions Cooperation, Internship Problems and Solution Suggestions. Ministry of Tourism Tourism Education Conference, 415–425.
- Carl, A.E. (2002). *Teacher Empowerment Through Curriculum Development: Theory into practice* (2nd ed.). Juta and Company.
- Cheng, Michael & Bosselman, Robert. (2016). An Evaluation of the Research Chefs Association's Bachelor of Science in Culinology® Core Competencies. *Journal of Hospitality &*

- Tourism Education*, 28, 127-141. DOI: 10.1080/10963758.2016.1189831.
- Choi, B. C., & Pak, A. W. (2006). Multidisciplinary, interdisciplinarity, and transdisciplinarity ihealth research, services, education, and policy: 1. Definitions, objectives, and evidence of effectiveness. *Clinical and investigative medicine. Medecine clinique et experimentale*, 29(6), 351–364.
 - D.A. Kolb (1984). *Experience as a source of learning and development* (2nd ed). Prentice Hall.
 - Dalton, S., (2020). *Disrupting Culinary Education: Making a Case for a European Curriculum Framework for Culinary Higher Education*. *ResearchGate* <https://www.researchgate.net/publication/341709557>.
 - Deutsch, J. (2014). *Suppressing Desire as Culinary Discipline: Can Culinary Education Be Hedonistic? Should It Be?.* Paper delivered at Dublin Gastronomy Symposium 2014. <http://arrow.dit.ie/cgi/viewcontent.cgi?article=1055&context=dgs>.
 - Eman A. Mahmoud (2018). *Is Private Higher Education on the Right Path? The Case of Hotel Studies Education in Egypt*, *Journal of Hospitality & Tourism Education*, 30(1), 19-35. DOI: 10.1080/10963758.2017.1336095
 - <https://doi.org/10.1080/10963758.2017.1336095>.
 - Eren, S. (2018). *The Quality of Culinary Education in Tourism. Encyclopaedia of Communication Research Methods. SAGE (chapter 45)*. <https://doi.org/10.4135/9781483381411.n471>.
 - Fine, G. A. (2008). *Kitchens: The Culture of Restaurant Work*, University of California Press.
 - Freire, P. (1970). *Pedagogy of the oppressed*. Seabury Press.
 - Gersh, I. (2016). *Culinary Industry Practitioners' and Educators' Perceptions of Core Competencies for a 4-Year Bachelor's Degree in the Culinary Arts*. *Journal of Hospitality & Tourism Education*, 28(1), 32-43.

- Hegarty, J.A. (2004). Standing the heat: Assuring Curriculum Quality in Culinary Arts and Gastronomy. The Hayworth Hospitality Press.
- Henning, E., Van Rensburg, W. and Smit, B. (2004), Finding Your Way in Qualitative Research. Van Schaik Publishers.
- Jooste, S.M. (2007). A curriculum framework for continuing professional development in culinary studies. University of Stellenbosch.
- Lin, P. M., Kim, Y., Qiu, H., & Ren, L. (2017). Experiential Learning in Hospitality Education through a Service-Learning Project. *Journal of Hospitality & Tourism Education*, 29, 71-81. <https://doi.org/10.1080/10963758.2017.1297716>.
- Lugosi, P., Lynch, P. and Morrison, A. J. (2009). Critical hospitality management research. *Service Industries Journal*, 29(10), 1465–78.
- Mahmoud, E. A. (2018). Is Private Higher Education on The Right Path? The Case of Hotel Studies Education in Egypt, *Journal of Hospitality & Tourism Education*, 30(1), 19-35. <https://doi.org/10.1080/10963758.2017.1336095>.
- Miles, M.B. and Huberman, A.M. (1994). Qualitative Data Analysis: An Expanded Sourcebook. Sage Publications.
- Miles, R. (2007). Culinary education: Past, present practice and future direction, in E. Christou and M. Sigala (Eds.), International CHRIE Annual Conference, Dallas, Texas: Council of Hotel, Restaurant and Institutional Education, 266–71.
- Ministry of higher education & scientific research communities universities.(n.d.). <https://mohestr.gov.eg/en-us/Pages/NationalUniversities.aspx>.
- Mitchell, R., Woodhouse, A., Heptinstall, T. & Camp, J. (2013). Why use design methodology in culinary arts education?. *Hospitality & Society*, 3(3), 239–260. [https:// doi: 10.1386/ hosp. 3.3.239_1](https://doi.org/10.1386/hosp.3.3.239_1).
- Ramadan, I. (2020). Food Tourism and Its Impact on Attracting Customers to The Egyptian Hospitality Sector. *Journal of Association of Arab Universities for Tourism and*

- Hospitality*, 19(1), 261-276. doi: 10.21608/jaauth.2020. 32466. 1032.
- Ruhanen, L. (2005). Bridging the divide between theory and practice. *Journal Of Teaching in Travel and Tourism*, 5, 33–51. doi: 10.1300/J172v05n04_03.
 - Schön, D. A. (1983). *The reflective practitioner: how professionals think in action*. Basic Books.
 - Shewry, B. (2012). *Origin*. Murdoch Books.
 - Stabback, P. (2007). Guidelines for constructing a curriculum framework for basic education. Presented at the regional workshop “What basic education for Africa” Kigali Rwanda 25 to 26 September 2007 UNESCO-IBE.
 - Stone, J. C., Chall, M. (1989). Ralph Tyler: Education--Curriculum development and evaluation. *Educational Evaluation and Policy Analysis*, 11(2), 205-208. <https://doi.org/10.2307/1163786>.
 - Stansbie, P., Nash, R., & Chang, S. (2016). Linking Internships and Classroom Learning: A Case Study Examination of Hospitality and Tourism Management Students. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 19, 19-29. <https://doi.org/10.1016/j.jhlste.2016.07.001>.
 - Thomas, D.R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237-246.
 - *University of gastronomic sciences*, UNISG <https://www.unisg.it/corsi-iscrizioni/laurea-Triennale/>.
 - Woodhouse, A. (2015). *Culinary Arts Pedagogy: A Critical Enquiry into its Knowledge, Power, and Identity Formation*. ResearchGate.
