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## **An Investigation of the Current Course Content on the BA (Hons.) in Culinary Arts Hot Kitchen Modules in the Dublin Institute of Technology to Ascertain whether the Content is Adequate in Meeting the Needs of the Stakeholders**

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**An Investigation of the Current Course Content on  
the BA (Hons.) in Culinary Arts Hot Kitchen  
Modules in the Dublin Institute of Technology to  
Ascertain whether the Content is Adequate in  
Meeting the Needs of the Stakeholders**

**A thesis submitted to the Dublin Institute of Technology in part fulfilment of the  
requirements for the award of M.Sc. in Culinary Innovation and Food Product  
Development**

**By**

**Pauline Danaher**

September 2012

**Supervisor:** Dr Máirtín Mac Con Iomaire

## Declaration

I hereby certify that the material that is submitted in this thesis towards the award of M.Sc. in Culinary Innovation and Food Product Development is entirely my own work and has not been submitted for any academic assessment other than part-fulfilment of the award named above.

Signature of candidate: \_\_\_\_\_  
Pauline Danaher

Date: \_\_\_\_\_

## **Abstract**

This research focuses on Culinary Arts Education, particularly the adequacy and attitudes of all the stakeholders to the content of the hot kitchen modules on the BA (Hons.) in Culinary Arts in the Dublin Institute of Technology. The lack of research in culinary education has been highlighted by Berta (2005) and Zopiatis (2010).

This thesis has traced the evolution of culinary culture in Europe from Ancient Greece and Rome, up to the present day. Carême (1784 – 1833) and Escoffier (1846 – 1935), the founders of classical French cuisine, codified French cuisine which lead to the need of properly trained chefs (James, 2002). The history of culinary education in France, England and Ireland from traditional apprenticeship with the guilds through to vocational and then liberal/vocational education has been outlined in the literature review.

The Dublin Institute of Technology were at the forefront of the move from vocational to liberal education with the development of the BA (Hons.) in Culinary Arts in 1999 (Hegarty, 2001). The implementation of modularisation in 2004 resulted in reduced hot kitchen contact hours on this programme. Relevant stakeholders (students, graduates, lecturers and employers) were consulted. The overall findings suggest that the majority of all stakeholders are satisfied with the current course content of the BA (Hons.) in Culinary Arts. However, a number of suggested improvements have been identified. These include rewriting modules with revised learning outcomes, clarifying assessment methods, increasing time allocation for modules and modernising module content.

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## Glossary of Terms

<b>BTS</b>	Brevet de Technicien Supérieur
<b>CAP</b>	Certificate d’Aptitude Professionnelle
<b>CAO</b>	Central Applications Office
<b>CDVEC</b>	City of Dublin Vocational Education Committee
<b>CERT</b>	Council for Education Recruitment and Training
<i>Coursewise</i>	Database used in DIT for information on programmes and module content
<b>DIT</b>	Dublin Institute of Technology
<b>ECTS</b>	European Credit Transfer System
<b>EEC</b>	European Economic Community
<b>EGF</b>	École Grègoire Ferrandi
<b>EURHODIP</b>	European Hotel Diploma
<b>HACCP</b>	Hazard Analysis Critical Control Points
<b>HEA</b>	Higher Education Authority
<b>HETAC</b>	The Higher Education and Training Awards Council
<b>IOT</b>	Institutes of Technology
<b>NCCCB</b>	National Craft Curriculum Certification Board
<b>NFQ</b>	National Framework Qualifications
<b>NTDA</b>	National Tourism Development Act
<b>NVQ</b>	National Vocational Qualification
<b>P.A.S.W</b>	Predictive Analytics Software
<b>TDM</b>	Taylor Design Method
<b>VEC</b>	Vocational Educational Committee

# **Chapter One: Introduction**

## **1.1 Introduction**

This chapter outlines the aims and objectives of this research, the background to the research topic and the justification for undertaking such research. A brief summary of each chapter is also outlined below.

## **1.2 Aim**

The aim of this thesis is to investigate the current course content on the BA (Hons.) in Culinary Arts hot kitchen modules in the Dublin Institute of Technology (DIT), and to ascertain whether the content is adequate in meeting the needs of the stakeholders.

## **1.3 Objectives**

1. Investigate the history of culinary education internationally and in Ireland.
2. Examine the current program content of the hot kitchen and larder modules on the BA in Culinary Arts in the Dublin Institute of Technology using the course document.
3. Explore the opinions of culinary arts educators in DIT of the module content of the hot kitchen modules.
4. Assess current students and graduates satisfaction rating of the delivered hot kitchen modules on the BA (Hons.) in Culinary Arts.
5. Examine employer's perceptions of Culinary Arts Degree hot kitchen modules.

## **1.4 Definition of Topic**

Hot kitchen modules referred to in this dissertation are kitchen and larder 1, 2 and 3, and major hot kitchen 1 and 2. These modules currently run on the BA (Hons.) in Culinary Arts in modular form. Comparisons with other culinary arts degree courses highlight the differences in culinary education between France, the United Kingdom and Ireland (Field Notes, 2010a). Culinary education began in Ireland in the 1880s (Mac Con Iomaire, 2010). In 1941 St Mary's College, Cathal Brugha Street, was established and renamed Dublin College of Catering in 1950. The Council for Education Recruitment and Training (CERT) was established in 1963 (Coolahan, 2002). CERT courses gradually replaced City & Guilds courses in DIT from 1988 to 1993 (Field Notes, 2010b). A Diet Cookery course began in 1984 and was replaced in 1995 by the Certificate in Culinary Arts (Catering for Health). In 1999, the BA



(Hons.) in Culinary Arts was launched. The development of the BA (Hons.) in Culinary Arts saw a change of direction in culinary arts education in Ireland (Hegarty, 2004). Curriculum development is affected by student outcomes and the Institutes ability to provide the necessary resources (Harrington *et al.*, 2005). The National Qualifications Authority of Ireland (NQAI) has developed a set of programme and module learning guidelines to be used when developing new programmes and modules. These guidelines are adhered to on the BA (Hons.) in Culinary Arts (DIT, 2012e). The lack of research in culinary education has been highlighted by Berta (2005) and Zopiatis (2010). The purpose of this research is to carry out an investigation of the quality of the hot kitchen modules involving all the stakeholders (industry, educators, graduates and students) to assess whether the content is adequate. It is hoped that this research will assist DIT culinary educators to improve the modules and prepare students for lifelong careers in the industry.

## **1.5 Justification**

Literature on culinary course development is limited with only one peer reviewed journal article specifically related to culinary education (Wollin & Graves, 2002). The first research on environmental factors that influence creative culinary studies established that the findings can be used as a basis and frame of relevance for the future planning of culinary education (Homg & Lee, 2009). Alexander (2007) explores the purpose of operations based training and its impact on curriculum development and the student learning experience. Birdir and Pearson (2000) have conducted one of the only investigations into culinary professional's competence. Their report indicates the need for further research in this area. Berta (2005) furthermore identified the lack of research in assessing quality in culinary programmes and calls for more research "to help educators improve their programmes" and "better prepare students for lifelong careers in the industry". Research on course content for specific modules in culinary arts to date has not been carried out. Hegarty (2001) recommends that industry and educators need to work together to ensure they are providing the best possible training including co-operation on every single aspect from curriculum content, ingredient sourcing and workplace training. With this in mind, it is essential to reassess the hot kitchen modules on the BA (Hons.) in Culinary Arts in the Dublin Institute of Technology for the benefit of future students, industry stakeholders and educators. The motivation for undertaking

this research was to ascertain whether the course content is relevant to all the stakeholders.

## **1.6 Outline of Thesis**

Below is a detailed outline of this thesis.

- **Chapter One – Introduction**

Chapter One provides an introduction into this dissertation, by presenting an overview of each thesis chapter. This chapter presents the background of the research and the justification for undertaking the research topic. It also details the aims and objectives of the thesis as well as providing a synopsis of each chapter in the thesis.

- **Chapter Two – Literature Review**

This chapter builds a theoretical foundation of knowledge around the research topic by reviewing all available relevant literature. It provides a comprehensive review of literature relating to the history of gastronomy from ancient Greece and Rome to the present day. Culinary education from apprenticeship to the foundation of culinary institutes in France, England and Ireland and their award systems was researched in-depth. The history of culinary education in Ireland which began in Kevin Street Technical School in the late 1880s to the opening of St Mary's College of Domestic Science in Cathal Brugha Street Dublin serves as a background to the development of the BA (Hons.) in Culinary Arts at the Dublin Institute of Technology. The BA (Hons.) in Culinary Arts moved culinary education from a technical/vocational method of teaching to more liberal education. The introduction of modularisation in DIT in 2004 saw the development of hot kitchen modules for the BA (Hons.) in Culinary Arts and the impact of modularisation is discussed. Learning styles used on the BA (Hons.) in Culinary Arts are highlighted using the learning outcomes for each hot kitchen module. Chapter two is a focal point of this research as it aids comprehension of core issues, identifies gaps in research, assisting to build the foundation of this study's primary research and building a framework required to answer the research question.

- **Chapter Three – Methodology**

This chapter describes the research approach used to achieve the objectives of the thesis. It identifies the primary research approach as a combination of qualitative and quantitative research methodologies. It establishes the method of secondary research employed and describes the primary research tools utilised to gain information. This chapter sets out the study's objectives, which were used to address the research question. It describes in-depth the lecturers' interviews, students/graduates questionnaires and the online employers questionnaire and their sampling approaches. Limitations experienced and ethical considerations encountered in the research are also outlined.

- **Chapter Four – Findings/Results**

This chapter presents information and data collected from the primary research. One of the analysis tools used was Predictive Analytics Software (P.A.S.W 18) for MS Windows. This tool was used in the analysing of the student/graduate questionnaire which allows for the data to be grouped, cross tabulations to be carried out and “if statements” to be analysed. The data obtained from the interviewing process and questionnaire for the employers were analyzed using the grounded theory method and grouped into relevant categories according to themes and values. The results are summarised in graphs created in Microsoft Excel 2007.

- **Chapter Five – Discussion, Conclusions and Recommendations**

This chapter analyses and discusses the main findings which are presented in Chapter Four. It examines the key findings of secondary and primary research through comparing and analysing results. It examines the research objectives, addresses the research question and draws conclusions and key recommendations that the School of Culinary Arts and Food Technology may implement to improve the course content of the hot kitchen modules.

## **Chapter Two: Literature Review**

## **2.1 History of Gastronomy**

Western European gastronomy has a long and varied history from Ancient Greece and Ancient Rome. At different stages in history countries have influenced other countries by way of invasions, food trading and sharing borders.

### **2.1.1 Ancient European Gastronomy**

Dalby (1999, p.189) suggests that our knowledge of ancient Greek cuisine is tantalizingly incomplete, since subjects other than food have preoccupied classical scholars. Much of what is known on Greek gastronomy is based on the writing of the 4<sup>th</sup> century BC poet Archestratus (Tannahill 1975, p.81; Dalby, 1999, p.190). Page and Kingsford (1971, p.13) suggest that the writings of Marcus Gavius Apicius (cira 42 BC to AD 37) provide much of what is known about Roman cooking. Artistic representations of plants, animals, foods and dining on walls, mosaics and pottery also provide sources of evidence.

The most reliable evidence of everyday life in Roman times can be found in the ruins of Pompeii, which is preserved by volcanic ash following an eruption in AD 79 (Stevenson, 2002, p. 57). The cuisine of Rome is the direct ancestor of most of the cuisines of Western Europe. Roman cookery came under strong Hellenistic influence, and Greek cuisine during the Hellenistic period was influenced by Macedonian and Persian cuisine (Dalby, 1999a; Dalby, 1999b). Dalby goes on to suggest that the highly developed cuisine was practiced in many Greek towns which, were influenced by Greek colonies in Sicily and Asia Minor.

As the Roman Empire expanded, new ingredients were brought back to Rome. Scully and Scully (2002, p. 2) suggests that the Roman province of Gaul, benefited from civilisation that the conquerors brought with them from the 1<sup>st</sup> century BC on, as Roman food habits persisted in Gaul during the five centuries that the Empire lasted. From the 3<sup>rd</sup> and 4<sup>th</sup> centuries onwards it is evident that Greek and Roman food models that had been established began to crumble due to Christianity and the newly dominant Germanic culture (Mac Con Iomaire, 2009, p.36). By far the biggest change was the demise of the Mediterranean triad – grain, wine and oil and the increased consumption of meat.

Montanari (1999, p.69) believes that the desire to be seen as belonging to 'civilisation' defined food culture in the Classical world. He further suggests that differentiating the civilised citizen from the uncivilised non-citizen depended on 'conviviality; the kind of food consumed; the art of cooking, and dietary regime'.

Amouretti (1999, pp.83-87) notes that professional cooks appeared in Athens by the 5<sup>th</sup> century BC, who "maintained a vigilant watch on the quality of foodstuffs and condiments". She also suggests that Greeks were particularly fond of vinegar and they appreciated a variety of costly foreign items, but they never developed the sophisticated taste of the wealthy Romans.

Meat to the Romans was associated with status and the poor ate grain-pastes and polenta-like porridge (Mac Con Iomaire, 2009, p.37). Poor Romans would eat in taverns and hot food stalls due to the risk of fire in their tenements. Inns and way stations were common along major roads but according to Peyer (1999, p.289) these inns were seen as disreputable and frequented by lower classes whereas aristocrats mostly relied on the hospitality of their social equals and only occasionally had to stay at an inn.

Bread, oil and wine were the symbols of civilised society. However, Greek and Roman civilisations were eminently urban; the countryside supplied the city with food (Montanari, 1999). By the 3<sup>rd</sup> century BC Tannahill (1975, p.81) states that 'Athens had developed the original *hors d'oeuvre* trolley, an innovation which other Greek stigmatised as evidence of a miserly disposition'.

Mac Con Iomaire (2009, p.42) notes that although cooking was a slaves' job evidence has been found suggesting emperors like Vitellius and Heliogabalus were able cooks and cooking to them was too important to leave to their slaves. In classical Athens professional cooks learnt and transmitted knowledge by word of mouth and by example (Dalby, 1999). He further suggests that professional (male) cooks hired out their services and their slaves. D'Arms (1991, p.173) remarks, in Roman times, that culinary specialists (cooks, bakers and carvers), although slaves occupied privileged positions on the dining room staff.

The decline of the Roman Empire saw Roman culinary traditions intermingle with invaders ranging from Goths, Franks or Vandals and these new culinary traditions became known as medieval cuisine (Gillespie, 2001). Christianity and the rule of the church had a long-lasting effect on the dietary rules and culture. Fast days took up two thirds of the year and this church policy was to erase the pagan traditions by substituting a Christian interpretation. During the Middle Ages food was produced and eaten by the producer and most rural dwellers were self sufficient. Adamson (2004, p.55) suggest that an individual's social standing determined not only what foodstuffs they could afford to eat, but also how it was prepared. Medieval towns had cookshops where hot pre-prepared food could be purchased, or where meat and poultry could be wrapped in pastry for a fee. This led to the guild of bakers as one of the first food guilds to be founded (Clarke & Refaüssé, 1993, p.18). The development of trade in towns led to a money-based economy and the rise of the urban bourgeoisie. By the 15<sup>th</sup> century considerable growth was seen in English towns of inns and alehouses, providing provision of care for the outsider (Heal, 1990). Guilds played a large part in medieval cooking as towns and money-based economies flourished. The guilds regulated according to Albala (2003, p.109) the number of people allowed to practice a craft in a city, thus preventing competition and securing the jobs and salaries of their members. Membership was by way of serving an apprenticeship for seven years, then work as a journeyman until finally a 'masterpiece' was produced to the satisfaction of the guild members. Only then would the craftsman be allowed to open a business of their own. Among the early craft guilds, also known as trade guilds, were the Butchers, Bakers and Cooks. London's Worshipful Company of Cooks became a recognised organisation in 1311 (Herbage, 1982, p.1). Guilds also existed in France and Albala (2003) notes that professional cooks had to belong to one of the many cooking guilds unless they were employed directly by a noble household.

The Renaissance saw the end of the Middle Ages and food was now influenced during this period by the Reformation which put an end to ecclesiastical regulation of what many Europeans ate (Flandrin, 1999, p.349). According to Willan (1992, p.37) Italian Bartolomeo Scappi's book *De Honesta Voluptate et Valctudine* influenced cooking to the same extent as Michelangelo influenced the fine arts. Scappi explored the Arab art of pastry-making. Italian cooks working in Italian courts anticipated in some sense the work of French cooks working in French courts in forming an elegant courtly cuisine

in a marked national style (Mennell, 1996, p.70). Mennell also suggests that the French adopted and improved Italian culinary practices and assumed for themselves culinary hegemony in Europe.

### **2.1.2 French Gastronomy**

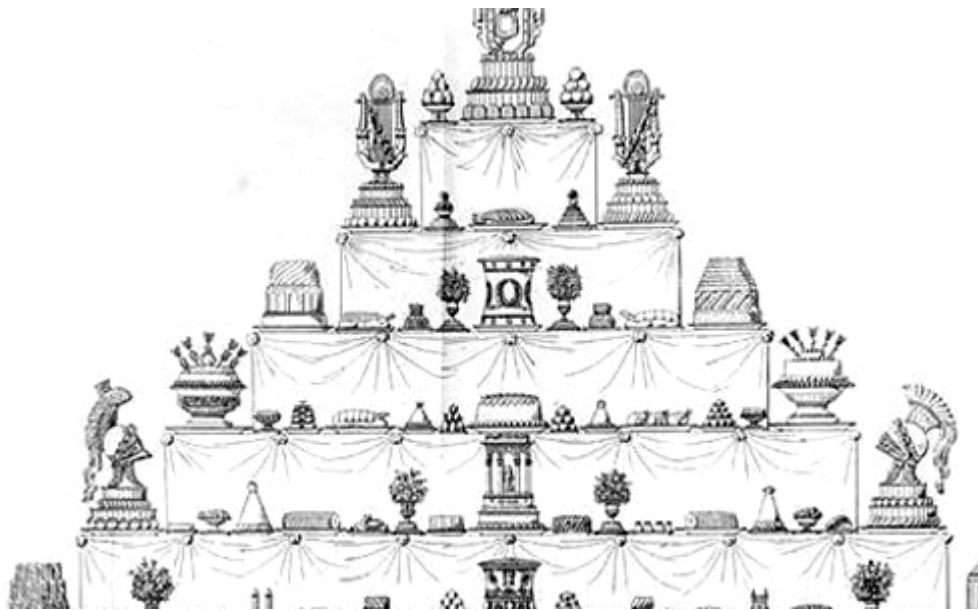
In Europe during the Middle Ages, the use of spices was a marker that separated the wealthy from the less well off. The 17<sup>th</sup> and 18<sup>th</sup> century saw the development of *haute cuisine* and the organisation of kitchens. La Varenne (1615-1678) published *Le Cuisinier François* in 1651 and is considered the founder of French classical cookery. La Varenne's book showed the enormous advances French cooking had made under the civilising influence of Renaissance values and court styles. He is also credited with using roux as a thickener and refining the technique of lamination in pastry work. During the 1740s *nouvelle cuisine* evolved and French cuisine moved to more simple forms of cooking using natural flavours, lighter sauces and ingredients at their freshest. Writers such as La Chapelle, Marin and Menon (Lehmann, 1999, p.278) refined *nouvelle cuisine* by suggesting that rather than masking the flavour of food it should be highlighted. They developed the use of stocks and sauces to capture the essence of individual ingredients, preferring the use of herbs such as parsley, thyme and bay leaf to the previously used spices of the Orient. The French royal court became less involved in government and focused more on elaborate social displays and virtuoso consumption became their essential means of self-expression. This was displayed in French preference for elaborately prepared sauces and made dishes costly in time, labour and ingredients (Mennell *et al.*, 1994). Two types of cuisine, never completely distinct or interchangeable, developed side by side: *haute cuisine* in the larger kitchens and *cuisine bourgeoise* in small kitchens of the prosperous classes (Wheaton, 1983, p.231).

After the revolution French *haute cuisine* developed rapidly with chefs competing with each other for the patronage of the dining public. French *haute cuisine* in the public sphere originated in Paris during the latter half of the 18<sup>th</sup> century with the appearance of restaurants (Spang, 2000, p.2). This also led to upper class adoption of French chefs and French dishes in England, other European countries and the United States. There were one hundred restaurants in Paris before the Revolution, according



to Pitte (1999, p.476) rising to six hundred under the Empire and to about three thousand during the Restoration.

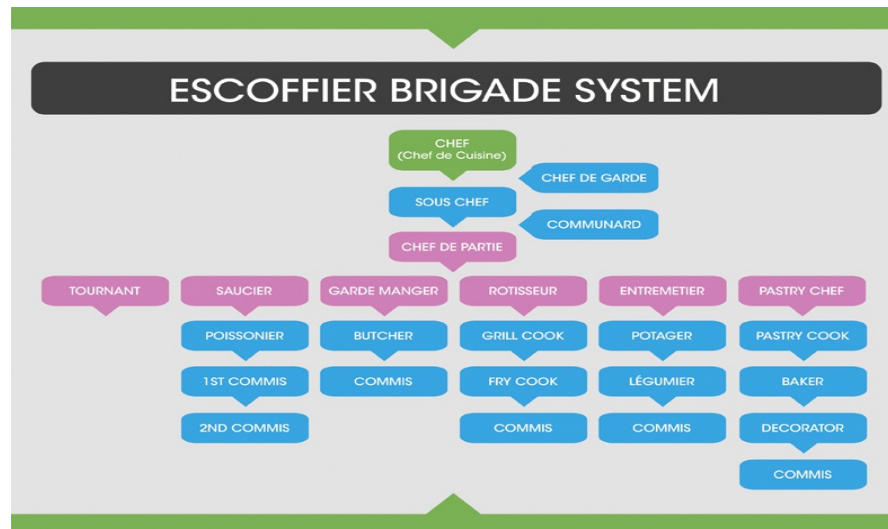
Antoine Carême (1784 – 1833) the founder of the classical French cookery and George-Auguste Escoffier (1846 – 1935) both wrote cookery books which became bibles of Culinary Arts. Carême became famous for his *pièces montées* centrepieces see Figure 2.1.



**Figure 2.1: A Selection of Pièces Montées**

**Source: (Hindley, 2011)**

Escoffier simplified French cuisine in the late 1800s and early 1900s by creating the brigade system which is still used today in large kitchens see Figure 2.2.



**Figure 2.2: Escoffier Brigade System**

**Source: American Culinary Federation (2009)**

Fernand Point is credited with the transition from *classical cuisine* to *nouvelle cuisine* (Sackett *et al.*, 2009). Point’s philosophy was simplicity and perfection in all of his dishes. Henri Gault and Christian Millau writing in the Gault Millau Guide set out the ten commandments of *nouvelle cuisine* including points such as reducing cooking times for fish, seafood, game, veal and green vegetables, reducing the number of items on a menu and that *nouvelle cuisine* chefs were not ‘systematically modernist’ (Freedman, 2007, p.294). Today’s French cuisine has seen the typical French neighbourhood restaurant replaced by McDonald’s or ethnic restaurants and according to Freedman (2007, p.294) the homogenising forces of the European union coupled with outbreaks of disease such as mad cow has polarised the French public and instituted a fear of cultural dissolution and the resulting loss of national identity.

## **2.2 Early History of Culinary Education**

Written accounts of the history of culinary education can be described as vague and incomplete. Many early accounts on food practices and customs were provided by travellers who commented on medicine, superstition, religious rites and customs and the ‘conspicuous consumption’ of the early courts and houses (Germov & Williams, 1999). One of the earliest accounts of this was the *De re conquinaria* (translated – ‘Cooking Matters’ or ‘Cookery and Dining in Imperial Rome’), a culinary manuscript

written by Apicius – a (non cooking) Roman citizen from the 1<sup>st</sup> century A.D. (Emms, 2005). Civitello (2004) notes that while there is more information about banquets because the wealthy and educated wrote about them, information about other classes is sparse. The first printed cookbook appeared in 1470 in Rome and the author had no connection with food (Adamson, 2004). The first cookbook of importance to be written by a chef was *Le Viander* by Taillevent which was in circulation for 100 years before being printed in 1490 (Gisslen, 2011; Prescott, 1987). *Le Viander de Taillevent* was probably written for Charles V between 1373 and 1380 and when printing was introduced it went through 15 editions between 1490 and 1640 signifying the importance of this cookbook (Prescott, 1987).

European Hotel Diploma (EURHODIP) identified the first formally recognised training programmes in education for tourism related subjects in the late 19<sup>th</sup> and early 20<sup>th</sup> century with the post unification apprenticeship scheme in Germany after 1870 (Hsu, 2006, p.28). Lausanne Hotel School founded in 1893 is identified as the first specialised school of its kind in Europe. As the food and hotel business grew in the industrialised world in the 19<sup>th</sup> century the development of formal and legitimate institutions to teach the craft of cooking occurred (Willy, 1910; Mayer, 1908). The early 20<sup>th</sup> century saw the City of Dublin Vocational Education Committee (CDVEC), École Grègoire Ferrandi (EGF) and Westminster College in London start professional culinary schools (Baum, 2005).

### **2.3 French Culinary History**

Guilds were formed mostly by male artisans who regulated their production and oversaw their apprenticeship (Trubek, 2000). The guilds retained their powers of regulation through the 1600s and 1700s in England and France. The guild controlled the system of apprenticeship, holidays, hours worked and wages (The Worshipful Company of Cooks, 2010). Caterers, pastry makers, roasters and pork butchers held licences to prepare specified items. François Pierre (de) La Varenne's *La Cuisinier Francais* (1651) began the transformation from medieval to modern cookery (Brown, 2005). It was only in the closed world of aristocracy that a *chef de cuisine* could practice his craft up until the 1800s (Trubek, 2000). During this time chefs competed with one another to create unique dishes named after their patrons.

Chefs working for the aristocracy raised the level of cooking to an art form to distinguish it from the cookery of common-people. In 1782 Beauvilliers opened the first large scale restaurant called the *Grand Taverne de Londres* which consisted of patrons sitting at a table being served individual portions (Walker, 2008). Culinary employment began to change in the late 18<sup>th</sup> century when the French Revolution removed the monarchy and the aristocrats leaving the great chefs of the time seeking employment elsewhere. Some went on to open restaurants, work in restaurants, work in hotels, and clubs that began to emerge at this time.

Around the 1800s chefs who were employed in the houses of French nobility taught culinary education informally. The *Chef de Cuisine* was at the pinnacle of their occupation and was no longer chained to the stove and directed the kitchen work more than they participated in it. Brown (2005) suggests that at this time chefs did not identify with any particular guild but identified with their individual employer. However Gisslen (2011) suggests that at this time food production in France continued to be controlled by guilds. After the French Revolution it was the Empire that saved the art and chef-artists of French cuisine from oblivion. Napoleon and his aristocrats employed these chefs who became famous for their work. They wrote cookbooks and educated apprentices and cooks who would extend the fame and culture of French cuisine throughout Europe (Brown, 2005).

Research on the ‘celebrity chef’ August Escoffier suggests that it was the combination of fashionable eating establishments and the growing availability of good chefs in the 18<sup>th</sup> and 19<sup>th</sup> centuries that invariably led to the advance of culinary practice and the need for properly trained chefs (James, 2002).

Fernand Point’s restaurant *La Pyramide* was among the first restaurant in 1933 to receive three stars from the *Michelin Guide* (Steinberger, 2010). Point’s pupils who went on to become great chefs including Louis Outhier, Francois Bise, George Blanc, Roger Verge, Raymond Thuilier, Alain Chapel, Paul Bocuse and Jean and Pierre Troisgros, are all witness to his mastery (Cousins *et al.*, 2009). After the Second World War hotel schools began to reopen. *Nouvelle Cuisine* began in the 1960s but gained momentum in the 1970s when Michel Guérard joined food critics and journalists Henri Gault and Christian Millau to advance uncomplicated natural

presentations in food. “Codification came in the 1970s through the work of, initially, Roger Vége and other pupils of Point and the publicity from Gault and Millau. It then spread to Britain through the work of Anton Moismann, Raymond Blanc and the Roux Brothers and throughout the world” (Cousins *et al.*, 2009, p.401). More recent developments in French Cuisine have been Fusion Cooking and Molecular Cooking from the scientific principles of molecular gastronomy.

### **2.3.1 History of French Culinary Education**

Traditionally culinary education in France was achieved through the apprenticeship system whereby an apprentice would have a mentor or master (baker, patisserie or roaster) who would teach them everything they knew (Brough, 2008). This culinary education consisted of practical production skills, the use of specialised equipment, artistry, visual, olfactory and taste references (Trubek, 2000). This education would begin at the age of 12 or 13 and would continue until such time as the apprentice gained the respect of their peers, clients and hotel managers (Le Cordon Bleu Foundation, 2011). Boys and young men learned their trade from an apprenticeship working their way from the bottom up. This would involve scouring pots and washing dishes before being promoted to chopping vegetables and finally preparing sauces and cooking (Snodgrass, 2004).

Maire-Antoine Carême is the founder of French Classical cuisine. He garnered fame for his decorative centrepieces and writings where he emphasised the importance of fresh ingredients and kitchen organisation (Chon *et al.*, 2010). Carême was determined to secure the place of cuisine among high arts and the status of chefs as both artists and scientists (Brown, 2005).

In 1842 an association called “*Société des Cuiniers Français*” was established to promote high class cuisine and train staff who were already employed and also to encourage young people into apprenticeship (Barberet, 1889). In 1881 Thomas-Gabriel Genin (1835-1888) had the idea of starting a professional cooking school but the following year French-Swiss chef Joesph Favre (1849-1903) sets up the “*Société Universelle pour le Progress de L’art Culinaire*”. The aim of organisation was to organise culinary competitions and develop culinary arts (Stengel, n.d.). This

organisation was made up of 23 members and four societies called La Saint Laurent, La Persévérance, Les Cuisiniers de Paris and L'assiette au Beurre and the main aim was to create a culinary school. In 1883 the first culinary school in Paris was opened on Rue Bonaparte by Charles Driessens called "*L'École Professionnelle de Cuisine et des Sciences Alimentaires*" and was subsidised by the state (Stengel, n.d.). The subjects taught were culinary arts and science and leading chefs such as Escoffier, Garlin, Morin, Suzanne, Helie and Poulin gave their time on a voluntary basis to assist in the schools success. The aim of the school was to teach food science, cooking, pastry, confectionery, alcohol, sommelier, charcuterie and preservation. Unfortunately the school wasn't profitable and was closed on the 30<sup>th</sup> of June 1892 (Stengel, n.d.). In 1895 Henri-Paul Pellaprat opened *L'École de Cuisine du Cordon Blue* to teach young women to cook. In 1903 Escoffier wrote *Le Guide Culinaire* which was considered to be the definitive text on classical cuisine (Trubek, 2000). Escoffier was the author and codifier of French modern cuisine through his book *Le Guide Culinaire* which he based on the experience and knowledge passed on by generations of great chefs. Theodore Gringoire and Louis Saulnier wrote "*Le Répertoire de la Cuisine*" in 1918 which was a shorthand version of Escoffier's "*Le Guide Culinaire*" this became an essential reference book for all chefs. The advancement of French cooking schools was assisted by the creation of the technical training law in 1919 and the Grapher of obligation of the trainer (Stengel, n.d.). Many housekeeping schools opened in Paris at this time.

In 1932 the first "*Atelier École*" offering professional training in food service was established by the Paris Chamber of Commerce and Industry (École Grègoire Ferrandi, 2011). This continues today. The Second World War affected culinary schools in France as a lot of the Professors took up arms to fight. After the liberation of Paris in 1944 hotel schools began to reopen with the assistance of hotels and restaurants (Stengel, n.d.). The majority of the students attending hotel schools at the time came from professional families but this began to change as students from different backgrounds began to enrol in short-term training courses as this led to a guarantee of employment. Paul Bocuse opened his school of Hotel and Restaurant Management and Culinary Arts in 1990 and was awarded a ministerial decree in 2007 for its BA in Culinary Arts and Restaurant Management (Institute Paul Bocuse, 2011). This was the first BA in Culinary Arts in France. Today many of France's leading

chefs such as Alain Ducasse and Anne Sophie Pic have opened culinary schools for amateur cooks and professionals alike to teach culinary techniques and knowledge.



**Figure 2.3: Henri Paul Pellaprat Imparting Knowledge to a Class in 1907**

**Source: (Le Cordon Bleu Cuisine Foundation, 2011:18)**

### **2.3.2 The Educational Award System in France**

The school system in France is determined by the Ministry of Education and local authorities are responsible for buildings and support services. From the age of 16 a student can choose to stay in full-time vocational education in upper secondary school (*lycée*). The student studies for a *Certificat d'Aptitude Professionnelle* (CAP). This is a two year professional qualification usually done during the last two years of secondary studies. It is not possible to move from a CAP to university but students can move on to a *Baccalauréat*, *Brevet de Technicien Supérieur* or a *Brevet Professionnel*. The *Baccalauréat* which is the equivalent of the leaving certificate has three different streams (Gabaudan, 2012):

1. Sciences (S).
2. Economics and Social Science (ES).
3. Literature (L).

*Brevet Professionnel* focuses more on professional study with less emphasis on academic studies. *Brevet de Technicien Supérieur* (BTS) is a two year higher education degree usually delivered by secondary schools. After the *Baccalauréat* a student interested in continuing studies in culinary education will choose between a BTS and a *Brevet Professionnel*. The BTS consists of a broader education and the *Brevet Professionnel* focuses on technical and professional skills (Burton, 2011). *Meilleur Ouvrier de France* (MOF) is a unique award in France according to category of trades in a contest between professionals. This is recognised as a third level degree by the French Ministry for Labour. Successful MOF have to show dexterity, knowledge of modern techniques and trends, creativity, good taste and use of both modern and traditional techniques (Le Cordon Blue, 2012).

The French equivalent to a Bachelor's degree (meaning three years of higher studies) that is recognized by the Ministry is called a "*Licence*". *Licences* are general degrees and can only be delivered in Universities (Gabaudan, 2012). There is a second category of Licence for professional/vocational education called a *Professional Licence* and this can be delivered in various types of Institutes. Students must hold a two year post-secondary degree in a field related to that of the *Professional Licence* programme they wish to enter. The defining features of the degree are professional internships and the prominent instructional role of practicing professionals. Because they are widely recognized in the job market as one of the best ways for students to prepare for a career, *Professional Licence* programmes in France's universities enrol more than 41,000 students annually (Campus France, 2010, p.1).

## **2.4 History of English Culinary Education**

In 1873 Mr Buckmaster gave a cookery demonstration at the International Exhibition, London and this revived interest in cookery leading to the establishment of the National Training School of Cookery (Monroe, n.d.). This private school trained teachers and provided instruction for the public in the art of cookery. The establishment in 1883 of Agnes B Marshall's National Training School in cookery introduced girls to scientific food preparation and prepared them for service at aristocratic tables (Snodgrass, 2004; Veron, 2007). This was the first institutional culinary training school that formally taught cookery education in England. The Technical Instruction Act of 1889 saw the establishment of numerous post school



courses in cookery (Monroe, n.d.). Institutionalised culinary education started in Britain through the sponsorship of guild conglomerates (Lawson & Silver, 1973). The City & Guilds of London Institute for the Advancement of Technical Education opened its central institution in 1884. In 1910 it became known as the City & Guilds College after its full incorporation into the Imperial College of Science Technology and Medicine (AIM25, 2008). The two main objectives were to create a Central Institute in London and to conduct a system of qualifying examinations in technical subjects. The guilds funded technical schools and paid for apprenticeship training. City & Guilds has provided training on a full-time, part-time or day-release basis to this day. Prospective chefs and people already employed in catering would attend colleges to obtain cooking qualifications. The 706/1 and 706/2 was the basic qualification in cookery that City & Guilds offered. The 711 pastry qualification and 706/3 pastry, kitchen and larder were senior qualifications offered by City & Guilds. Today City & Guilds offer an extensive range of catering courses for example:

- Certificate and Diploma for Proficiency in Food Industry Skills.
- Certificate and Diploma in Proficiency in Food Manufacturing Excellence.
- Culinary Skills.
- Certificate in Hospitality and Catering/Food Studies.
- Advanced Professional Diploma in Hospitality and Catering.
- Certificate in Hospitality and Catering Principles.
- Diploma in Professional Cookery.
- Diploma in Professional Food and Beverage Services.
- Patisserie and Confectionery.
- NVQ in Hospitality and Catering.
- NVQ Diploma in Professional Cookery.

Source: (City & Guilds, 2012).

All of the above courses are taught at different levels.

### 2.4.1 The English Education Award System

Baum (2005) classifies culinary education in England as being offered at five levels five levels:

- **Level 1** – students are provided with a wide range of competencies which involve the application of skills in the execution of a varied range of vocational activities which are routine or predictable.
- **Level 2** - equips students with competencies which involve the application of skills in the execution of a series of significant activities which are complex or non-routine and which require a certain level of responsibility or autonomy. Working with others, as part of a team, for example is a frequent requirement.
- **Levels 1 and 2** equate to qualified work status and lead to the award of a certificate.
- **Level 3** is a specialist qualification and leads to the award of a Diploma. Level 3 offers students competencies which involve the application of skills in the execution of a wide range of varied professional duties, executed in a wide-ranging series of different contexts, most of which are complex and non-routine. A considerable amount of responsibility and autonomy is required, as well as frequently involving team management and supervision of other workers.
- **Level 4** provides training for the advanced specialist and leads to the award of a Degree. Level 4 brings students competencies which involve the application of skills in the execution of complex, technical or professional activities, performed in a wide ranging field of different contexts and involving a substantial level of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources are often involved.
- **Level 5** is designed for the education of senior executives through postgraduate courses for MBA and equivalent qualifications. Level 5 provides students with competencies which involve the application of a series of fundamental principles in a variety of extensive and often unpredictable contexts. A very substantial level of personal autonomy and often significant responsibility for the work performed by others and the allocation of substantial resources are often characteristic of work at this level. There will also be personal

responsibility for the analysis, diagnosis, design and execution of planning and assessment.

## 2.5 Culinary Education in Ireland

Culinary education in Ireland began in Kevin Street Technical School in the late 1880s. This consisted of evening courses in plain cookery. The City of Dublin Vocational Education Committee (CDVEC) organised their own professional cookery and restaurant service classes in French culinary techniques. Dublin's leading chefs and waiters of the time participated in developing courses in French culinary classics and these courses ran in Parnell Square Vocational School from 1926 (Mac Con Iomaire, 2011). St Mary's College of Domestic Science was purpose built and opened in 1941. This was renamed Dublin College of Catering in the 1950s. Reviews carried out by Organisation for Economic Co-operation and Development (OECD) and the Department of Education on *Training of Technicians in Ireland* (1964) and *Investment in Education* (1966) found the need for higher education courses geared towards manpower requirements. These reviews highlighted the future need for technical qualified personnel which led to the development of The Council for Education, Recruitment and Training for the Hotel Industry (CERT). This national body was set up in 1963 and was responsible for coordinating the education, recruitment and training of staff for the hotel, catering and tourism industries (Coolahan, 2002). Corr (1987) outlines the background and history of CERT, pointing out that it was originally run under the auspices of *Bord Fáilte*, and it was aimed exclusively at the hotel industry. It was in 1974 that it began providing education, recruitment and training for the entire catering sector. In 1977, new management in CERT streamlined courses and new services were offered with the help of European Economic Community (EEC) funds until 1982 when the National Craft Curriculum Certification Board (NCCCB) was established. This allowed Irish catering education to set their own standards, establish its own criteria and award its own certificate, roles which were previously carried out by City & Guilds of London (Corr, 1987). In 1977 the City & Guilds of London programmes in advanced kitchen/larder and pastry (706/3) were seen as major developments in Irish culinary history (Mac Con Iomaire, 2010) and were later replaced by Advanced Certificate in Larder/Pastry offered by CERT. The National Tourism Development Act (NTDA) of 2003 saw the abolition of CERT and the formation of Fáilte Ireland (House of the Oireachtas, 2003). Fáilte

Ireland with the assistance of Institutes of Technologies (IT) around Ireland has now developed new courses in culinary arts ranging from certificates to ordinary Bachelor degrees:

- Waterford IT – Higher Certificate in Arts Culinary Arts.
- Cork IT – B Bus degree in Culinary Arts.
- Tralee IT – Higher Certificate in Arts Culinary Arts.
- Limerick IT – Higher Certificate in Culinary Arts.
- Galway Mayo IT – Higher Certificate in Culinary Arts.
- Letterkenny IT – Higher Certificate in Arts Culinary Arts.
- Athlone IT – Higher Certificate in Arts Culinary Arts.
- Dundalk IT - Higher Certificate in Arts Culinary Arts.
- Tallaght IT - Higher Certificate in Arts Culinary Arts.

### **2.5.1 Dublin Institute of Technology**

The Dublin College of Catering which became the Dublin Institute of Technology is the flagship of catering education in Ireland (Field Notes, 2010c). In 1984 a course in Diet Cookery was developed and later renamed Certificate in Culinary Arts (Catering for Health). On the 19<sup>th</sup> of July 1992 the Dublin Institute of Technology Act was enacted into law. This act enabled DIT to provide vocational and technical education and training for the economic, technological, scientific, commercial, industrial, social and cultural development of the State (Irish Statute Book, 1992). In 1998, DIT was granted degree awarding powers by the Irish state, enabling it to make major awards at Higher Certificate, Ordinary Bachelor Degree, Honours Bachelor Degree, Masters and PhD levels (Levels six to ten in the National Framework of Qualifications), as well as a range of minor, special purpose and supplemental awards (NQAI, 2010). On the 29<sup>th</sup> of May 1996 the BA in Culinary Arts programme was mooted (Hegarty, 2004) at a school meeting. Finally in 1999 a primary degree in Culinary Arts was sanctioned by the Department of Education after some controversy (Duff *et al.*, 2000). Some of the Irish catering industry organisations tried to block this new programme fearing that it might affect the inexpensive labour that the apprenticeship system offered. Their fears proved to be unfounded as the students on the BA (Hons.) in Culinary Arts introduced a better educated cohort of students to the industry. Irish

graduates from the BA (Hons.) Culinary Arts are working in many of the leading restaurants in Ireland and across the world (Mac Con Iomaire, 2008). In September 2005 the School of Culinary Arts and Food Technology began to develop a master's in Culinary Innovation and Food Product Development and this has been offered to students since September 2006 (DIT, 2009). The first PhD in the School of Culinary Arts and Food Technology was awarded by DIT in 2009. The recipient is the first Irish chef to receive a PhD (DIT, 2012a).

## 2.5.2 Irish Education Award System

Third level education in Ireland is monitored by The National Framework of Qualifications (NFQ) and the Higher Education Authority (HEA). The NFQ offers ten levels of awards. Universities award level seven to ten and Dublin Institute of Technology and other IT award levels six to ten.

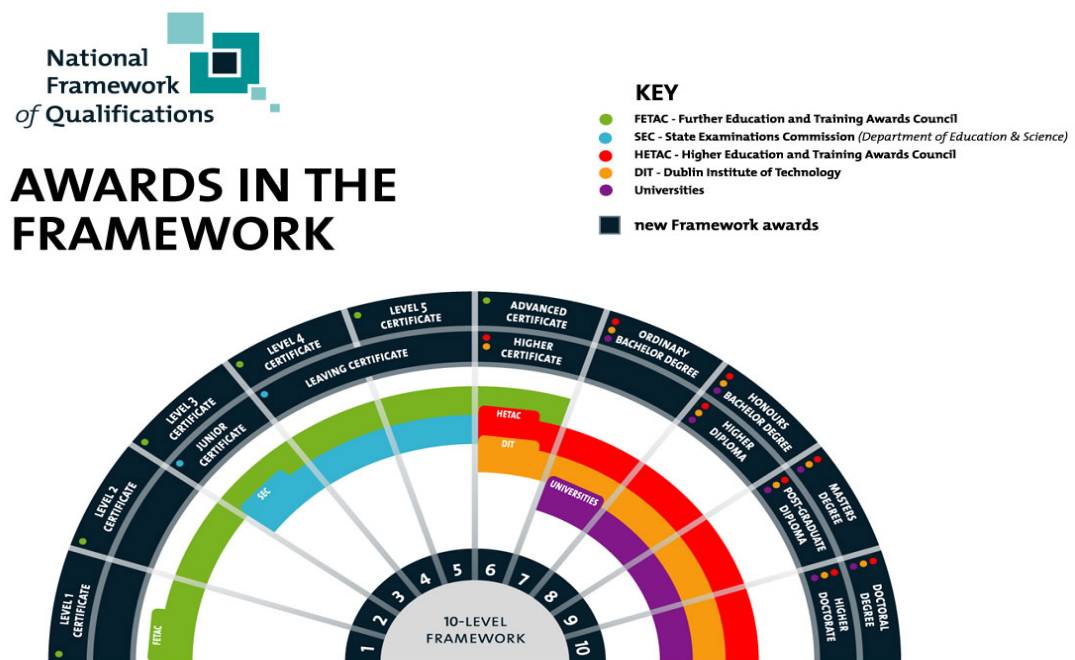


Figure 2.4: The National Framework of Qualifications

Source: ([www.nfq.ie](http://www.nfq.ie))

- **Level six** – higher certificate awarded after completion of two year programme in recognised higher education Institute. The awarding bodies for level six are the Higher Education and Training Awards Council (HETAC), Dublin Institute of Technology (DIT) and Institutes of Technology (IOT).
- **Level seven** – Ordinary Bachelor Degree is awarded after completion of three year course in recognised higher education institution. HETAC, DIT, Universities and IOT are the awarding bodies.
- **Level eight** – Honours Bachelor Degree award upon completion of three to four years programme. Awarding bodies are HETAC, DIT, IOT and Universities.
- **Level eight** – Higher Diploma award following completion of one year programme. Holders of Honours Bachelors Degrees and Ordinary Bachelors Degrees can enter these programmes. Awarding bodies are DIT, HETAC, IOT and Universities.
- **Level nine** – Master’s degree either taught or researched. Taught Master’s can be awarded after one or two years. Entrants to a programme must have either Ordinary or Honours Degree. Awarding bodies are HETAC, DIT, IOT and Universities.
- **Level nine** – Post-graduate Diploma award following one year programme. Entrants must have Ordinary or Honours Degree. Awarding bodies are HETAC, DIT, IOT and Universities.
- **Level ten** – Doctoral Degree is for holders with a high classification Honours Degree who enter a Masters research programme and transfer to a Doctoral programme. This programme can be the traditional research doctorate or professional and practitioner doctorate which have substantial taught components.
- **Level ten Higher Doctoral Degree** – awarded for excellent and distinguished contributions to learning. Normally recipient has a first doctorate for some time. Awarding bodies are HETAC, DIT, IOT and Universities.

## 2.6 International Culinary Education

When assessing a degree programme, the programmes objectives and achievements determine whether a degree is successful or not (Klein, 1972). Research carried out by the author determined that there are five colleges in the United States of America offering Honours Bachelors awards in Culinary Arts. However, many of these degrees are “two plus two” degrees whereby the participant would have achieved an associated degree in Culinary Arts and then topped up with a business or systems degree (Nicholls State University, 2010).

1. The International Culinary School at the Arts Institutes (Phoenix, Arizona).
2. The International Culinary School at the Arts Institutes (Coronado, Arizona).
3. Kendall College (Chicago, Illinois).
4. The International Culinary School at the Arts Institutes (Lenexa, Kansas).
5. The Culinary Institute of America (Hyde Park, New York).

Source: Culinary Schools U (2012)

Six colleges in the United Kingdom (UK) offer Honours Degrees in Culinary Arts varying from Bachelors of Arts (BA) to Bachelors of Science (BSc) (Field Notes, 2012d).

1. Culinary Arts Management BA (Hons.) 4 years, University College Birmingham.
2. Culinary Arts Management BSc (For) (Hons.) 4 years, University of Ulster.
3. Management of Culinary Arts BA (Hons.) 1 year, Coleg Llandrillo Cymru.
4. International Culinary Arts BSc (Hons.) 3 years part-time, Southern Regional College Newry.
5. International Culinary Arts BA (Hons.) 1 year, University of West London.
6. Professional Culinary Arts BA (Hons.) 1 year, University of Derby.

The main distinction between the BA (Hons.) in Culinary Arts in DIT Cathal Brugha Street is that it is a four year full-time course whereas the BA (Hons.) and BSc (Hons.) degrees in the UK vary from one to four years in duration and the American degrees are top up degrees.

## **2.7 From Technical/vocational Education to Liberal Education**

According to Hegarty (2004, p.5) the terms “liberal” and “vocational” are often employed to denote two different paradigms in education, two distinct educational philosophies in which the former values knowledge for its own sake, while the latter places a premium on application or on the way knowledge is used in practice. Liberal education encourages contemplation, the seeking of truth, appreciating the best that is known and thought in the world and central is the idea of nourishment and liberation of the mind (Pearce, 1991). Corporate interests in education and government use education as a major tool in determining the skill-base of the future workforce. They determine the content and process in education so that education becomes a mix of skills and a technical consensus is built around concepts such as efficiency, quality and accountability (Grace, 1989). The idea of liberal education has a long history, lies in thought rather than in practice, and is characterised as being concerned with learning rather than teaching (Tribe, 2000).

For centuries, universities have primarily survived as academies for training for the ‘professions’, such as law, medicine and theology (Tribe, 2003). Over time, these have adapted to the changing economic and social structures and volume of demand for skills, to include the likes of marketing and hospitality (Morrison & O’Gorman, 2008, p. 215). Two landmark legislation dates for technical education in Ireland were the establishment in 1899 of the Department of Agriculture and Technical Instruction and the 1930 Vocational Education Act which established statutory local Vocational Educational Committees (VEC) to provide continuation, apprentice and technical education in Ireland (Nijhof, 2002). The VEC organised a wide variety of courses in different trade areas normally linked to apprenticeship schemes. Under the insistence of the Catholic Church technical education could only teach practical and vocational subjects and not infringe on what was been taught in national and secondary education. “Technical education was seen as having two main purposes, to train young people for entry to particular employments and to improve the skills of those already employed” (Coolahan, 2002, p.100). Dublin saw the establishment of St Mary’s College of Domestic Science in 1941 where cookery programmes were taught (Duff *et al.*, 2000).



According to Hegarty (2004) practical education requires a more comprehensive curriculum design to develop not only skill, but also an intellectual and moral capacity in the student. The traditional distinction between liberal and vocational education must become less relevant as we are challenged to recreate the citizen (well rounded worker) as opposed to the consumer (Hegarty, 2004). Peter's (1966) seminal work *Ethics and Education* proposes that liberal education can add value to the specialist curriculum by opening up the mind to alternative streams of consciousness. Teaching culinary arts in the past had been through a vocational education criteria whereby students were taught skills for industry which were narrow, restrictive and constraining without the necessary knowledge to articulate the acquired skill. In developing the degree in culinary arts in Cathal Brugha Street the programmes team decided that "knowledge has an intrinsic value of its own, that is to substantiate a realistic, relevant or useful curriculum it is necessary to relate it to human values and not just to the immediate demands of market materialism"(Hegarty, 2001, p.46). The tension between vocational and liberal education is caused by the assumption that vocational education is practical and not academic. Hegarty (2001) suggests that technical or technological education should satisfy the practical needs of the student but must be conceived in a liberal spirit, as intellectual enlightenment in regard to principles applied and services rendered. Cairns *et al.* (2000, p.34) suggests that young people of the twenty-first century will need a holistic education that reflects both traditions:

We need to overcome the false and sterile opposition of academic and vocational. Many outside education have complained about this characteristic of educational thinking. This is by no means an English phenomenon, but the problem is intensified for us because our social structure is so dominated by class. Curricula should be designed with a view to eliminating the distinctions between academic and vocational; young people need aspects of both traditions ... We need curriculum which gets beyond thinking in academic and vocational terms.

Practical education shouldn't mean equipping the students with employment skills but equipping them with life skills. Because of the liberal and vocational background of the BA (Hons.) in Culinary Arts, students are able to determine for themselves their own learning, pursue their own worthwhile form of life through a wider choice of career opportunities, adapt to changing situations and will allow them to continue to

develop as human beings (Hegarty, 2001). Tribe (2000) cautions that there are limitations in this potentially liberating educational approach, as an education for liberal reflection and philosophising may be perceived to be a largely passive, individual and cerebral process. The challenge is to construct intellectual bridges, translating it into the vocational and action (Morrison & O’Gorman, 2003).

## 2.8 Development of the BA (Hons.) in Culinary Arts at DIT

On 29<sup>th</sup> May 1996 the School of Culinary Arts and Food Technology adopted a strategy to develop an undergraduate degree in Culinary Arts. The core principle of this strategy was to promote a change in direction for Culinary Arts education in Ireland that would ensure its future development (Hegarty, 2004). A series of staff meeting, brainstorming sessions and the formation of a curriculum development team took place over the course of two years. Initially the School of Culinary Arts began by developing a one year diploma add on to the already established Culinary Arts Certificate programmes. In May 1997 the then Faculty Director proposed that a degree curriculum be developed. Berta (2005) states that determining quality in education is very difficult and is particularly difficult for culinary programmes. Focus groups were held with three industry groups comprising industry practitioners (chefs), industry management, and professional cookery graduates (Hegarty, 2004). By March 1998 the aims and objectives and the four “pillars” of learning were agreed upon. The subject areas were divided into four pillars of learning to assist the disciplinary teams (see Table 2.1).

<b>IT</b>	<b>Culinary Arts</b>	<b>Food &amp; Life Sciences</b>	<b>Business</b>
Hardware & Software	Art & Design	Health and Safety	Marketing
Information Systems	Language	Physiology	Managing Change
Communications Technology	Culinary Arts Major Gastronomic Experience	Nutrition Food Safety	Innovation Enterprise Development
Catering Systems Computers & Equipment	Table Arts Customer Care	Life Style	

**Table 2.1: Four Pillars of Culinary Arts**

**Source: (Course Document, 1998)**

### **2.8.1 The Philosophy of the BA (Hons.) in Culinary Arts**

The guiding philosophy of the BA (Hons.) in Culinary Arts was to move beyond the utilitarian and traditional craft-based apprenticeship in professional cookery and move towards an academic and scholarly form which reflected high status knowledge thereby improving culinary arts education (Hegarty, 2001).

### **2.8.2 Hot Kitchen Development on the BA (Hons.) in Culinary Arts**

When the BA (Hons.) in Culinary Arts was launched in 1999 the ‘culinary arts performance’ subject in year one was very different to the kitchen and larder module in year one being delivered today. As this was the first time the BA (Hons.) in Culinary Arts was delivered there was a “certain freedom regarding kitchen content” (Zaidan, 2012). Culinary arts performance was delivered over two consecutive days for four hours a day. On the first day, theory and mise-en-place took place with the final products being cooked and assembled on the second day. Pastry was also taught as part of this subject for six weeks of the 30 weeks (Clancy, 2012). For the final four weeks of the subject the students were given restaurant experience both in the kitchen and in the restaurant in preparation for their first internship in industry which ran for ten weeks (Zaidan, 2012). In 2004, DIT moved to modularisation and subjects became modules.

The new modules were taken from the already established Culinary Arts Certificate course and transposed on to the new DIT module template. This was due to time constraints in relation to validating the new molecular programmes (Field Notes, 2012e). Also European Credit Transfer System (ECTS) and semesters, had to be taken into account in a short period of time by staff. Changes were made in terms of content and time allocation.

In year one, semester 1 students take kitchen and larder 1 and pastry 1. In semester 2 students take kitchen and larder 2. The kitchen and larder 1 and 2 modules have four practical hours and one theory hour. Modularisation has also reduced the academic year from thirty weeks to twenty six weeks (see Table 2.2).

<b>Current Culinary Arts Modules</b>	<b>Pre Modularisation Culinary Art Subjects</b>
<b>Year 1 Semester 1 (12 Weeks)</b>	<b>Year 1 (Subjects taught over 30 Weeks)</b>
Kitchen & Larder 1	Gastronomy (30 weeks)
Pastry One	Aesthetics for Culinary Arts (30 weeks)
Culinary Science and Technology 1	Culinary Art Performance (30 weeks)
Food and Beverage Studies	Food and Life Sciences (30 weeks)
Gastronomy 1	Language (30 weeks)
Language	Business and Communication Studies (30 weeks)
<b>Semester 2 (12 Weeks)</b>	Information Technology (30 weeks)
Introductory Nutrition	Internship (Ten weeks)
Aesthetics for Culinary Arts 1	
Kitchen and Larder 2	
Culinary Science: Food Safety 1	
National Internship 1 (5 Weeks)	
Culinary Information Systems	

**Table 2.2: Year One of the BA (Hons.) in Culinary Arts**

In year two of the BA (Hons.) in Culinary Arts students took ‘Culinary Arts Performance – production and service’ subject which saw students “building on the fundamental concepts and theories covered in first year. Second year “aims to provide the students with the knowledge, skills and competence to participate in culinary arts performance at higher level and serves to accelerate an overall comprehension of the many complex and challenging issues involved” (DIT, 1999, p.120). Again this subject ran over 30 weeks for eight hours a week (see Table 2.3). Students attended kitchen and restaurant classes (Carberry, 2012). Since modularisation students now take pastry 2 (4 hours) in semester 1 and kitchen and larder 3 in semester 2. The kitchen and larder 3 module is four hours long with one theory hour.

<b>Current Culinary Art Modules Year 2 Semester 1 (12 Weeks)</b>	<b>Pre Modularisation Culinary Art Subjects Year 2 Subjects Taught over 30 Weeks</b>
Aesthetics for Culinary Arts 2	Gastronomy
Pastry Two	Aesthetics for the Culinary Arts
Culinary Science and Technology 2	Language
Gastronomy 2	Business and Communication Studies
Management Principles	Information Technology
Diet, Health and Disease (Nutrition 2)	Culinary Arts Performance
<b>Semester 2 (12 Weeks)</b>	Food and Life Sciences
Wine Studies I	Professional Internship
Kitchen and Larder 3	
National Internship 2 (5 Weeks)	
Services Marketing	
Food and Beverage Service	
Language	

**Table 2.3: Year Two of the BA (Hons.) in Culinary Arts**

Year three of the BA (Hons.) in Culinary Arts practical hot kitchen class was ‘culinary arts major 1’. The students had to choose between culinary art major 1, major pastry 1 or major larder 1. Depending on the choice the student made they were unable to change to another practical elective in year three or four. The students that choose culinary major 1 had a 15 week subject which consisted of a three hour open kitchen to prepare *mise en place* before a five hour practical class with the lecturer (DIT, 1999, p.213). This subject follows the same format that is currently used in major hot kitchen 1. Students also completed a Culinary Arts Production subject in the training restaurant similar to the food and beverage immersion module currently running. Currently in semester 1 students’ complete major hot kitchen 1 (see Table 2.4) which is a five hour practical class (Carberry, 2012). Students also choose between major larder 1 and major pastry 1. In semester 2 students complete the food and beverage immersion module which is carried out in the restaurant training kitchen and is similar to ‘Culinary Arts Production 1’ (Smith, 2012).

<b>Current Culinary Art Modules Year 3 Semester 1 (12 Weeks)</b>	<b>Pre Modularisation Culinary Art Subjects Year 3 (Taught over 30 Weeks)</b>
Financial and Cost Accountancy	Gastronomy
Major Hot Kitchen 1 (Culinary Arts)	<b>Culinary Arts Production (15 Weeks)</b>
Gastronomy 3	Language
Food Product Development 1	Business and Entrepreneurial Studies
Major Pastry 1	Culinary Arts Systems Technology
Major Larder 1	Product Development 1 (15 Weeks)
Language	Culinary Art Major (Elective 15 Weeks)
<b>Semester 2</b>	Research Methods (15 Weeks)
Food and Beverage Management Ten ECTS	
International Internship 15 ECTS	
Research Methods	

**Table 2.4: Year Three of the BA (Hons.) in Culinary Arts**

Year four of the BA (Hons.) in Culinary Arts practical hot kitchen class was culinary art major 2 which ran for 15 weeks. Only students who choose culinary art major 1 could complete culinary art major 2. Again this subject had a three hour open kitchen at the beginning followed by a five hour class with the lecturer. “The aims, learning objectives and syllabus are as stated for this subject in third year” (DIT, 1999, p.242). Students also had a subject called culinary arts production 2 which was a ‘gastronomic experience’. This was seen as “the culmination of the theory in use concept. Through the medium of performance-based exercises, students will be given the opportunity to apply, integrate and reflect on knowledge and skills gained over the preceding three years” (DIT, 1999, p.220). This subject was taught using problem-based learning whereby the students were given a problem to solve and they had to produce a gastronomic meal experience as the final product at the end of the semester (Field Notes, 2012f). Today students have a choice of one practical module in semester 1 (major hot kitchen 2, major larder 2 or major pastry 2). Students who choose major larder 2 or pastry 2 must have completed major larder 1 or major pastry 1 (see Table 2.5.). Major hot kitchen is a five hour practical class with a three hour open kitchen.

<b>Current Culinary Art Modules Year 4 Semester 1 (12 Weeks)</b>	<b>Pre Modularisation Culinary Art Subjects Year 4 (Taught over 30 Weeks)</b>
Food Entrepreneurship	Culinary Arts Production 2 (15 weeks)
Dissertation Research (Ten ECTS)	Business and Entrepreneurial Studies
Major Hot Kitchen 2 (Ten ECTS)	IT Research Package
Major Larder 2/ Major Pastry 2 (Ten)	Culinary Art Majors (Elective 1 15 weeks)
<b>Semester 2 (12 Weeks)</b>	Contemporary Culinary Arts Issues (15 Weeks)
Gastronomic Showcase Event	Product Development 2 (15 Weeks)
Gastronomy 4	Dissertation (15 Weeks)
Food Product Development 2 (Ten)	

**Table 2.5: Year Four of the BA (Hons.) in Culinary Arts**

### **2.8.3 Internship**

Internship can be defined as “work experience in an industrial, business, or government work situations that leverages class guide-lines experience through practical work experience” (Dulgarian, 2008, p.281). Students on the first two years of the BA (Hons.) in Culinary Arts must complete six weeks internship annually in Ireland and third year students spend eight weeks on an international internship.

*The internship is one of the key elements of the degree in Culinary Arts. It is a work based learning programme in a Culinary Arts professional environment and is a major contributor to the student’s personal and professional development. (Course Document, 1998)*

Internship can benefit the student by providing work based learning opportunities, mixing with professionals and increase skills that are difficult to develop in a classroom laboratory environment (Lauber *et al.*, 2004). Although internship is an important part of the BA (Hons.) in Culinary Arts it is outside the scope of this research. However, it is important to note the benefit of internship in relation to students skills development, kitchen confidence, interpersonal development and problem solving abilities. Internship research of the BA (Hons.) in Culinary Arts can be found in Mac Con Iomaire (2004; 2009) and for International internship Cullen (2010; 2012).

## 2.9 Modularisation

The *National Strategy for Higher Education to 2030* allows for the establishment of technological universities in Ireland which will change the way curricula are delivered. This strategy calls for “higher education needs to be externally responsive to wider social, economic, environmental and civic challenges, in addition to being internally responsive to the needs of students and researchers” (Department of Education and Skills, 2011, p.37). DIT strategic plan *Vision for Development 2001-2015* introduced modularisation to the Institute. DIT states that “the major purpose of introducing modularisation is to offer students more choice and freedom with respect to how they construct and participate in a programme of study and any such programme must meet the academic requirements of the particular area of study. It is hoped that opportunities for more inter-disciplinary studies will be afforded to students” (DIT, 2012b). On the 22<sup>nd</sup> of May 2002 it was agreed at a meeting of the Academic Council that the Dublin Institute of Technology should move towards a modularised structure for academic programmes. Validation of programmes began and in 2004 the BA (Hons.) in Culinary Arts was modularised (Hand, 2012). The effects of modularisation on the BA (Hons.) in Culinary Arts are:

- There would be three exam series: at the end of each semester and late August/September.
- Students can progress from first to second semester.
- 60 European Credit Transfer System (ECTS) points would be achieved in one year.
- Maximum number of attempts to pass a module is four.
- Minimum period of registration for a programme shall be one year of full time study.
- Levels of difficulty or learning of a module should be established.
- Modules which stipulate pre-requisites will establish rules governing the progression of students from one stage to another.
- Regulations shall provide for compensation.
- That condonement as a mechanism should be used in the final stage only in determining the award and classification of the degree/higher certificate.



- That two-tier examination boards (Module Board and Progression and Award Board) should be established. (DIT, 2012c)

## 2.10 Curriculum Development

As culinary education grew in the 19<sup>th</sup> century the development of formal and legitimate institutions to teach the craft of cooking occurred. These institutions created a need for curriculum development to validate such institutions (Harrington *et al.*, 2005; Mayer, 1908; Meyer & Rowan, 1977) and ensure student's success and meet the needs of industry. Curriculum development and evaluation is a dynamic process (Gustafson *et al.*, 2005) and institutions must ensure that currency is met at all times to ensure credibility (Baker *et al.*, 1995). Culinary education has been associated with vocational education and focused on students mastery of core technical culinary competencies (Mandabach, 1998; Mandabach *et al.*, 2002). According to Hegarty (2004) culinary arts education requires a holistic curriculum designed to develop not only technical skills but also the student's individual, intellectual and moral capabilities. Factors that affect curriculum development are determined by student outcomes and the organisation's ability to provide resources (Harrington *et al.*, 2005). George (2009) states that aims, objectives, and outcomes should be central as the starting point for designing and understanding the design of learning. Zopiatis (2010) emphasises the need for industry and education to look at the competencies required and explore what can be done to close the gap. Zopiatis research also found that technical culinary specific competencies rank first in importance. Muller *et al* (2009) indicate that employers expect graduating students to have a set of specified skills and abilities. It is for this reason that the Irish catering industry wanted to influence the curriculum development of the culinary arts programme (Hegarty, 2004). When developing curriculum in Ireland educational providers must adhere to the National Qualifications Authority of Ireland (NQAI) guidelines. For example, at Level eight (the level of the BA (Hons.) in Culinary Arts see Appendix 1), under Knowledge – Kind, the NQAI require that a successful graduate of an Honours Bachelor Degree programme should “have a detailed knowledge and understanding in one or more specialised areas, some of it at the current boundaries of the field(s) (See Table 2.6.).

Strand	Sub-strand	Description
Knowledge	Breadth	How extensive is the learner's knowledge?
	Kind	What nature or quality of knowing has the learner engaged in?
Know-How & Skill	Range	How extensive are the physical, intellectual, social and other skills demonstrated by the learner?
	Selectivity	How complicated are the problems that the learner can tackle using the skills acquired and how does a learner tackle them?
Competence	Context	In what contexts is a learner able to apply his / her knowledge and skills?
	Role	How much responsibility can the learner take, personally and in groups, for the application of his / her knowledge and skills?
	Learning to Learn	To what extent can the learner identify the gaps in his / her learning and take steps to fill those gaps?
	Insight	How far has the learner integrated the intellectual, emotional, physical and moral aspect of his / her learning into his / her self-identity and interaction with others?

**Table 2.6: NQAI Strands and Sub-strands for Programme Learning Outcomes**

**Source: DIT Guide to Writing Learning Outcomes**

When designing or reviewing an honours degree programme, it should be evident from the programme learning outcomes in the programme document that a successful graduate would achieve the required NQAI learning strands (Bowe & Fitzmaurice, n.d.). NQAI level eight states:

Innovation is a key feature of learning outcomes at this level. Learning outcomes at this level relate to being at the forefront of a field of learning in terms of knowledge and understanding. The outcomes include an awareness of the boundaries of the learning in the field and the preparation required to push back those boundaries through further learning. The outcomes relate to adaptability, flexibility, ability to cope with change and ability to exercise initiative and solve problems within their field of study. In a number of applied fields the outcomes are those linked with the independent, knowledge-based professional. In other fields the outcomes are linked with those of a generalist and would normally be appropriate to management positions. (NQAI, 2003, p.21).

In curriculum development George (2009, p.161) states that it is vital first of all to determine precisely and fully what the purposes of the proposed learning are, and to keep this in mind consistently throughout the whole process of planning and delivery. Assessment drives learning and determines what is learned: it interprets and communicates the learning aims for the learners. Learning needs must be anticipated, defined and planned for in accord with the aims and assessments, this in turn will define the kind of teaching provided.

### **2.10.1 Types of Learning Styles**

Cartelli (2006, p.137) states that “knowledge of learning styles can be used to increase the self-awareness of students and lecturers about their strengths and weakness as learners”. There are 71 learning models reported in the literature (Cartelli, 2006). For the purpose of this thesis two models will be reviewed.

### **2.10.2 Bloom’s Taxonomy**

McDonald (2002, p. 34) outlines Benjamin Bloom’s three domains of educational activities:

1. Cognitive: mental skills (knowledge consisting of six levels).
2. Affective: growth in feelings or emotional areas (attitude consisting of five levels).
3. Psychomotor: manual or physical skills (skills consisting of six levels). (See Appendix 2)

These learning behaviours are the goals of a learning process whereby the learner should have acquired a new skill, knowledge and/or attitudes. Each one of the three domains is organised into a series of levels and each level must be completed before moving on (Atherton, 2011). Depending on the level of learning required will determine the number of levels to be reached. All levels may not have to be achieved i.e. passed training of chefs covered knowledge, comprehension and application levels leading to low levels of learning. Pascarella and Terenzini (1991) state that culinary arts education should have the basic skills of cooks and chefs as well as the additional “higher order thinking skills” identified as cognitive skills in Bloom’s taxonomy.

Bloom's Taxonomy led to divisions of lower and higher levels of thinking (Forehand, 2005) similar to vocational and liberal education perceptions. Blooms Taxonomy has been revised by Lorin Anderson one of Bloom's former students during the 1990s (Anderson, 2001). Changes occurred in three categories: terminology, structure and emphasis. Bloom's six major category terminologies were changed from noun to verb forms (see Appendix 2). Structural changes now consist of a two-dimensional table (see Appendix 3). One dimension identifies knowledge dimension (knowledge to be learnt) and the second is the cognitive process dimension (the process used to learn) (Forehand, 2005). Originally Bloom's Taxonomy wasn't designed for a broader use in education. However the revised version emphasises that it is now a more authentic tool for curriculum planning, instructional delivery and assessment. Cognitive abilities have been linked to career success in regards to skill attainment (Antun & Salazar, 2005). Drecher and Betz (1991) suggest that cognitive skills are of particular importance at the beginning stages of one's working life and diminishes over time.

### **2.10.3 Honey and Munford**

Honey and Munford (1992) developed four distinct learning styles based on the work of Kolb learning cycle (Beard & Wilson, 2006). The four distinct learning styles or preferences:

1. **Activist** – learners who learn by doing (brainstorming, problem solving, group discussions, puzzles, competitions and role play).
2. **Theorist** – learners who like to understand the theory behind the actions (models, statistics, stories, quotes, background information and applying theories).
3. **Pragmatist** – learner who needs to be able to see how to put learning into practice in the real world (time to think about how to apply learning in reality, case studies, problem solving and discussion).
4. **Reflector** – learner who learns by observing and thinking about what happened (paired discussions, self analysis questionnaires, personality questionnaires, time out, observing activities, feedback from others, coaching and interviews).

The term learning style is used as a description of the attitudes and behaviours which determine an individual's way of learning (Honey & Mumford, 1992, p.1). According to Honey and Mumford, people learn in two ways the first through teaching and the second through experience. There are four types of people with preferences for each stage of the learning cycle (see Appendix 4). The Honey and Mumford learning cycle is similar to the Lewin, Kolb and Deming/Shewhart cycles (see Appendix 5) where there is a strong link between thinking and doing/applying to create an effective learning process (Beard & Wilson, 2006).

### **2.11 Developing Modules**

The National Qualifications Authority of Ireland (NQAI) has developed a set of programme and module learning outcomes to be used as a guide when developing new programmes and modules and since 2004 DIT has adhered to these outcomes (Bowe & Fitzmaurice, n.d.). The module templates that DIT uses to assist in writing modules comprise of different headings (see Appendix 6).

### **2.12 Definition of Hot Kitchen Modules**

Hot kitchen modules for the purpose of this research consist of kitchen and larder 1, 2 and 3, and major hot kitchen 1 and 2 on the BA (Hons.) in Culinary Arts (see Appendix 7). The aims and learning outcomes for these modules were obtained from *Coursewise* as this reflects what the School of Culinary Arts and Food Technology should be delivering regarding modules. The aim and learning outcomes will be presented along with learning styles.

#### **2.12.1 Kitchen and Larder 1**

- Kitchen and larder 1 module aims to introduce the learner to the essential, underlying kitchen and larder principles and practice (Campbell *et al.*, 2009). The aim of this module is to give the learner a knowledge and understanding of the selection, combination, preparation, cooking and presentation of food using safe and hygienic practices. The learner will move beyond trial and error behaviourism to a careful recognition and definition of concepts through which the learner organises and controls the materials they encounter (see Table 2.7 for learning outcomes).

<b>Learning Outcomes for Kitchen and Larder 1</b>	<b>Bloom's Taxonomy</b>	<b>Honey &amp; Munford Learning Styles</b>
Prepare stocks and marinades	Psychomotor	Activist
Identify and specify kitchen/restaurant equipment and utensils, operate them safely and correctly	Cognitive	Theorist
Demonstrate capacity to make common cuts fine dice, julienne, cube, slice, baton, wedge etc.	Psychomotor	Activist
Identify the cuts of meat, poultry and fish	Cognitive	Theorist
Bone elements of beef, veal, lamb and fish	Psychomotor	Activist
List and apply appropriate methods of cookery to the appropriate cuts of meat and fish	Cognitive	Pragmatist/Reflector

**Table 2.7: Kitchen and Larder 1 Learning Styles**

### 2.12.2 Kitchen and Larder 2

- Kitchen and larder 2 aims to build on and extend the range of skills, techniques and knowledge previously acquired (see Table 2.8 for learning outcomes). This module aims to interrogate and reflect on implementing a new coalition of culinary knowledge, skills and techniques in a new culinary art discipline. Also it aims to introduce students to the pursuit of excellence in culinary arts by developing their concepts and skills (Danaher *et al.*, 2009).

<b>Learning Outcomes for Kitchen and Larder 2</b>	<b>Bloom's Taxonomy</b>	<b>Honey &amp; Munford Learning styles</b>
Explain and demonstrate an understanding of the reasons for cooking food.	Cognitive	Theorist/Activist
Apply moist, dry and oil methods of cooking appropriately to a variety of ingredients/commodities/dishes.	Psychomotor	Activist
Extend their range of particulation and manipulation skills.	Psychomotor	Activist
Define and understand stocks, emulsions (stabilisation and breakdown) as part of culinary preparation.	Cognitive	Theorist
Achieve a balance of nutritional value, texture, flavour and colour of each item prepared with an emphasis on healthy eating.	Psychomotor/Cognitive	Activist
Prepare, cook and present a list of dishes from the classical repertory.	Psychomotor	Activist

**Table 2.8: Kitchen and Larder 2 Learning Styles**

### 2.12.3 Kitchen and Larder 3

- Kitchen and larder 3 aims to equip the learner with a deep knowledge of national and international culinary traditions, processes/principles and practices (see Table 2.9 for learning outcomes) (Connell, 2009).

<b>Learning Outcomes for Kitchen and Larder 3</b>	<b>Bloom's Taxonomy</b>	<b>Honey &amp; Munford Learning styles</b>
Critically assess and apply the major culinary elements of classical and modern cuisine	Psychomotor	Activist
Demonstrate a range of culinary techniques of past and present recognised culinarians	Psychomotor/cognitive	Activist
Demonstrate creativity and innovation with a wide variety of food commodities.	Psychomotor	Activist
Critically analyse standards of performance appropriate to ethnic food production	Cognitive	Theorist
Develop a critical, objective and logical approach to problem solving in relation to food preparation, cooking and service	Cognitive/psychomotor	Activist
Understand and comply with the legal requirements regarding the production and service of healthy safe nutritious food.	Cognitive	Theorist
Display inter-personnel, individual and teamwork skills.	Psychomotor	Activist

**Table 2.9: Kitchen and Larder 3 Learning Styles**

### 2.12.4 Major Hot Kitchen 1

- Major hot kitchen 1 aims to create an awareness of a wide range of culinary styles and trends enabling the learner to move to a higher level of knowledge and understanding and be able to organise, critique and assess their own performance and that of their peers (see Table 2.10 for learning outcomes) (Carberry, 2009a).

Learning Outcomes for Major Hot Kitchen 1	Bloom's Taxonomy	Honey & Munford Learning styles
Express confidence and capability in the planning, organising and execution of Culinary Arts performance.	Psychomotor	Activist
Accurately record, document and critically review their culinary arts activity.	Cognitive	Theorist/reflector
Record accurately the outcomes of laboratory sessions	Cognitive	Theorist/reflector
Produce quality written accounts of practical and applied culinary work accompanied with photographic evidence.	Cognitive	Activist/reflector
Reproduce the documented work of selected culinarians to a high standard	Psychomotor	Activist

**Table 2.10: Major Hot 1 Learning Styles**

### 2.12.5 Major Hot Kitchen 2

- Major hot kitchen 2 aims to enable learners to create, develop, reflect and record the further development of their own culinary style of culinary art performance which will include a range of appropriate culinary art dishes and



a higher level of understanding of commodities, culinary arts performance and aesthetic judgement (see Table 2.11 for learning outcomes) (Carberry, 2009b).

<b>Learning Outcomes for Major Hot Kitchen 2</b>	<b>Bloom's Taxonomy</b>	<b>Honey &amp; Munford Learning styles</b>
Conceive and execute new ideas and concepts in culinary arts performance with creativity and flair.	Psychomotor	Activist
Formulate food recipes suitable for publication and produce critical, evaluation written accounts of the practical kitchen laboratory work carried out accompanied with photographic evidence.	Cognitive	Activist/reflector
Express confidence and capability in the planning, organising and the execution of culinary arts performance.	Psychomotor	Activist
Apply theoretical knowledge and analytical tools in developing solutions for culinary art challenges in developing recipes.	Cognitive/psychomotor	Theorist
Further develop their intellectual and personal abilities while facilitating and advancing their own learning.	Cognitive	Theorist

**Table 2.11: Major Hot Kitchen 2 Learning Styles**

The above learning outcomes for the hot kitchen modules on the BA (Hons.) in Culinary Arts appear on the module descriptor of *Coursewise*. The programme content is also outlined in *Coursewise* which is not an accurate reflection on what is currently being delivered (see Appendix 13) on the BA (Hons.) in Culinary Arts. The programme content on *Coursewise* (see Appendix 7) has numerous inaccuracies:

### **Kitchen and Larder 1**

1. Some authors names in capital letters.
2. Spelling mistakes.
3. Learning outcomes repeated by copying and pasting.
4. Terminology used is incorrect.
5. Module content is not presented in sequence.
6. Assessment methods do not reflect the current assessment methods used.
7. States that module is available on different programmes however these programmes are all certificate programmes (level 7) not (level 8) which the module was written for.
8. The course content does not reflect what is currently being delivered on the kitchen and larder module 1.

### **Kitchen and Larder 2**

1. Some authors' names in capital letter and one lecturer named who appears as module author was in fact not the module author.
2. Learning outcomes repeated by copying and pasting.
3. Module content repeated by copying and pasting and doesn't reflect what is currently being delivered.
4. Reading list doesn't reflect the reading list given to students.
5. Module available to (level 7) certificate courses. This is a (level 8) module.

### **Kitchen and Larder 3**

1. Learning outcomes repeated by copying and pasting.
2. Module content not presented in sequence.
3. Module content doesn't reflect the current module being delivered.
4. Weighting for assessment methods not shown.
5. Module available to certificate courses (level 7) written for (level 8).

### **Major Hot Kitchen 1**

1. No pre-requisite stated. Should have kitchen and larder 1, 2 and 3.
2. Learning outcomes repeated by copying and pasting.
3. Module content repeated three times.
4. Module content does not reflect current module content.
5. Assessment criteria not specified.
6. Open kitchen preparation required in additional information however, this is not currently available for major hot kitchen 1.
7. Module available to (level 7) certificate course, this module is a (level 8) module.

### **Major Hot Kitchen 2**

1. States module delivered over 2 semesters however, only delivered over one semester.
2. Learning outcomes repeated by copying and pasting.
3. Module content repeated by copying and pasting.
4. Assessment criteria not identified.

As has been highlighted above there are numerous inaccuracies on *Coursewise* regarding the hot kitchen modules in DIT. These mistakes do not reflect well on the school's ability to deliver the modules in a professional manner. *Coursewise* is available to the general public and prospective students wishing to enrol on the BA (Hons.) in Culinary Arts, therefore the aims and learning outcomes of the modules should be portrayed accurately. Whether the course content should be displayed is contentious as it could lead to other institutes copying module content.

### **2.13 Summary of Literature Review**

The cuisine of Rome is the direct ancestor of most of the cuisines of Western Europe. In Classical Athens professional cooks learnt and transmitted knowledge by word of mouth and by example. In Roman times culinary specialists (cooks, bakers and carvers), although slaves occupied privileged positions on the household staff (D'Arms, 1991, p.173). The Middle Ages saw the development of the trade guilds which regulated the amount of people that could practice a craft in the city. In France, chefs were members of cooking guilds unless they worked in private houses (Albala,

2003). During the Renaissance Italian Bartolomeo Scappi was the most influential author of the time. French chefs adopted and improved Italian culinary practices and assumed for themselves culinary hegemony in Europe (Mennell, 1996, p.70).

La Varenne's book in 1651 showed the enormous advances French cooking had made under the civilising influence of Renaissance values and court styles. After the French Revolution the reputation of the French chef and French *haute cuisine* rose dramatically as chefs competed with each other for the patronage of the dining public (Spang, 2000). Marie Antoine Carême was the founder of French Classical cuisine and Auguste Escoffier the inventor of the brigade system still used today in professional kitchens. Both men wrote books which became culinary staples for Culinary Arts.

Formal culinary education began in the late 19<sup>th</sup> and early 20<sup>th</sup> century in Germany (Hsu, 2006) and the first school opened in Lausanne in 1893. French culinary education was achieved through an apprenticeship system. Numerous early attempts in France to open culinary schools failed due to financial problems. In 1932 the first *Atelier École* opened its doors and continues to this day (École Grégoire Ferrandi, 2011). Numerous famous French chefs have opened successful culinary schools in France most notably Paul Bocuse.

The Technical Instruction Act of 1889 saw the establishment of numerous post school courses for cookery in England (Monroe, n.d.). City & Guilds was and still is the main provider of culinary education in England. A number of colleges in England have now begun to offer degrees in culinary arts. Culinary education in Ireland began in Kevin Street Technical School in the late 1880s. St Mary's College of Domestic Science opened in 1941 in Cathal Brugha Street (Mac Con Iomaire, 2010). In 1963 CERT educated, recruited and trained staff for the hotel, catering and tourism industries in colleges all over Ireland (Corr, 1987). Fáilte Ireland, formerly CERT, now assists Institutes of Technologies in developing new Culinary Arts courses.

In September 1999, the BA (Hons.) in Culinary Arts was launched in DIT, Cathal Brugha Street. This changed culinary education from a vocational subject of study to a liberal arts subject (Hegarty, 2001). Early hot kitchen classes had “certain freedom regarding class content”. Modularisation saw the reduction of class contact hours and the number of weeks in a semester: subjects becoming modules. Modules content has to adhere to NQAI guidelines for level eight. Aims, learning outcomes and learning styles had to be considered. The current hot kitchen modules on the BA (Hons.) in Culinary Arts in DIT, along with the learning outcomes have been evaluated according to both Bloom’s Taxonomy and Honey and Munford learning styles. The hot kitchen modules misrepresentation on *Coursewise* have been highlighted.

## **Chapter Three: Methodology**

### **3.1 Methodology**

This chapter explains the research methodology used for this dissertation. The research question and objectives along with the research rationale will be presented. Both the primary research methodology and the use of multi-variant methods will be justified. The methodology applied assisted in comparing the attitudes of all the stakeholders of the BA (Hons.) in Culinary Arts.

### **3.2 Aims and Objectives**

The aim of this thesis is to investigate the current course content on the BA (Hons.) in Culinary Arts hot kitchen modules and to ascertain whether the content is adequate in meeting the needs of the stakeholders.

### **3.3 Objectives**

1. Investigate the history of culinary education internationally and in Ireland.
2. Examine the current programme content of the hot kitchen and larder modules on the BA in Culinary Arts in the Dublin Institute of Technology using the course document.
3. Explore the opinions of culinary arts educators in DIT of the module content of the hot kitchen modules.
4. Assess current students and graduates satisfaction rating of the delivered hot kitchen modules on the BA (Hons.) in Culinary Arts.
5. Examine employers perceptions of Culinary Arts Degree hot kitchen modules.

### **3.4 Research Rationale**

In order to achieve the objectives of this dissertation primary research was carried out in addition to secondary research reviewing of relevant literature in Chapter Two which has been assembled to build background knowledge of the subject area. The primary research will be both qualitative and quantitative. Different methods used and consisted of:

1. Interviews with culinary educators who teach on the BA (Hons.) in Culinary Arts.
2. Self-administered questionnaire with students past and present. (The questionnaire was informed by the learning outcomes of each module).

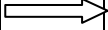


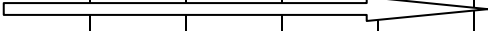
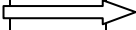
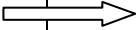
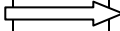
### 3. Online employers/mentors questionnaire.

The reason for undertaking this piece of research is to ascertain whether the course content of the hot kitchen modules is adequate for all stakeholders. Kumar (2011) notes that research is a way of thinking: examining critically the various aspects of your day-to-day professional work: understanding and formulating guiding principles that govern a particular procedure; that will contribute to the advancement of your practice and profession. Research, according to Kothari (1990) is a scientific and systematic search for pertinent information on a specific topic. The decision to conduct this piece of research stems from the author's concern about the adequacy of the course content on the hot kitchen modules. In personal conversations with industry mentors in recent years, issues were raised concerning culinary arts students abilities (knife skills, culinary knowledge – cooking methods, knowledge in use of kitchen commodities) in professional kitchens. The author also feared that the course content is outdated and students are unable to meet industry standards. This perceived shortage of practical skills pertaining to culinary arts students has become a national issue (Hegarty, 2011).



### 3.5 Research Plan and Schedule

#### Gantt Graph

Task name	Sept - Nov - 11	Dec -11	Jan - 12	Feb-12	Mar -12	Apr 12	May 12	June 12	July 12	Aug 12	Sept 12
Preliminary literature review											
Finalise Research Proposal											
Submit research proposal											
Literature review											
Methodology Methods finalised and carried out											
Data Analysis and findings											
Conclusions											

**Table 3.1: Research Plan and Schedule**

### 3.5.1 Timeline of Data Methods

	May 12	June 12	July 12	August 12
Interviews of Lecturers	→			
Pilot Questionnaire for students	→			
Corrections and alterations carried out on student questionnaires	→			
Questionnaire distributed to students	→			
Pilot questionnaires for employers	→			
Corrections and alterations carried out on employer questionnaires	→			
Email questionnaire to employers		→		
Data analysis using SPSS of student questionnaires		→		
Data analysis of lecturer interviews using grounded theory			→	
Data analysis of employers questionnaires using grounded theory and Microsoft excel.			→	
Evaluation				→

**Table 3.2: Methodology Timeline**

### 3.6 Secondary Research

Secondary research assists in refining and understanding the chosen field of study (Saunders *et al.*, 2009). Malhotra (1999) insists that exhaustive analysis of all published and unpublished work relating to the subject matter under investigation is imperative before advancing towards primary data collection. Malhotra (2007) states the main advantage of secondary research is that it is accessible, reasonably inexpensive and can be quickly acquired; it also can assist in identifying the research problem and aids the development of a research approach. Similarly, Hart (2004) identifies reasons for undertaking literature investigations as it identifies previous research undertaken preventing duplication, and therefore avoiding errors. Hart (2004) states also that literature research can determine the most suitable methodological techniques and also identify research gaps.

The literature reviewed for this thesis was gathered from a comprehensive list of sources that included books, journals, official reports, course documents, academic books and government agency websites and legislation.

### **3.7 Primary Research**

Data may be qualitative or quantitative. Neergaard and Uhløi (2007) suggest the definition by Denzin and Lincoln (1994) as the most authoritative contribution on qualitative research. They define qualitative research as:

multi method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meaning people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts – that describe routine and problematic moments and meaning in individuals lives. (Denzin & Lincoln, 1994, p.2).

Merriam (2009, p.14) identifies four characteristics that explain qualitative research:

1. The focus is on process, understanding, and meaning.
2. The interviews, questionnaires and employers survey are the primary instrument of data collection and analysis.
3. The process is inductive.
4. The product is richly descriptive.

Qualitative research searches for answers to questions that stress how sociological experience is created and given meaning. Qualitative research describes how people interpret their experiences. Malhotra (2007, p.106) defines primary information as ‘data (which) originated by a researcher for the specific purpose of addressing the problem at hand’. Research methodology can be qualitative and quantitative in characteristics. Malhotra (2007) states that qualitative and quantitative methods should compliment each other.

Interpretivist approach, of which Thomas Kuhn is best known for, uses qualitative methods and is carried out at a micro level, which produces rich accounts and descriptions which is seen to be more favourable to the impersonal statistics of positivists using quantitative methods (Kavanagh, 2009).

For this study a mixed method approach of data collection was used to obtain a comprehensive understanding of the research area. Flick (1998), cited in Denzin and Lincoln (2000) argues that use of multi methods of data collection act as ‘a strategy that adds rigour, breath, complexity, richness and depth’ to the inquiry. Silverman (2000), however, suggests that multiple sources of data mean that a researcher must learn more data analysis skills.

### **3.8 Case Study Methodology**

Case study methodology is important to this study as it attempts to take an in-depth look at the case from a micro perspective while understanding the specifics of the research questions. This research is a single case study using qualitative data collection methods which provides the theory and evidence necessary for verification and replication of the study. It provides theory from the extensive literature research carried out and evidence from the in-depth interviews and questionnaires conducted. Wisker (2001) states this methodology advantage is that an in-depth situation or individual can be fully explored. Case studies can establish cause and effect while fully exploring an individual or structure ensuring an in-depth, rich account, which is pertinent when evaluating a change in curriculum practice (Kavanagh, 2009).

### **3.9 Methods**

The following methods were used in conducting this dissertation.

#### **3.9.1 Interviews**

To carry out the multi-variants methodology approach the author conducted interviews with culinary educators in DIT. Cohen *et al.*, (2001) state that interviews have numerous characteristics similar to questionnaires, resulting in findings being regularly compared in research. Gorman and Clayton (2005) recognise that interviews achieve in-depth information because of the interaction between the interviewer and

the respondent, who in this instance are knowledgeable about the specific subject area. Tull and Hawkins (1993) suggest that 'there is freedom to create questions, to probe those responses that appear relevant, and generally to try to develop the best set of data in any way practical'. Undertaking interviews, according to McDaniel and Gates (2008), gives the author a better understanding of the respondent's motivations and feelings.

Interviews were held with four lecturers teaching the different modules across the different years. These interviews were conducted between the 16<sup>th</sup> April and the 17<sup>th</sup> April 2012. Meetings were arranged with lecturers at mutually agreeable times. Before the interviews took place the lecturers were informed verbally as to the content of the interviews. Written interview questions were prepared and recording equipment put in place. The interviews used a semi-structured approach; with questions, being based on the research objectives, literature reviews findings and learning outcomes of the hot kitchen modules (see Appendix 8). The semi-structured questions began with general information about the respondent's involvement in hot kitchen modules on the BA (Hons.) in Culinary Arts. Respondents were then asked questions on modularisation and the teaching methods they use to delivering the different modules. Learning outcomes and any proposed changes the respondents would like to see made were investigated. Respondents were then asked their opinions on internship and its influence on the students and the module content. Finally, respondents were asked about the assessment techniques they use to assess the different modules.

Respondents were assured at the start of the discussion that all the information obtained would be treated in the strictest of confidence and respondents will not be named but given codes. Interviews lasted from seven minutes to twenty-two minutes and notes were taken during the interviews if the interviewer felt that received information could be used in the questionnaires for students or employers. Once the data was collected from the interviews the next stage involves analysing the information provided. When conducting interviews the cost per interview is the highest of any survey method used (Domegan & Fleming, 2003). It was necessary to complete the interviews first as questions asked in the interviews could highlight questions that would need to be included in the students survey.

The data obtained from the interviewing process was analyzed using grounded theory (Strauss & Corbin, 1998) and grouped into relevant categories according to themes and values. The representative quotes were extracted as a way of capturing response patterns in the words of the respondents.

### **3.9.2 Student and Alumni Questionnaire**

Quantitative research measures the relationship between variables using numbers to explain how they relate (Denzin & Lincoln, 2005). Quantitative research as defined by Aliaga and Gunderson (2002) is explaining phenomena by collecting numerical data that is analysed using mathematically based methods (in particular statistics). Dillman (2000) points out that Tailored Design Method (TDM) increases response rates and information received from questionnaires. A survey instrument to determine the quality aspects of the BA (Hons.) in Culinary Arts using a five-point Likert scale was developed. Piloting of this questionnaire among current culinary students is very important to ensure accuracy. Muijs (2004) states that quantitative methods can be used to measure students attitudes by developing a questionnaire to ask students to rate statements giving quantitative data. Both students and alumni were surveyed using questionnaires (see Appendix 9).

### **3.9.3 Questionnaires Design**

The questionnaires were designed based on the finding of the secondary research and from conversations the author conducted with work colleagues regarding students' kitchen abilities.

The questionnaires for the students and alumni used in the research were self-administered by the author. This is a relatively inexpensive way to get information about people's attitudes, beliefs and behaviours. The self-administered questionnaire was filled out by participants.

The first section of the questionnaire consisted of general information questions. These questions were made up of closed and open questions using a Likert scale for the hypothesized statements. Likert scales measure attitudes and was used to indicate respondents level of dissatisfaction or satisfaction; numerical scores ranging from one

to five were assigned. A similar study by Hertzman and Stefanelli (2008) chose a Likert scale as a method of data collection. According to Malhotra (2007) the major disadvantage of this method is the length of time it takes participants to complete the questionnaire.

The questionnaire was divided into four sections. The second, third and fourth section of the questionnaire consisted of all Likert scale questions. Sections one and two were to be completed by all participants as questions eight to twenty eight are the learning outcomes of kitchen and larder 1, 2 and 3. Section one, two and three were to be completed by third year students as questions 28 to 31 were the learning outcomes for hot major 1. Section one, two, three and four to be completed by 4<sup>th</sup> year and alumni students, questions 32 to 35 are the learning outcomes for hot major 2.

#### **3.9.4 Pilot Testing**

Before any actual evaluation sessions are conducted, Stone (2005) states that pilot test should be carried out as a way of evaluating your questionnaire and to help ensure it works. Pilot testing allows the researcher to highlight any potential problems with the way the respondents react and interpret questions. Pilot testing can reveal any misunderstandings or difficulty interpreting questions asked.

Pilot tests were carried out on students from second, third, fourth year and alumni. These tests gave the respondents an opportunity to highlight any improvements or changes they believe should be made to the questionnaire. Also pilot testing gave the author an indication as to the length of time it should take to fill in the questionnaire. Pilot testing was conducted over a week as not all groups attend college together. Following the feedback received, the questionnaires were slightly modified. This questionnaire was then approved by the author's thesis supervisor and was ready for distribution to students and alumni.

### **3.9.5 Distribution of Questionnaires for Students and Alumni**

As the author had direct access to all current students on the BA (Hons.) in Culinary Arts the questionnaires were handed out in classes to be filled in before the students left the classes. Colleagues of the author assisted in this by handing out questionnaires to be filled in by the students in their classes. The classes chosen were core subjects on the BA (Hons.) in Culinary Arts ensuring the maximum number of students would be attending. This method of distribution ensures a high response level by population sample. The distribution took place over the course of two weeks to ensure the maximum number of the population who attended college would complete the questionnaire. Questionnaires were distributed from the week of the 30<sup>th</sup> April to the 11<sup>th</sup> May. This period was the last two weeks of semester 2 and students would be attending college to complete their in class examinations, course work and receive feedback from lecturers before written examinations.

The alumni questionnaire was distributed using email. The email contained a brief explanation of the nature of the author's research and asked participants to complete the attached questionnaire. Alumni contacts were obtained using a combination of the author's personal email contacts for graduates, social media (Facebook and LinkedIn), brainstorming with colleagues and the placement officer in the School of Culinary Arts and Food Technology. These contacts were augmented by a list from the DIT Alumni office (O'Kelly, 2012). Graduates were sent an email on the 30<sup>th</sup> May and a reminder email on the 12<sup>th</sup> June and 17<sup>th</sup> June.

Once the completed questionnaires were returned they were assessed to ensure they were valid and were then assigned a code to aid traceability. A Predictive Analytics Software (PASW) version 18 was used to analyse the data.

### **3.9.6 Data Analysis Tool used for Student and Alumni Questionnaires**

Data gathered from the questionnaires returned was analysed using the P.A.S.W 18 for MS Windows (see Appendix 10). This is a software tool explicitly designed for exploring data (Babbie *et al.*, 2007). PASW allows for cross tabulation, groupings and "if statements" to be analysed. Graphs were designed using data obtained from PASW in Microsoft Excel.



### **3.9.7 Response Rate**

A total of 67 questionnaires were distributed to the current students. The response rate was 100% and the questionnaires were collected on the day. Ninety three graduates were emailed and 18 responded giving a response rate of 20%.

### **3.9.8 Employers Questionnaire**

The questionnaires for the employers were designed based on three specific areas:

1. General information about the employer (age, experience, type of establishment etc.)
2. Satisfaction with the learning outcomes of the hot kitchen modules on the BA (Hons.) in Culinary Arts.
3. An outline of the current course content on the hot kitchen modules (see Appendix 11).

The questionnaire was divided into two sections and each section was explained at the beginning of the questionnaire. Questionnaires for industry mentors followed a similar path to the student questionnaire whereby the questionnaires were pilot tested on industry professionals. Feedback from the pilot test was considered and all necessary adjustments made to the questionnaire in preparation for distribution using 'SurveyMonkey'.

### **3.9.9 Distribution of Employers Questionnaires**

The researcher decided to use the internet as the main research tool for this part of the dissertation. SurveyMonkey was selected as the internet provider for a monthly fee of twenty euros; this website allowed the researcher to devise the survey online and filter results, the survey was posted for a period of six weeks. The company, SurveyMonkey, started in 1999 provides a twenty-four hour online survey tool which enables people of all experience levels to create their own surveys quickly and easily. SurveyMonkey is an easy-to-use tool for the creation of online surveys. Williams (2009) states that SurveyMonkey's primary strength is its intuitive Web interface, which makes it easy for nontechnical people to use. The author and thesis supervisor assembled a list of employers who were known to have employed graduates of the BA

(Hons.) in Culinary Arts. The author then contacted the employers by phone asking if they would participate in filling out the questionnaire. At this time the author obtained the employers email addresses. An email invitation was then sent to the employers on the 12<sup>th</sup> of June and follow-up reminder emails were sent again on the 20<sup>th</sup> of June. Participants were asked in the email to complete a questionnaire about graduates of the BA (Hons.) in Culinary Arts and to give their opinion on the current course content which was included in the questionnaire. Participants clicked on a hyperlink in the email message to access the survey website.

According to Hague and Jackson (1998) respondents need to feel reassured that their efforts in completing the questionnaire are valued. Legitimacy influences response rates in all types of surveys and the researcher decided on contacting employers, to inform them, that if they completed the survey, the findings of the research would have long-term benefits to future graduates/employees of the employers as the course content may be adjusted according to the findings.

#### **3.9.10 Response Rate**

In total 38 questionnaires were emailed with a response rate of 47%. This is a reasonable response rate as such levels of response are not uncommon in survey research by email. Nevertheless, interpretations of findings must be tempered with caution as the non-respondents may well have other views and perspectives than the respondents.

#### **3.9.11 Data Analysis**

As with the student questionnaire the design was based on a Likert scale measuring respondents level of dissatisfaction or satisfaction using numerical scores ranging of from one to five and closed and open questions were also used to ascertain employers opinions on module content. The open-ended comments about the course content were analyzed thematically for major themes and values as in the interviewing process. The information gathered was analysed using SurveyMonkey analysis tool and Microsoft Excel.

### **3.10 Limitations Experienced in Conducting the Research**

- Time constraints, working within a limited time frame restricted the study.
- Lack of record keeping regarding names of lecturers who previously taught on the BA (Hons.) in Culinary Arts. The author contacted a number of retired culinary arts lecturers to establish what they taught but unfortunately they were unable to answer the author's questions.
- Interviews restricted to four lecturers of hot kitchen modules on the BA (Hons.) in Culinary Arts.
- Record keeping of graduate email addresses and current occupation not kept up to date.

### **3.11 Ethical Considerations**

This research was carried out in accordance with the Dublin Institute of Technology's ethics policy (Dublin Institute of Technology, 2011) and takes into account the following ethical considerations:

- Permission must be sought from those involved in the study to use information obtained from them.
- Care must be taken when wording the questionnaire so as not to offend respondents.
- Individuals are adequately informed of the purpose of the research.
- Individuals are voluntary participants of the research.
- Individuals can withdraw from the research at any time.
- Individual's anonymity and confidentiality will be maintained.
- The information will be preserved and reported solely in the form of a thesis.
- Precautions will be taken to ensure that adequate security and storage is available for the data.

Ethical practice carried out in this research was done in consultation with thesis supervisor.

## **Chapter Four: Findings/Results**

## **4.1 Introduction**

This chapter examines the findings of the interviews conducted with the lecturers who teach hot kitchen modules on the BA (Hons.) in Culinary Arts, in the School of Culinary Arts and Food Technology, Cathal Brugha Street. Transcripts of the interviews are available in Appendix 12. The interviews were conducted with all four lecturers who teach all the hot kitchen modules on the BA (Hons.) in Culinary Arts. These interviews were held between the 16<sup>th</sup> April and the 17<sup>th</sup> April 2012. Lecturers have been assigned numbers one to four. The input from these interviews is significant for the authenticity of the research as some participants are the module authors and also lecturers across the majority of hot kitchen modules.

The results of the questionnaire completed by 86 current students and graduates will be presented below. This questionnaire was completed by second, third and fourth year students from the 30<sup>th</sup> April to the 11<sup>th</sup> May in Cathal Brugha Street and was distributed during core modules to achieve a maximum response rate. A total of 19 graduates completed the questionnaire and these were coded and added to the current student data base.

The online questionnaire that was undertaken by the employers of graduates completed will also be presented below.

This chapter presents the main findings of the primary research: both quantitative and qualitative information. Results are recorded using statistical analysis and the key findings will be illustrated using summary tables and graphs. Percentage values will be rounded to the nearest whole number. The results recorded in this chapter focus on the relevant topics identified by this study's objectives.

## **4.2 Emerging Themes from Lecturers Interviews**

The interviewees answered 16 questions varying in time duration. This process gave an insight into the current hot kitchen modules delivery in the School of Culinary Arts and Food Technology. The following is a table of the emerging themes from the data analysis carried out on the interviews.

<b>Interview Questions</b>	<b>Emerging Interview Themes</b>
What do you think of modularisation?	Modularisation is good. Unhappy with number of weeks reduced from 30 to 24. Class time constraints.
Were you involved in creating the modules you teach.	Involvement – to no involvement by half of the interviewees.
Have you been involved in any updates of the modules you teach?	No involvement in updates of modules for all lecturers except one.
What teaching techniques do you use in the different years i.e. portfolio, reflection, HACCP plan, what type of research you require?	Portfolios common across modules but content of portfolios differs between lecturers. End of module practical exam common across majority of modules. Student reflection.
Do you confer with other colleagues regarding the module delivery?	Confer regarding module content but no conferring regarding teaching methods and assessments.
What is your opinion of the hot kitchen modules for the different years?	Lecturers not aware of content in all hot kitchen modules. No clear path for progression. Review of modules needed.
Are you aware of the learning outcomes for the modules you teach and do you adhere to them?	Lecturers are aware of learning outcomes. Lecturers more focused on module content.
What additional if any learning outcomes would you suggest should be added?	All learning outcomes need to be reviewed except major hot 2.
What changes would you make to the course content on the modules you teach?	Time allocation to be increased.
Do you think the modules need to be reviewed?	Complete review of modules
What is your opinion on the timing of the modules should they be run concurrently or as they are?	Timing of modules is acceptable as is.
Students do a 5 week national internship in first year and second year and 12 weeks international internship in third year do you see a difference in the students because of internship?	Significant difference identified.
Should students do longer internships in 1 <sup>st</sup> and 2 <sup>nd</sup> yr?	Internship is beneficial but not realistic due to non payment of students.
What assessment techniques do you think should be used for the different modules that you teach?	Satisfaction with assessment techniques. Students should receive more information on assessment techniques used.

**Table 4.1: Themes Emanating from Interviews**

### 4.3 Responses to Interview Questions by Lecturers

- **Question 1:** *How long are you teaching on the hot kitchen modules on the BA (Hons.) in Culinary Arts?*

The objective of this question was to establish how long each lecturer has been teaching hot kitchen modules on the BA (Hons.) in Culinary Arts to establish how experienced and how familiar they are with the modules they teach.

Lecturer four who teaches kitchen and larder 3 only began teaching it this year but has been teaching major hot kitchen 1 for three years. The remaining lecturer's one, two and three have between seven to twelve years experience.

- **Question 2:** *What hot kitchen modules do you teach on the BA (Hons.) in Culinary Arts?*

The purpose of this question was to ascertain whether there was any continuity of lecturers throughout the years of hot kitchen modules in the BA (Hons.) in Culinary Arts (see Table 4.2). Responses to this question varied.

	Kitchen and Larder 1	Kitchen and Larder 2	Kitchen and Larder 3	Major Hot Kitchen 1	Major Hot Kitchen 2
Lecturer One				✓	✓
Lecturer Two			✓	✓	
Lecturer Three	✓	✓	✓		
Lecturer Four			✓	✓	

**Table 4.2: What Modules Lecturers Teach**

- **Question 3: What do you think of modularisation?**

Modularisation has reduced lecturer contact hours and class times across the Institute and this question assessed what culinary arts lecturers feel the impact of modularisation has had on their modules.

Lecturer one's response was that "*modularisation was good for the students*" however, it was not good for continuation of learning as students could have semesters where they are not involved in practical classes and this has had an effect on their motor skills when they restart classes. Lecturer one preferred major hot kitchen 2 as a module because "*teaching content could be controlled*" compared to hot major one which has two other lecturers teaching the same module. Lecturer one clarified this by stating that because lecturer one taught the students in third year and therefore was more familiar with the strengths and weakness of the students whereas now students in fourth year may not be familiar to lecturer one and may feel at a disadvantage because of a different lecturer.

Lecturer two stated it was "*good for the degree course*" but the time was too short however lecturer two went on to say "*that 12 weeks makes the lecturer focus*" on what has to be taught. Also lecturer two would like to know what is taught in kitchen and larder 1 and 2 to see the "*progression from year one to two*".

Lecturer three agrees with lecturer two regarding the time constraints and would have preferred the thirty week programme that ran previously to the current programme. Lecturer three feels the reduction of "*time from classes i.e. five hour classes reduced to four hour classes and thirty weeks reduced to twenty four weeks has had an effect*" on the BA (Hons.) in Culinary Arts. Lecturer four states that "*modularisation is good*".



- **Question 4:** *Were you involved in creating any of the modules you teach?*

Currently the hot kitchen and larder modules 1 and 2 have been written by authors who teach on the BA (Hons.) in Culinary Arts, however kitchen and larder 3 has been written by a lecturer who has not taught on the BA (Hons.) in Culinary Arts for ten years. Major hot kitchen 1 and 2 were written by one lecturer who teaches these modules on the BA (Hons.) in Culinary Art but the other two lecturers are not the module authors.

Lecturer one is the original author of the major hot kitchen 1 and 2 modules. When developing these modules originally lecturer one wanted major hot kitchen 1 *“to be more student led as this was deemed a better method of learning”* as lecturer one believes that the students work harder because they have to *“make it happen”* however currently lecturer one believes that *“major hot kitchen 1 is more teacher led due to current constraints”*.

Lecturer two was not involved in writing any of the modules as the modules haven't been *“updated in seven years”*.

Lecturer three was *“not really involved”* in writing any of the hot kitchen modules due to the number of people involved at the time in writing these modules however, lecturer three's name appears as a module author.

Lecturer four was not involved in writing any hot kitchen and larder or major hot kitchen modules.

- **Question 5:** *Have you been involved in any updates on the modules you teach?*

The purpose of this question was to assess whether the modules have been updated since they were first developed.

Lecturer one has been involved in updates of major hot kitchen 1 and 2 modules by changing the marking criteria to make marking of skills more important than written work as *“it is a performing arts module”* however the portfolio is very important especially in major hot kitchen 2 as *“it is a reflection on someone’s culinary style”*.

Lecturer two has been involved in updates on module content of kitchen and larder 3 by conferring with lecturers as teaching the module *“it is a team effort”*. Lecturer two states that regarding major hot kitchen 1 it is *“left to itself”* based on *“preferred teaching methods”* of individual lecturers.

Lecturer three has been involved in *“updating what he teaches”* but not updating the modules. However lecturer three doesn’t agree with the way school management are insisting that all modules are generic and can be taught across a wide variety of courses which are taught at different levels i.e. level seven and eight as per NQAI as the learning outcomes are different at certificate and degree level.

Lecturer four has not been involved in any updates of modules.

- **Question 6:** *What teaching techniques do you use in the different years i.e. portfolios, reflection, Hazard Analysis Critical Control Plan (HACCP) plans and what type of research do you require?*

This question will ascertain what techniques the different lecturers use to teach their individual modules and are any using the same teaching techniques? There can be up to three classes of the same module being taught in any one semester on the BA (Hons.) in Culinary Arts.

Lecturer one uses the work of *“well published modern contemporary chefs”* as a guide to class content for major hot kitchen 1. Lecturer one would rewrite all the recipes *“as he can see the gaps in the recipes”* to ensure the *“students get a positive outcome in class as this is very important”*. Having a positive outcome makes students *“see the way things should be done properly as it’s a very short space of time in the 12 week module and lecturer one is trying to make it as positive for the student as this makes a big impression on the students”*. For the last three weeks of module students *“begin to*

*cook their own food*” as lecturer one gives students all the notes for the first eight weeks. Students have to work in groups as class sizes are too big to facilitate individual cooking which would be the preferred option. Students must “*read up on ingredients and techniques used in class*” however lecturer one believes the students are “*not doing enough research work*”. At the end of the module a portfolio is produced by each student with photographs and written research but students “*are photographing other students work and submitting it as their own work which is a real problem*”. Students “*will photograph my work and put it in their project*”. Lecturer one doesn’t require HACCP plans or costing as this is “*taken as a given they have done it in first and second year*”. Lecturer one states that “*major hot kitchen 2 is a step up from major hot kitchen 1*” as “*students must work on their own with no group work*”. Students have to perform “*it’s do or die*” this shows where students “*are at*”. For major hot kitchen 2 the students receive no recipes only classical references from Escoffier which they must research and reproduce in their own “*culinary style*”. Lecturer one believes this is very difficult for the students as it makes “*them think for themselves*” and it shows students strengths and weaknesses. The last four weeks students are given a list of ingredients and the lecturer will assign certain ingredients to a particular course on the menu. Students have to “*write up the recipes, photograph dishes every week and write a reflection on outcomes of their class particularly positive outcomes*”. All outcomes whether positive or negative must be reflected on as lecturer one believes in Donald Schon the reflective practitioner who believes that students learn from positive and negative outcomes. The reflective journal is to make students think and plan for themselves.

In kitchen and larder 3 lecturer two uses portfolios and also students have to work in groups in the kitchens due to the resources available however lecturer two “*believes the students learn more from each other by talking to each other and in third year (major hot kitchen 1) they take a more independent stance*”. The portfolio is very good, as is the continuous assessment in kitchen and larder 3 but in major hot kitchen 1 lecturer two “*includes formal tests as in two practical tests mid module*”. The portfolio is the only way of “*achieving an assessment within a practical as there is no theory module for major hot kitchen 1*”. HACCP plans and food costing must be included in the portfolio.

Lecturer three uses a number of techniques. A list of dishes for each class is distributed to the students and *“they are expected to research this list using a broad research base and then students will reproduce the same dishes using different styles”* then a discussion *“would take place and dishes would be compared and contrasted”*. This is all part of the students portfolio along with research around commodities used in class. Lecturer three also gives out *“culinary vocabulary each week in kitchen and larder 2 and 3 which is linked into what the students are doing in class”* and they have to research and submit this work as part of the portfolio. Lecturer three also asks *“students to reflect at the end of each class on what they have learnt, how they learnt, what was good, what was bad, what worked, what didn’t work and analyse it so that they can make changes the next time”* and become reflective practitioners. Lecturer three believes costing of dishes in kitchen and larder 1, 2 and 3 is now an important part of the module due to food costing classes being abolished in modularisation. Lecturer three asks students in kitchen and larder 1 to cost one dish and to put the raw ingredients in the language they are studying to *“make a link with modules they are studying”*. Kitchen and larder 2 the students must *“cost per portion and in kitchen and larder 3 to come up with a selling price giving a 70% gross profit”*. Lecturer three assigns *“a student every week to be head chef to learn delegation and see how a class works also looking at HACCP and storage of ingredients”*. Lecturer three does a *“certain amount of explanation, demonstration at beginning of class and at the end gathers students around to ask them questions on what they learnt”*.

Lecturer four uses the portfolio in *“kitchen and larder three as a learning tool using the learning outcomes”*. Students *“are given their learning objectives and must do their own learning outcomes”* they must also summarise their work over the 12 week period.

- **Question 7:** *Do you confer with other colleagues regarding the module delivery?*

This question will identify if any team teaching takes place on the BA (Hons.) in Culinary Arts.

Lecturer one confers with other colleague's regarding the ingredients being used to ensure *"everyone is using the same ingredients but everyone has a different artistic bent and as we are all artists we can't do the same thing"*. All lecturers need *"creative space and can't be controlled"*.

Lecturer two believes there is a *"team efforts in some modules and individual effort in other modules"* depending on how willing the module author is to change. Lecturer two believes he has a different teaching style to the other lecturers on major hot kitchen 1. Lecturer two also believes the dishes should be relevant to industry so much so that lecturer two *"goes to top restaurants to see their dishes, watch how they are done, get the recipe from the chef and will bring those dishes back to college and as long as students are capable of doing them"* will introduce dishes to major hot kitchen 1. Dishes will *"always relate to the skills learning outcomes"*.

Lecturer three works closely with other lecturers on kitchen and larder 1, 2 and 3 however lecturer three points out *"that this year we have taken four groups for kitchen and larder 3 and a new lecturer has joined the team and is not fully integrated into the way we teach this module yet but this will take time"*.

Lecturer four stated that *"he does confer with other colleagues on the modules he teaches"*.

- **Question 8:** *What is your opinion of the hot kitchen modules for the different years?*

This question will highlight if lecturers are aware of what is being taught on the other hot kitchen modules.

Lecturer one states that the modules are good however lecturer one is not aware of what the module content is in kitchen and larder 1, 2 and 3. Lecturer one is unhappy with *"motor skills of students in third year i.e. cuts of vegetables"* particularly in the first couple of weeks of major hot kitchen 1. Lecturer one believes *"a lot of the students in culinary arts are not interested in being on the degree"* because they are not into food *"they need to be passionate about culinary arts to excel"*.

Lecturer two believes more of a team effort from the lecturers on the BA (Hons.) in Culinary Arts is needed to see what is the progression from the different levels and what is it the teaching team want to achieve. Lecturer two “*believes the programme needs to be re-evaluated*”. Also the teaching team should be invited to course committee meeting and lecturer two believes “*there is a lot of individuality on the course*” so it’s difficult to have an opinion.

Lecturer three’s opinions on the hot kitchen modules are “*that from what I know of them they are quiet good*” and “*we are trying to continuously improve the modules*”. Lecturer three believes there is a need for more individual cooking and more testing throughout the year.

Lecturer four believes that students are more “*focused on books and recipes in kitchen and larder three and are more hands on in major hot kitchen one*”. Lecturer four gives a two hour practical demonstration in major hot kitchen 1 but not in kitchen and larder 3 as there is a lot to cover in class.

- **Question 9:** *Are you aware of the learning outcomes for the modules you teach and do you adhere to them?*

Learning outcomes are very important in a practical module relating to being at the forefront of a field of learning and in terms of knowledge and understanding.

Lecturer one is aware of the learning outcomes but focuses mainly on the course content and how students prepare to carry out classes.

Lecturer two is aware of the learning outcomes and believes lecturers “*can be creative as to how outcomes are reached*”. Lecturer two states that skills and techniques should be focused on in major hot kitchen 1 and that lecturers shouldn’t be limited to “*published authors*” but to use recipes from chef’s whom students maybe do internships with.

Lecturer three is aware of the original learning outcomes but has recently become “*aware of the reviewed learning outcomes that don’t reflect the scope of what is actually done*” in the class.

Lecturer four is aware of the learning outcomes and adheres to them.

- **Question 10:** *What additional if any learning outcomes would you suggest should be added?*

Lecturer one states that there are no new learning outcomes to be added to major hot kitchen 1 or 2.

Lecturer two believes learning outcomes have changed due to lack of resources in kitchens now compared to when the modules were originally written when the kitchens had adequate resources. Lecturer two believes “*that none of the outcomes have physically changed on paper but the course content and hours have*”.

Lecturer three suggest that the learning outcomes for the modules have been changed by people who do not teach on the course and “*have been copied and pasted over a period of time and don’t necessarily reflect*” what is actually being taught on the course.

Lecturer four suggest adding learning outcomes of demonstrations students receive and students should give feedback on the “*12 week plan*”. Lecturer four states “*that students should do a portfolio on the learning outcomes of the 12 weeks*”.

- **Question 11:** *What changes would you make to the current course content on the modules you teach?*

This question will identify if the teaching team thinks that the course content needs to be changed.

Lecturer one believes major hot kitchen 1 need to be changed but this could be difficult due to “*different lecturers teaching this module, budget constraints and class sizes*”. Lecturer one wants more time to teach this module because when the module was originally written students had an open kitchen to prepare mise-en-place before class commenced. The individual students also had to look at a contemporary chef and reproduce their work over a 12 week period. The module then had to change when major hot kitchen 1 became a core module as food budgets escalated dramatically.

Lecturer two believes kitchen and larder 3 “*is fine but there should be a bit more larder element in it*”. Major hot kitchen 1 lecturer two believes that industry dishes should be promoted which are relevant rather than published dishes. Guest chef lecturers should be brought into classes and students can replicate the demonstrated dishes the following weeks in class. Lecturer two also suggests that students need to receive more research technique classes as “*standard of writing is very poor*”. Lecturer two also suggests creating a larder module in first year and removing larder from the third year as students carryout larder work in major hot kitchen 1.

Lecturer three believes more time is needed, more individual work and regular testing of students.

Lecturer four states that the module content is sufficient.

- **Question 12:** *Do you think the modules need to be reviewed?*

Lecturer one states that major hot kitchen 2 does not need to be reviewed but major hot kitchen 1 need some adjustment. Lecturer two suggests all modules need to be reviewed every year. Lecturer three believes that all the modules “*need to be completely reviewed as the modules do not reflect what is actually being taught*”. Lecturer four suggests that the modules need to be reviewed as students “*are getting crazy recipes and they don’t understand them i.e. the words and the techniques*”. However lecturer four agrees that the course content on kitchen and larder 3 and major hot kitchen 1 doesn’t need to be changed.



- **Question 13:** *What is your opinion on the timing of the modules should they run concurrently or as they are?*

Currently students in year one have kitchen and larder 1 in semester 1 and kitchen and larder 2 in semester 2. Kitchen and larder 3 is delivered in semester 2 year two and major hot kitchen 1 is delivered in semester 1 year three and major hot kitchen 2 in semester 1 year four. Second year students don't have a hot kitchen module from May to February of the following year. Fourth year major hot kitchen 2 students finished major hot kitchen 1 in December and start major hot kitchen 2 in September the following year.

Lecturer one is not "*sure as students go out in third year on internship and learn so much*". Lecturer one believes students need this "*time and space*" to learn and "*brings out the best in the students*". Because of internship lecturer one believes students are getting time to practice the skills they have acquired in college.

Lecturer two suggests that kitchen and larder 1, 2 and 3 should run concurrently but that the major hot kitchen modules are "*fine as they are*". Lecturer two states that open kitchens should be abandoned due to some classes having open kitchen and other classes don't due to lack of staff.

Lecturer three agrees with the way the modules are positioned at present as other modules students take help in "*understanding, running and operating of restaurant*". Lecturer three also believes that students are more "*successful in hot kitchen modules if they have worked in a professional kitchen prior to college, continue to work in good places while in college and the quality of their internship experience*".

Lecturer four indicated that the modules don't have to run concurrently.

- **Question 14:** *Students do a five week national internship in first and second year and 12 weeks international internship in third year do you see a difference in the students because of internship?*

This question will identify the benefit of internship to the BA (Hons.) in Culinary Arts students.

Lecturer one can see a major difference in the students particularly in fourth year if the “*student has been to a good strict kitchen and because they have been there for 12 weeks*”. Five weeks is too short as “*students only settling in when the five weeks are up and a chef is not going to be bothered with a student when they know they are only there for five weeks*”.

Lecturer two identifies “*a big difference in students*” that have completed internship. Lecturer three sees a “*real difference in the students and states that 60% – 70% of the students are kept on so it’s like they are doing a 12 week internship. They become more mature as individuals and their skills compared to those that do it and those that don’t there is a huge difference*”.

Lecturer four indicates that there is a “*big difference between the third and fourth years as they do a longer internship*”.

- **Question 15:** *Should students do longer internships in first and second year? They currently do five weeks.*

Lecturer one does not know if they should do internship in first or second year.

Lecturer two believes “*they should not do internship in first year but the longer they do one in second year the better*”.

Lecturer three believes that because the internship is unpaid it is unrealistic to expect students to complete longer internships but lecturer three can identify the “*value in the internship and would encourage all students to stay on for the summer in paid employment*”.

Lecturer four has no opinion because of lack of involvement in the internship procedure.

- **Question 16:** *What assessment techniques do you think should be used for the different modules you teach?*

This question will assess whether culinary arts lecturers are happy with the assessment techniques i.e. continuous assessment, portfolios and end of module practical exam currently being used.

Lecturer one and two are happy with the assessment techniques currently being used however lecturer two “*would like to see more practical related theory classes*”.

Lecturer three believes that the assessment techniques used in the modules are not outlined and there should be more clarity for students from the outset. Students should be aware of how assessments are carried out as lecturer three believes this will assist in “*holding the student’s attention more*”. Lecturer three identifies that the “*minimum of 80% attendance focus students minds*”. Also checking students’ portfolios “*every week is good idea*”. Lecturer three would also approve of an external assessor who is/has been a practicing professional chef assessing students work.

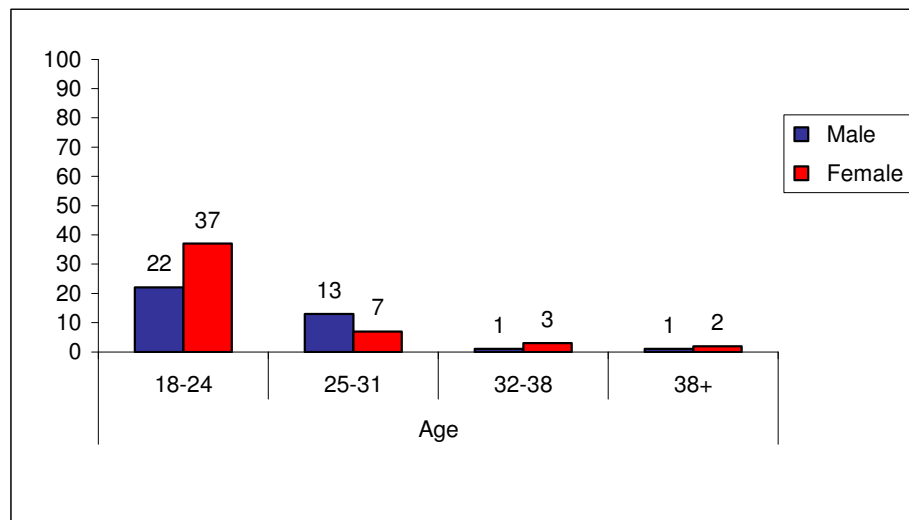
Lecturer four believes the assessment methods currently used are adequate.

#### 4.4 Student and Graduate Questionnaire Findings

The following is the data analysis from the student/graduate questionnaire which was distributed by the author.

##### 4.4.1 Demographics of Population Sample

A total of 86 current students and graduates answered the questionnaire. Figure 4.1 highlights the age and gender of the sample population.

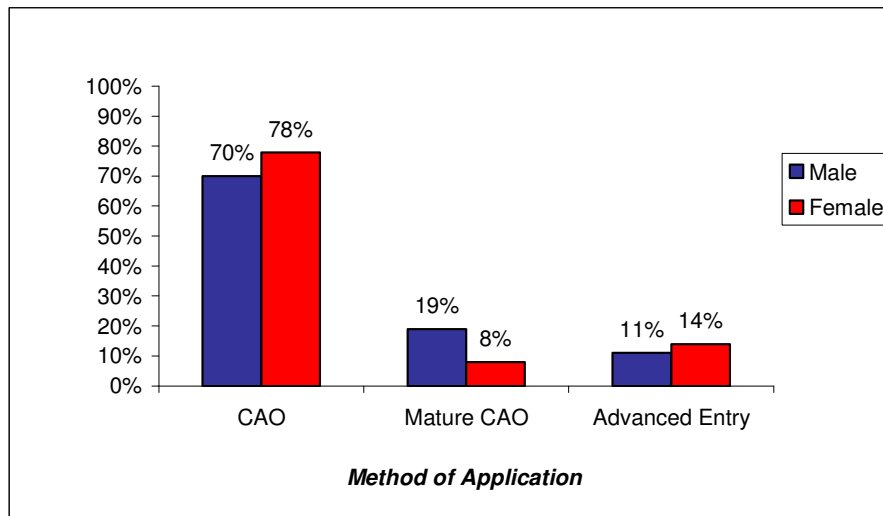


**Figure 4.1: Gender and Age (N = 86)**

A total of 22 males are in the 18-24 year category, 13 in the 25-31 year category and two in the remaining brackets. A total of 37 females are in the 18-24 year category, seven in the 25-31 category, three in the 32-38 and two in the 38+ category.

##### 4.4.2 Method of Application to BA (Hons.) in Culinary Arts

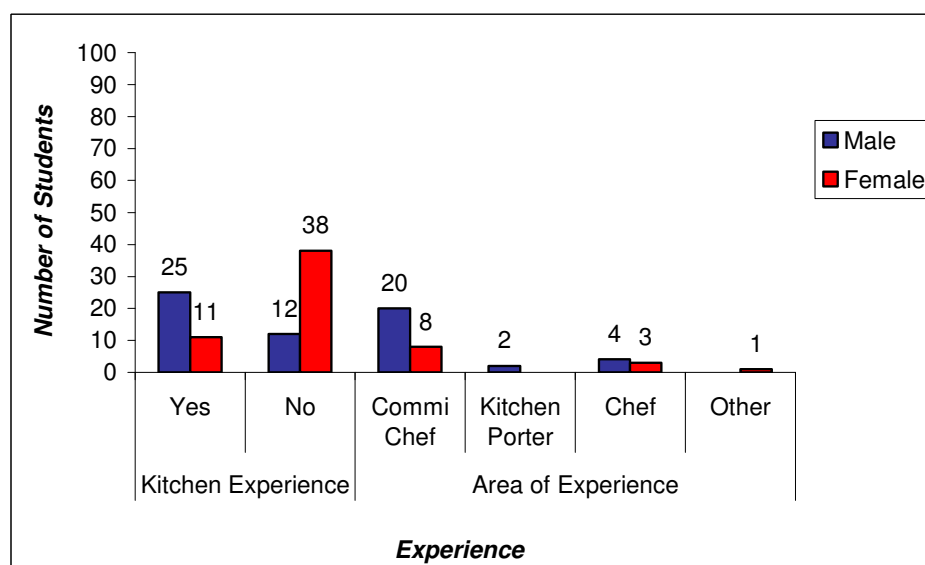
Figure 4.2 illustrates that the majority of students/graduates applied through the CAO to gain entry on to the BA (Hons.) in Culinary Arts.



**Figure 4.2: Method of Application (N = 86)**

#### 4.4.3 Prior Professional Kitchen Experience before Commencement on the BA (Hons.) in Culinary Arts

Figure 4.3 identifies the number of students/graduates who had prior kitchen experience before commencing their degree. The majority of males had prior experience compared to females and the most common area of experience is that of commis chef. One person had other prior experience in a bakery.



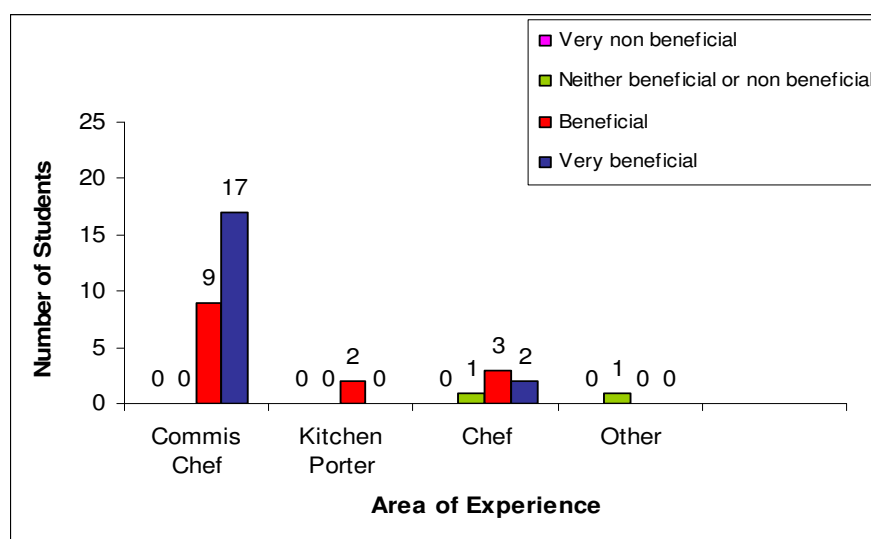
**Figure 4.3: Prior Experience and Area of Experience (N = 86)**

#### 4.4.4 Benefit of Continued Work Experience on Participation on the BA (Hons.) in Culinary Arts

Of the 72 responses to this question the majority of males 32 out of 34 found that continuing to work while participating on the BA (Hons.) in Culinary Arts was beneficial. The majority of females 31 of 38 also found it very beneficial. An independent-sample t-test was carried out to assess if there was a significant difference between males and females regarding the benefit of work to participation on the BA (Hons.) in Culinary Arts and there was a small significant difference (see Appendix 10).

#### 4.4.5 Benefit of Prior Work Experience to Participation on the BA (Hons.) in Culinary Arts

Seventeen students/graduates with prior work experience particularly as a commis chef found this experience very beneficial for participation on the BA (Hons.) in Culinary Arts, nine found it to be beneficial. Two student/graduates found working as a kitchen porter beneficial. Three students/graduates found working as a chef beneficial, two found it very beneficial and one found it neither beneficial nor non beneficial. The student that worked as a baker found it very non beneficial to their participation on the BA (Hons.) in Culinary Arts (see Figure 4.4).



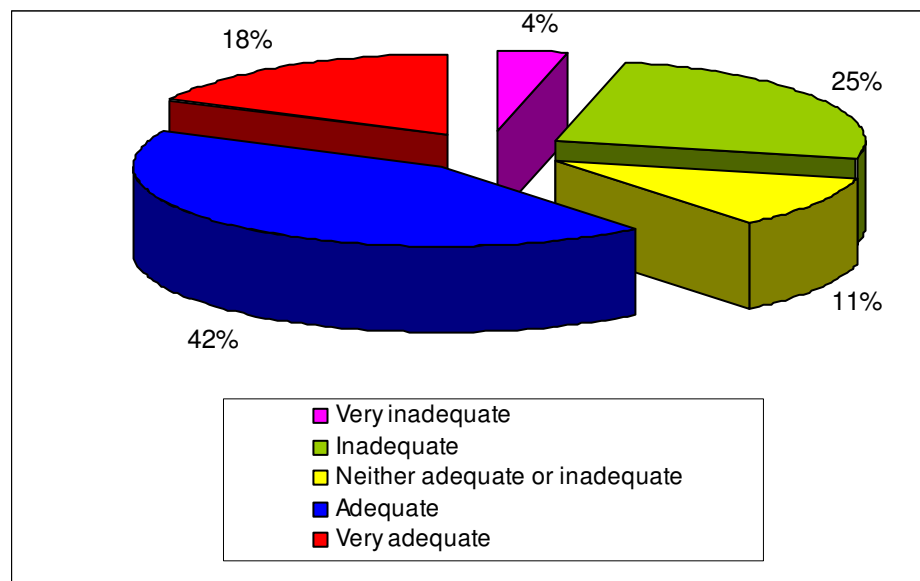
**Figure 4.4: Type of Work Experience Benefit to Participation on BA  
(Hons.) in Culinary Arts (N = 36)**

Comments made by students/graduates on whether they continued to work and what benefit this had on their participation in hot kitchen modules range from:

1. Teaches me to work fast under pressure.
2. Essential to help improve my skills as there are not enough practical hours in college.
3. Helps with plate presentation.
4. Affects attendance in college.
5. Essential as college work very limited.
6. Helps improve abilities and those that don't work in professional kitchens slow classes down.

**4.4.6 The Benefit of the Current Hot Kitchen Course Content in Relation to your Work Experience to Date**

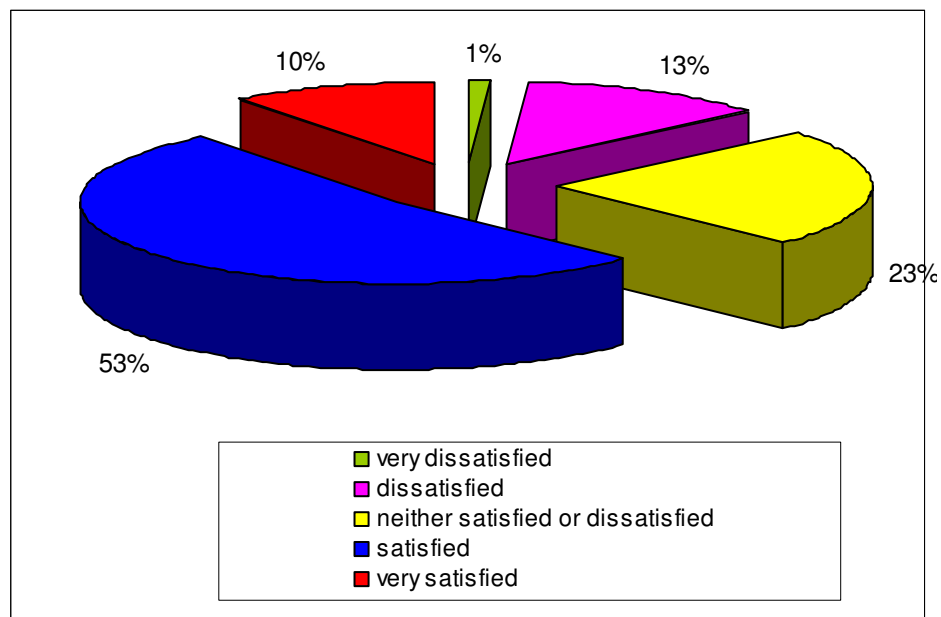
The benefit of the current course content was very adequate for 18% of students/graduates, adequate for 42%, 11% found it neither adequate nor inadequate, 25% found it inadequate, and four percent found it very inadequate (see Figure 4.5).



**Figure 4.5: Benefit of Course Content in Relation to Work Experience (N = 39)**

#### 4.4.7 Satisfaction with Course Content

Of the students/graduates ten percent are very satisfied with current course content, 53% are satisfied, 23% are neither satisfied nor dissatisfied, 13% are dissatisfied, and one percent are very dissatisfied (see Figure 4.6).



**Figure 4.6: Satisfaction with Course Content (N = 86)**

Students/graduates were asked to comment also on their level of satisfaction of the course content. Current students responded with comments such as:

1. Not enough practical hours in kitchens.
2. Class content doesn't reflect what is currently happening in professional kitchens.
3. Some of class content is irrelevant.
4. A lot of repetition of dishes through out the years.
5. Poor quality ingredients and equipment.
6. Course content too classical and more focus needed on plate presentation.



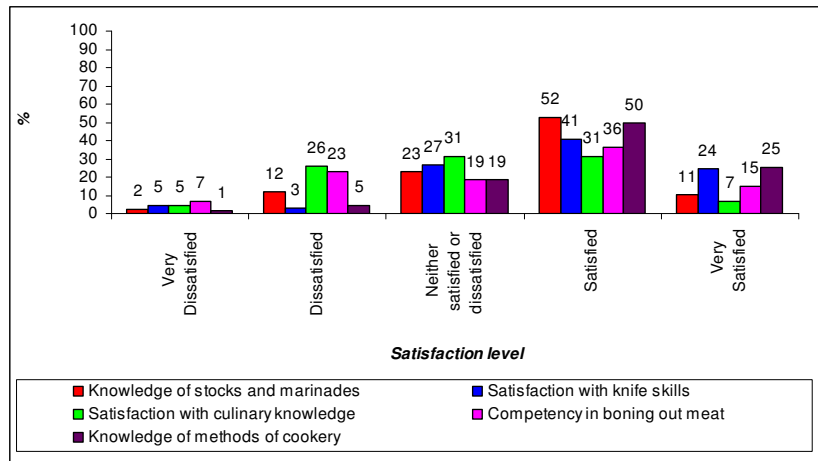
7. Curriculum being taught across the year is different in each class, it depends on the lecturer you have
8. Need to have hot kitchen modules in every semester as in first year.

The graduates' comments were:

1. Solid grounding with good learning environment.
2. Out of date dishes, need more variety and stimulation.
3. Kitchen and larder 1, 2 and 3 are good foundations, need to modernise hot major modules.
4. Very repetitive dishes.
5. Covers a lot of skills but not practical for day to day professional kitchen.
6. Very thorough knowledge achieved.

#### **4.4.8 Students/Graduates Satisfaction with Learning Outcome in Kitchen and Larder 1**

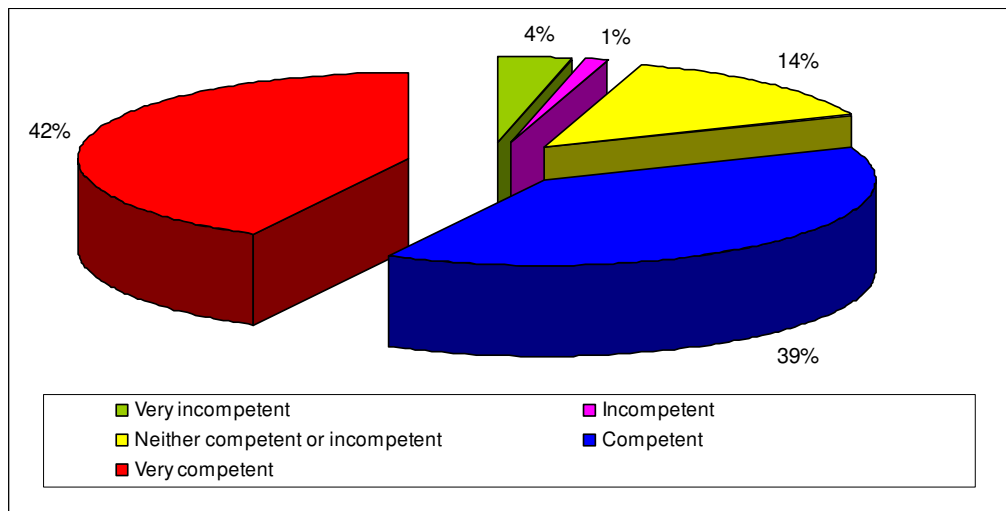
Question nine to fourteen asked students/graduates to rate their satisfaction with the learning outcomes for kitchen and larder 1 (see Figure 4.7). The total number of students/graduates who answered this question was 86. Students/graduates rated significant satisfaction with the learning outcomes for kitchen and larder 1. Sixty three percent of students/graduates were satisfied with their knowledge of stocks and marinades. Satisfaction with knife skills, 65% were satisfied. Culinary knowledge, 38% were satisfied however, it should be noted that 31% are dissatisfied with their culinary knowledge. Competency in boning out meat 51% students/graduates are satisfied and 30% are dissatisfied with their boning out competences. Knowledge of methods of cookery, 75% of students are satisfied.



**Figure 4.7: Satisfaction Level with Learning Outcomes in Kitchen and Larder 1 (N = 86)**

#### 4.4.9 Competency in Operating Kitchen Equipment

Question ten asked students/graduates to rate their competence in operating kitchen equipment. The majority (81%) of students/graduates were very competent/competent (see Figure 4.8).

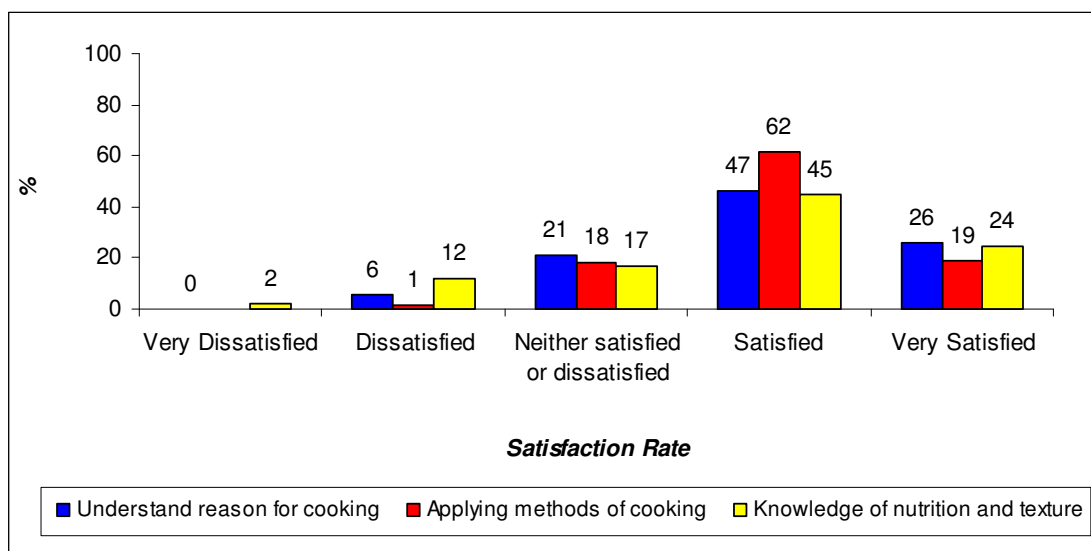


**Figure 4.8: Competency in Operating Kitchen Equipment (N = 85)**

#### 4.4.10 Student/Graduate Satisfaction with Learning Outcome in Kitchen and Larder 2

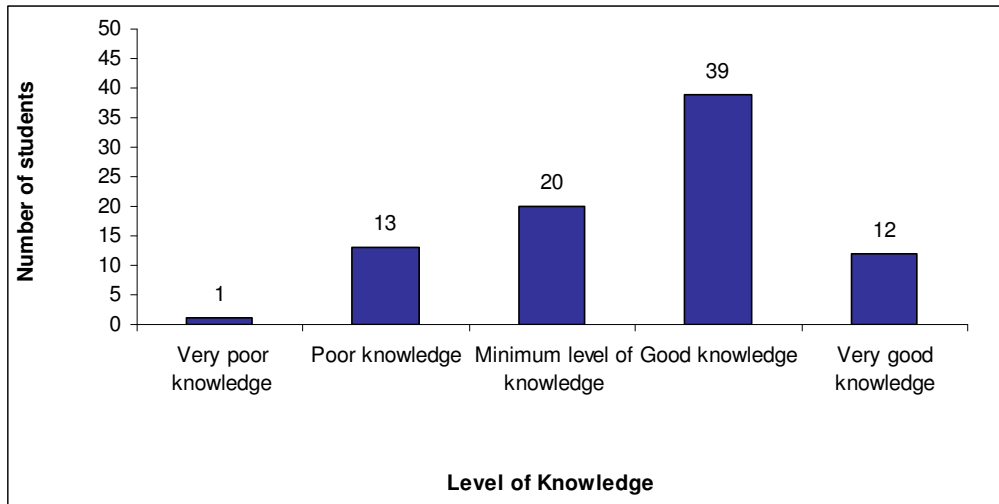
Students/graduates were asked in questions 15 to 19 to rate their satisfaction, knowledge and competency with the learning outcomes for kitchen and larder 2. One

student failed to answer a number of questions. Students/graduates level of understanding the reasons for cooking, 26% were very satisfied, 47% were satisfied, 21% were neither satisfied or dissatisfied, six percent were dissatisfied. Applying methods of cooking 19% were very satisfied, 62% of students/graduates were satisfied, 18% were neither satisfied nor dissatisfied, and one percent were dissatisfied. Students/graduates level of satisfaction with knowledge of nutrition and texture was 24% very satisfied, 45% were satisfied, 17% neither satisfied nor dissatisfied, 12% dissatisfied and two percent very dissatisfied (see Figure 4.9). There is significant satisfaction with the learning outcomes for kitchen and larder 2. Students/graduates (73%) were satisfied with their level of understanding the reasons for cooking. Applying methods of cooking 81% were satisfied and knowledge of nutrition and texture 69% were satisfied.



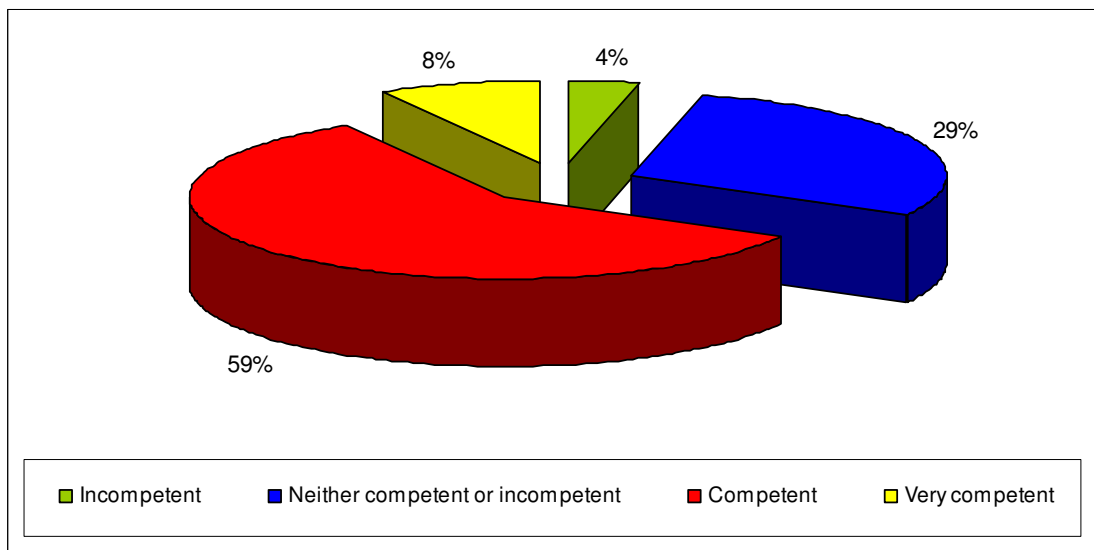
**Figure 4.9: Satisfaction Rate with Cooking, Methods of Cooking and Knowledge (N = 85)**

Question 17 asked students to rate their knowledge of stocks and emulsion (see Figure 4.10). Of the 85 students who answered the question 12 have a very good knowledge 39 students have a good knowledge, 20 have a minimum knowledge, 13 have a poor knowledge, and one has a very poor knowledge of stocks and emulsions.



**Figure 4.10: Level of Knowledge of Stocks and Emulsions (N = 85)**

Question 19 asked students/graduates to rate their level of competency in preparing, cooking and presenting classical dishes (see Figure 4.11). A total of eight percent are very competent, 59% are competent, 29% are neither competent nor incompetent, and four percent are incompetent.



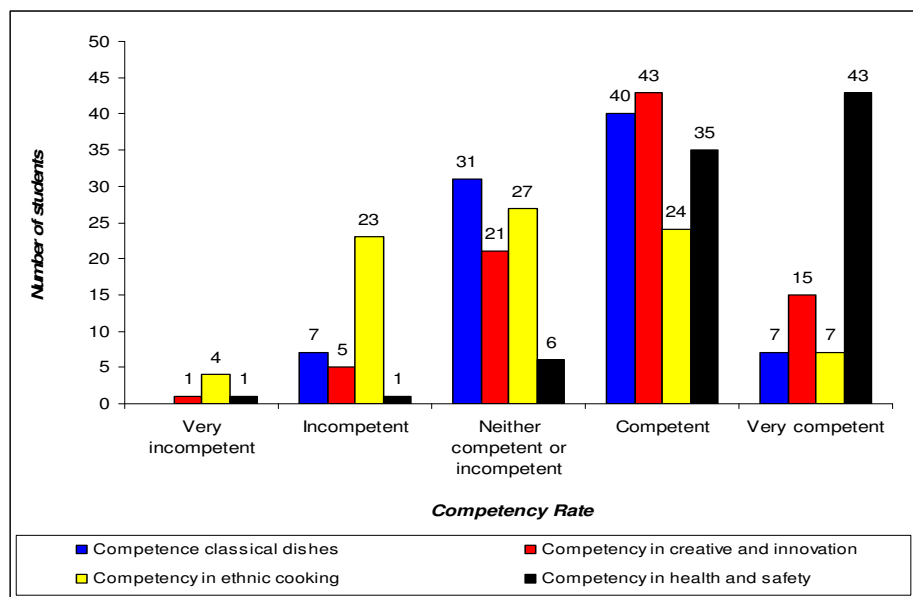
**Figure 4.11: Competency in Classical Cooking Methods (N = 86)**

#### 4.4.11 Student/Graduate Satisfaction with Learning Outcome in Kitchen and

##### Larder 3

Questions 20 to 26 rated students' competence or satisfaction levels with the learning outcomes of kitchen and larder 3. One student failed to answer a number of questions.

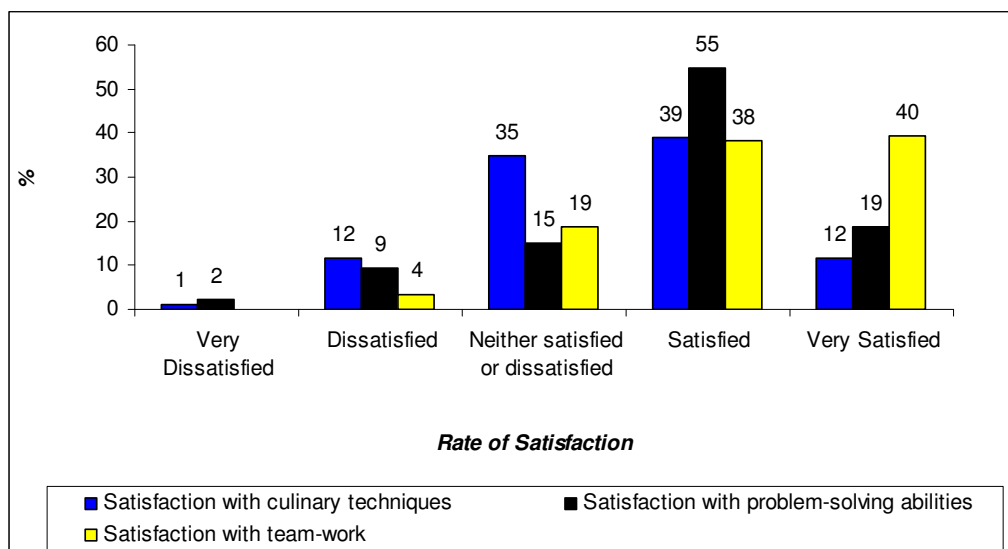
Students/graduates when asked to rate their competency in assessing and applying major culinary elements of classical and modern cuisine seven are very competent, 40 are competent, 31 neither competent nor incompetent and seven are very incompetent. Students/graduates were also asked to rate their competency in being able to be creative and innovate with a wide variety of foods 15 are very competent, 43 are competent, 21 are neither competent nor incompetent, five are incompetent and one was very incompetent. Competency in cooking ethnic food students/graduates responded that seven are very competent, 24 are competent, 27 are neither competent nor incompetent, 23 are incompetent, and four are very incompetent. Competency in complying with health and safety legislation in regard to food production and service students/graduates rate this as 43 are very competent, 35 are competent, six are neither competent or incompetent, one is incompetent and one is very incompetent (see Figure 4.12). Forty seven students/graduates are competent in classical dishes and modern dishes, creativity and innovation 58 are competent, ethnic cookery 31 are competent and 78 are competent with health and safety legislation.



**Figure 4.12: Competency in Classical Cooking, Creative, Innovation, Ethnic Cooking and Health and Safety (N = 85)**

The students/graduates satisfaction level with kitchen and larder 3 learning outcome of being able to demonstrate culinary techniques from the past and present culinarians is 12% very satisfied, 39% satisfied, 35% neither satisfied or dissatisfied, 12%

dissatisfied and one percent very dissatisfied. Three student/graduates did not answer this question. Student/graduates satisfaction with problem-solving abilities in relation to food preparation, cooking and service was 19% are very satisfied, 55% are satisfied, 15% are neither satisfied nor dissatisfied, nine percent are dissatisfied and two percent are very dissatisfied. One student didn't answer this question. Student/graduate level of satisfaction with interpersonal, individual and teamwork skills improved in the kitchen and larder module rated as 40% are very satisfied, 38% are satisfied, 19% are neither satisfied nor dissatisfied and four percent are very dissatisfied (see Figure 4.13). Students/graduates overall satisfaction with culinary techniques from past and present culinarians rates at 51%, problem-solving abilities in relation to food preparation, cooking and service is 74% and interpersonal, individual and teamwork skills is 78%.



**Figure 4.13: Culinary Techniques, Problem-solving Abilities and Team-work**

(N = 83)

Question 27 asked students to rate the teaching and learning techniques used to teach all hot kitchen modules. These learning techniques were identified during the interviewing process with all the lecturers of hot kitchen modules. One student/graduate failed to answer 27(m) and 27(o). Table 4.3 below identifies the level of satisfaction with the teaching and learning techniques used. Student/graduate researching of commodities has a satisfaction rate of 63%, recipe research 71%,

culinary vocabulary 64%, lecturer feedback 62%, peer feedback 54%, photo log of classes 62%, reflection on class 54%, costing of dishes 39%, use of foreign language 33%, tasting of new dishes 84%, experiencing new foods 77%, keeping portfolio 79%, in-class demonstration 80% and in-class discussion 67%.

	Very Dissatisfied	Dissatisfied	Neither Satisfied or Dissatisfied	Satisfied	Very Satisfied
Research (commodities)	1%	6%	30%	41%	22%
Research (Recipe)	1%	9%	19%	50%	21%
Culinary Vocabulary	4%	14%	19%	44%	20%
Lecturer Feedback	6%	16%	16%	35%	27%
Peer Feedback	2%	15%	29%	32%	22%
Photo log of classes		13%	26%	35%	27%
Reflection on class	4%	17%	20%	45%	14%
Costing of dishes	13%	21%	28%	27%	12%
Use of foreign language	22%	20%	26%	22%	11%
Tasting of dishes		2%	14%	39%	45%
Experiencing new foods	5%	6%	13%	29%	48%
Keeping portfolio of work	2%	9%	10%	49%	30%
In-class demonstration		7%	13%	40%	40%
In-class discussion	4%	7%	22%	37%	30%

**Table 4.3: Teaching and Learning Techniques**

#### 4.4.12 Student/Graduate Satisfaction with Hot Kitchen Modules Content

Students/graduates were asked to rate their satisfaction with the hot kitchen modules content. Eight six students answered part one, two and three. Forty seven answered part four and 28 answered part five (see Table 4.4). Kitchen and larder 1 has a satisfaction rate of 73%, kitchen and larder 2 has 66%, kitchen and larder 3 has 66%, hot major 1 has 72% and hot major 2 has 79% satisfaction rate.

	Very Dissatisfied	Dissatisfied	Neither Satisfied or Dissatisfied	Satisfied	Very Satisfied
Kitchen and larder 1	4%	3%	20%	51%	22%
Kitchen and larder 2	2%	4%	28%	45%	21%
Kitchen and larder 3	4%	6%	24%	47%	19%
Major hot kitchen 1	2%	3%	23%	55%	17%
Major hot kitchen 2			21%	43%	36%

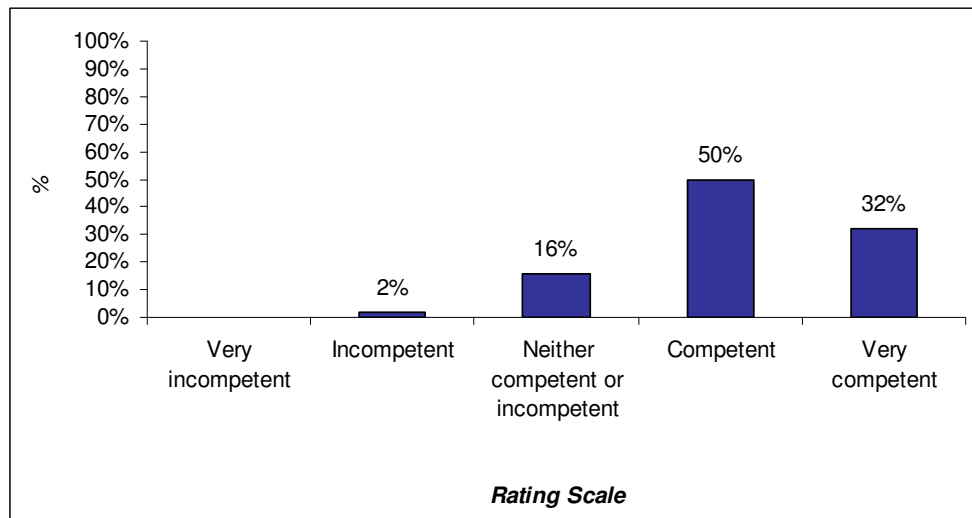
**Table 4.4: Satisfaction with Hot Kitchen Modules**

#### 4.4.13 Major Hot Kitchen 1 Learning Outcomes

Questions 29 to 31 asked students/graduates to rate the learning outcomes of major hot kitchen 1. Question 29 identified students/graduates confidence and ability to plan, organise and execute a culinary arts performance. Fifty student/graduates answered this question and (Figure 4.14) illustrates their responses. The majority 82%

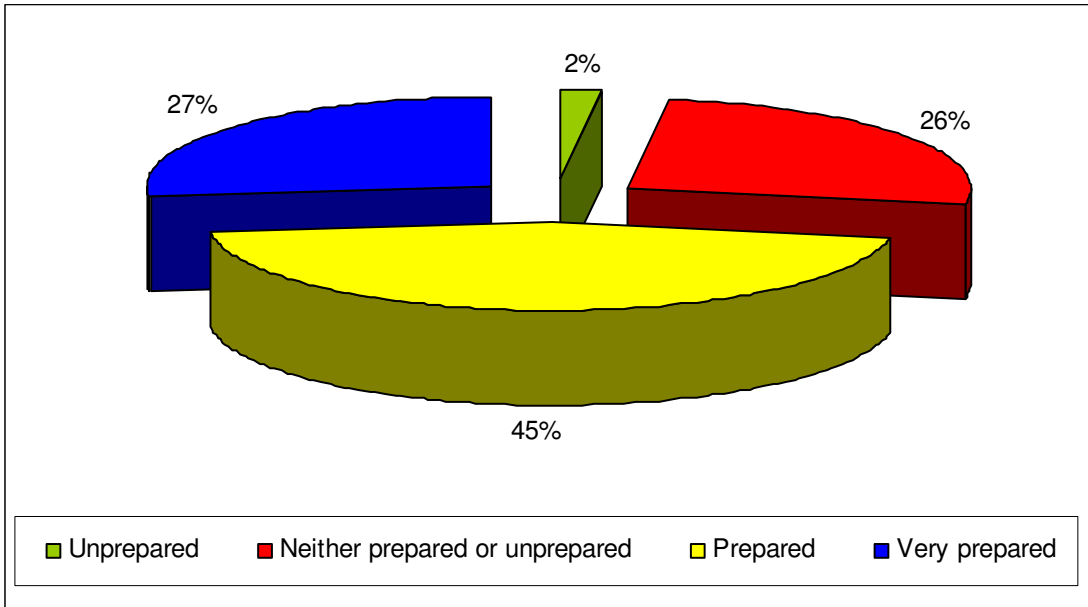


of student/graduates are either very competent or competent. A total of 16% are neither competent nor incompetent and two percent are incompetent.



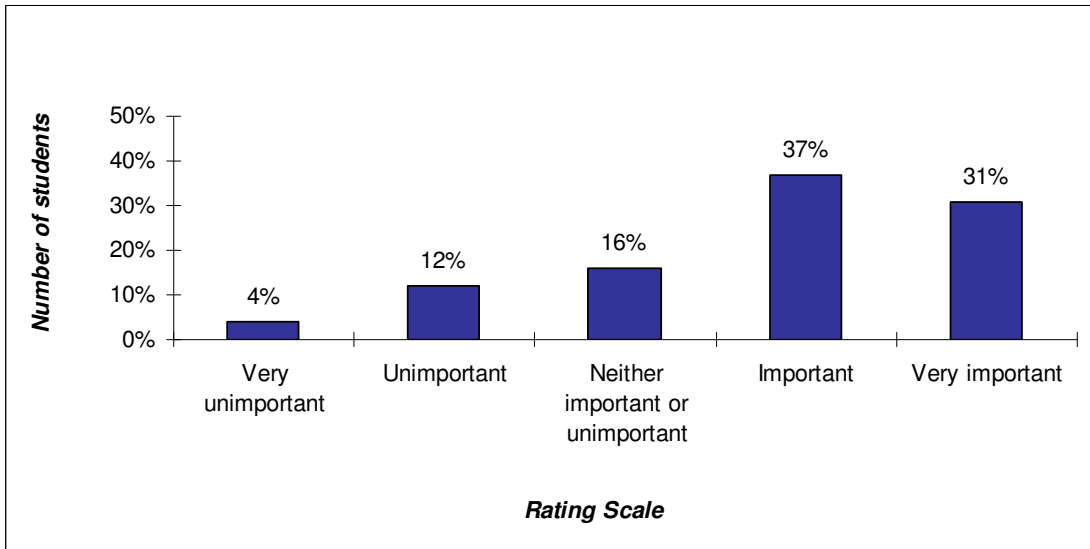
**Figure 4.14: Confidence in Delivering a Culinary Arts Performance (N = 50)**

Question 30 focused on whether students/graduates believed that the BA (Hons.) in Culinary Arts has prepared them to become reflective practitioners (see Figure 4.15). Fifty one students answered this question, of this 27% are very prepared to be reflective practitioners, 45% students/graduates are prepared, 26% are neither prepared nor unprepared and two percent are unprepared.



**Figure 4.15: Reflective Practitioners (N = 51)**

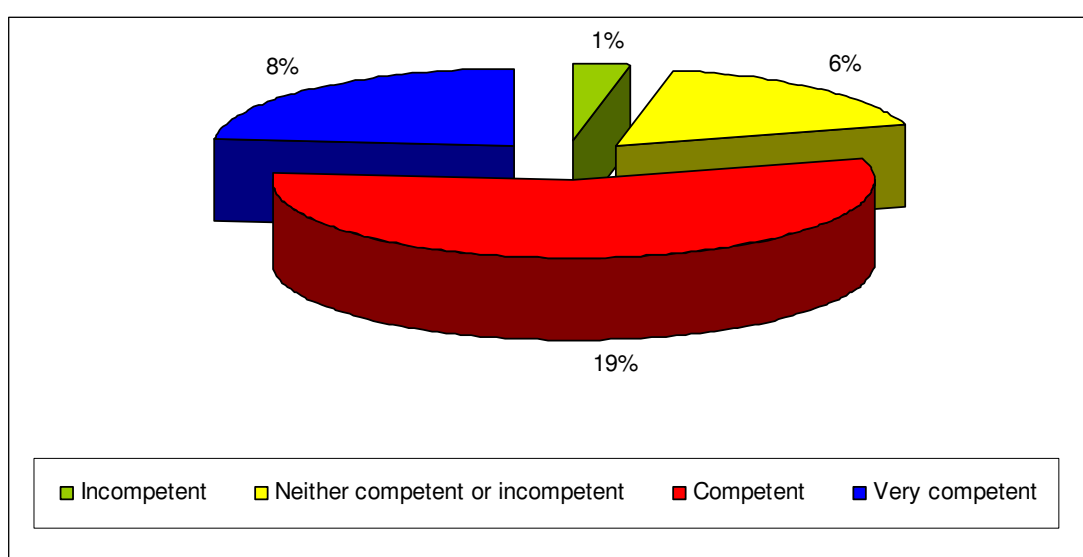
Question 31 asked students/graduates to rate the use of their portfolios as a learning tool. Fifty one students answered this question. A total of 31% see it as very important learning tool, 37% see it as important, 16% see it as neither important nor unimportant, 12% see it as unimportant and four percent see it as very unimportant (see Figure 4.16).



**Figure 4.16: Portfolio as a Learning Tool (N = 51)**

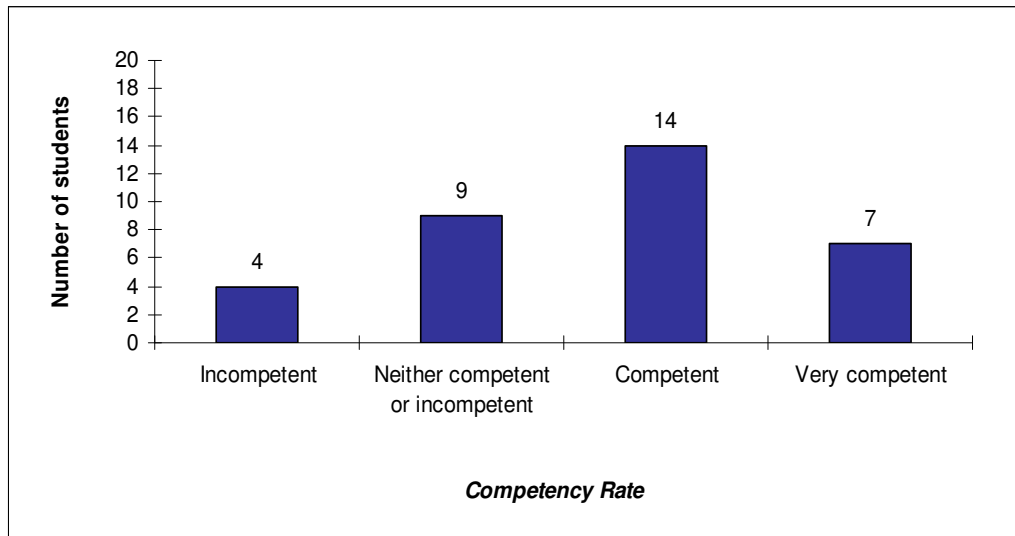
#### 4.4.14 Learning Outcomes for Major Hot Kitchen 2

Question 32 to 35 dealt with the learning outcomes for major hot kitchen 2. Question 32 asked students/graduates to rate their competency in conceiving, executing, new ideas and concepts with creativity and flair in culinary art performance (see Figure 4.17). In all 34 students answered this question and 24% are very competent, 55% are competent, 18% are neither competent nor incompetent and three percent are incompetent.



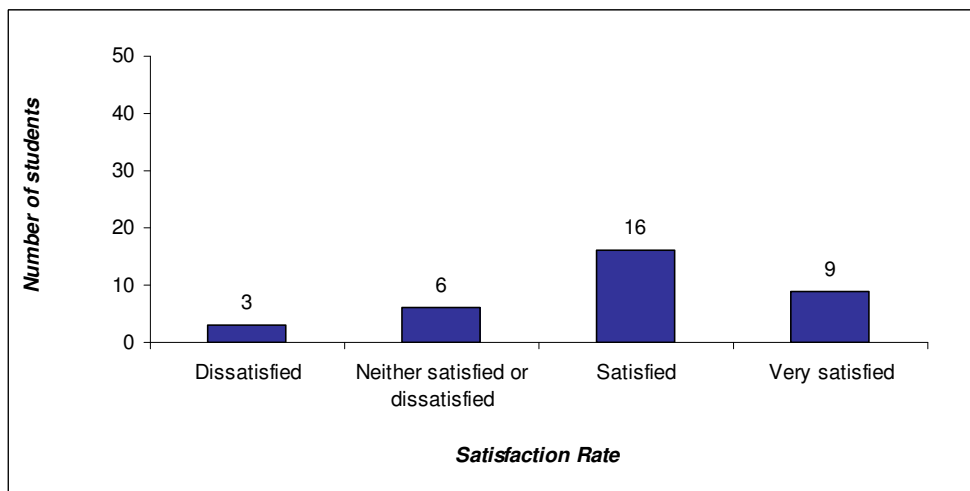
**Figure 4.17: Competency to Execute New Ideas and Concepts (N = 34)**

Question 33 asked students/graduates how competent are they in formulating new recipes. Thirty four answered this question and seven are very competent, 14 are competent, nine are neither competent nor incompetent, and four are incompetent (see Figure 4.18).



**Figure: 4.18: Formulating New Recipes (N = 34)**

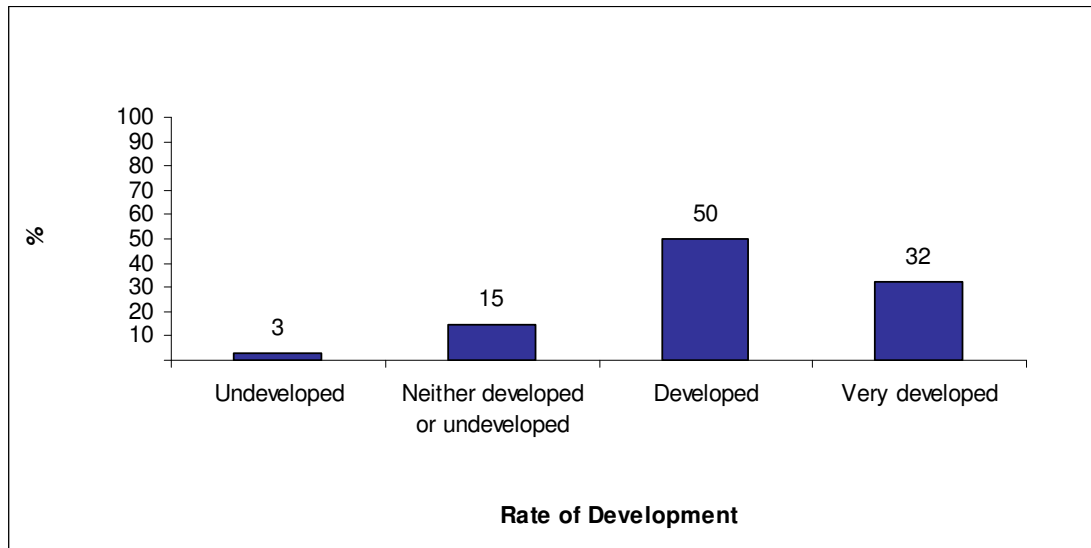
Question 34 focused on how satisfied students/graduates are with their acquired theoretical knowledge and analytical tools to develop solutions for culinary art challenges in developing recipes (see Figure 4.19). Thirty four students/graduates answered this question, nine are very satisfied, 16 are satisfied, six neither satisfied nor dissatisfied and three dissatisfied.



**Figure 4.19: Satisfaction with Acquired Theoretical Knowledge and Analytical Tools (N = 34)**

Question 35 identified whether students/graduates felt they had developed their intellectual, personal and self learning abilities completing the hot kitchen and larder

modules and the major hot kitchen modules (see Figure 4.20). Thirty four students answered this question and 32% have become very developed, 50% have developed, 15% neither developed nor undeveloped and three percent felt they are undeveloped.



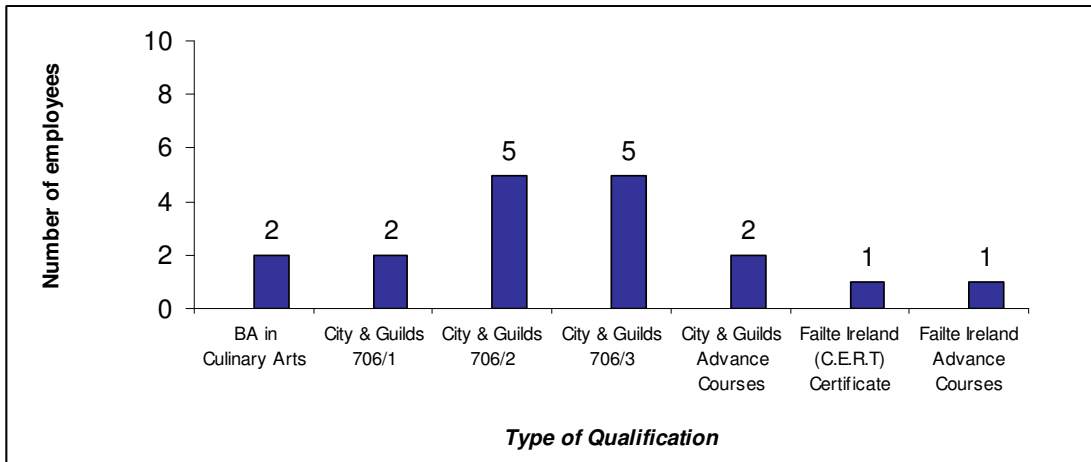
**Figure 4.20: Personal Development (N = 34)**

#### **4.5 Employer’s Questionnaires**

Eighteen employers filled in the online questionnaire using SurveyMonkey. Sixteen employers fully completed the questionnaire with two partially completing it. A total of 38 employers were contacted with a response rate of 47%. The questionnaire was divided into two sections. The first section focused on demographics and the second section focused on employer’s opinion on the module content of each module.

##### **4.5.1 Highest Culinary Qualification of Employer**

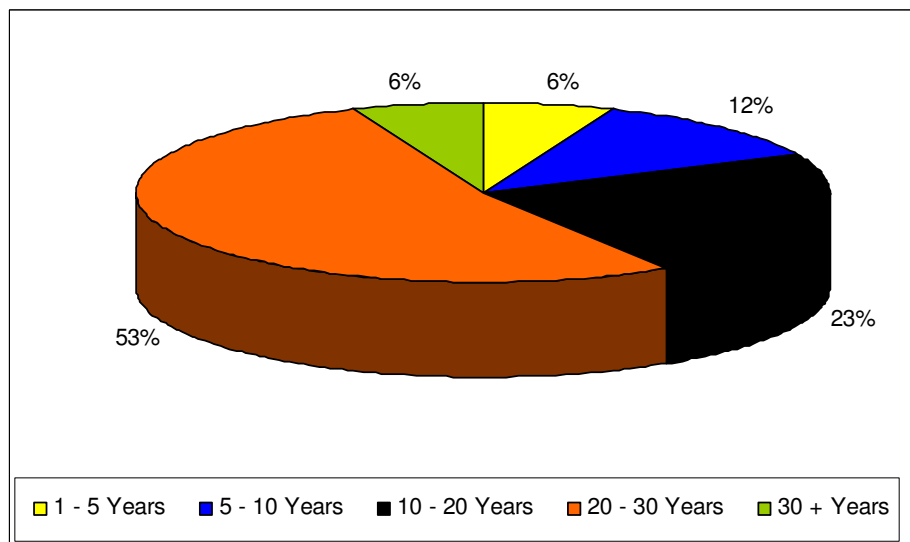
A total of two of the respondents have BA (Hons.) in Culinary Arts, two have City & Guilds 706/1, five have City & Guilds 706/2, five have 706/3, two have City & Guilds Advance Courses, one has Fáilte Ireland (C.E.R.T) Certificate and one has Fáilte Ireland Advance Courses (see Figure 4.21).



**Figure 4.21: Highest Culinary Qualification (N = 18)**

#### 4.5.2 Number of Years of Experience

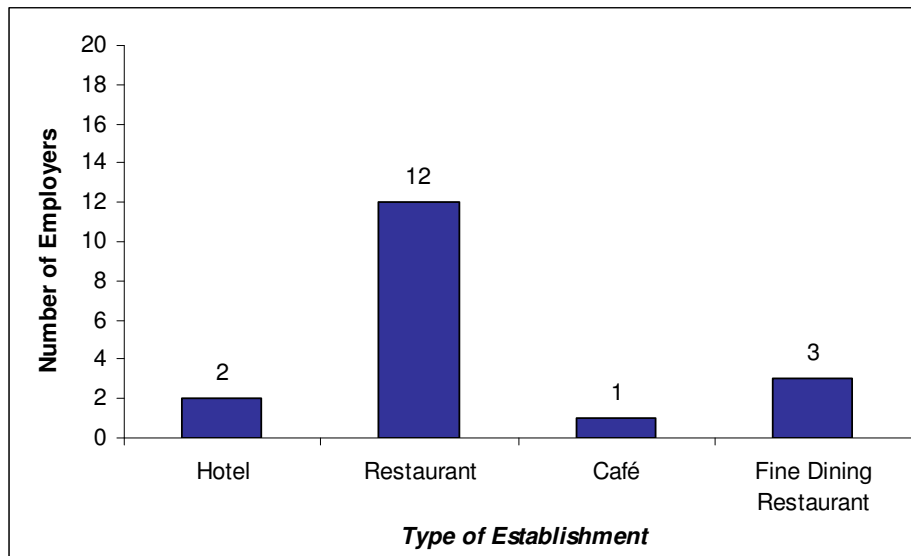
The majority of respondents 53% have 20 – 30 years experience, 23% have 10 – 20 years, 12% have 5 – 10 years, 6% have 1 – 5 years, 6% have 1 – 5 years and 6% have more than 30 years experience (see Figure 4.22). One respondent did not answer this question



**Figure 4.22: Number of Years Experience in Professional Kitchen (N = 17)**

#### 4.5.3 Current Place of Employment

Two respondents are employed in hotels, 12 in restaurants, one in café and three in fine dining restaurants (see Figure 4.23).



**Figure 4.23: Current Place of Employment (N = 18)**

#### 4.5.4 Employer Culinary Qualifications and Place of Employment

One employer who is working in a hotel and one working in a restaurant have a BA in Culinary Arts, three employers working in restaurants and fine dining restaurant have 706/1 City & Guilds qualifications, six employers working in restaurants and fine dining restaurants have City & Guilds 706/2, one employer working in a hotel, three working in a restaurant and one working in a fine dining restaurant have City & Guilds 706/3, one employer working in a restaurant and one working in a café have City & Guilds Advance Courses, one employer working in a restaurant has Fáilte Ireland (C.E.R.T) Certificate and one employer has Fáilte Ireland Advance Course.

#### 4.5.5 Number of Graduates Employed by Respondents

One employer has employed one graduate of the BA (Hons.) in Culinary Arts, three employers have employed two graduates, one employer has employed three graduates, seven employers have employed four graduates and six employers have employed more than four graduates (see Figure 4.24). One of the employers noted that they had employed eight graduates in total, one noted that the graduates employed had three years experience in another country before being employed by the respondent and one employer noted that two graduates employed had not completed the BA (Hons.) in Culinary Arts.

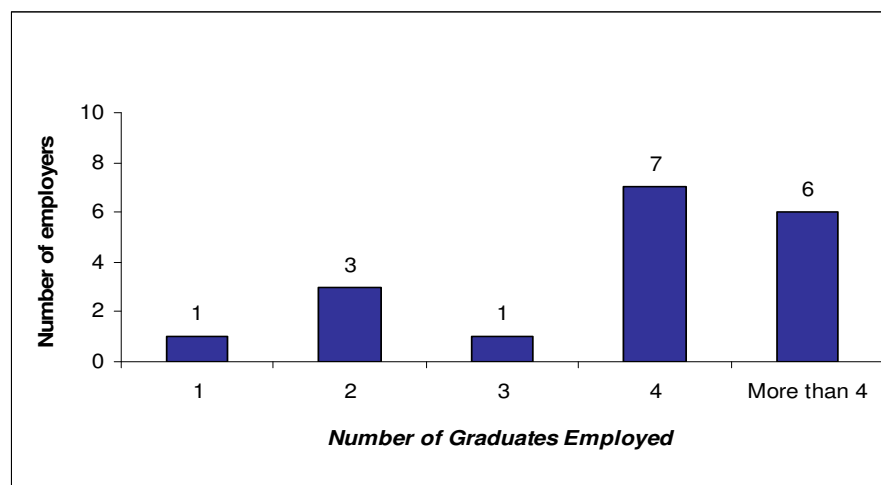


Figure 4.24: Number of Graduates Employed by Respondents ( $N = 18$ )



#### 4.5.6 Employers Level of Satisfaction with Graduates Learning Outcomes

Employers were asked to rate their level of satisfaction with the graduates they have employed acquired learning outcomes from the BA (Hons.) in Culinary Arts. A total of 16 employers responded to this question. The majority of employers 81% are satisfied with knife skills, 81% are satisfied with culinary knowledge of commodities, 87% are satisfied with health and safety regarding using kitchen equipment, 93% are satisfied with applying appropriate cooking methods, 87% are satisfied with creativity with food commodities, 81% are satisfied with knowledge of classical and modern cuisine, 75% are satisfied with competency in classical and modern cuisine, 43% are satisfied with menu innovation, 50% satisfied with ethnic food knowledge, 62% satisfied with problem-solving abilities in food production, cooking and service, 88% satisfied with compliance with health and safety legislation in food production and service, 93% satisfied with teamwork abilities, 87% satisfied with culinary work, 75% satisfied with ability to plan, organise and execute kitchen tasks, 87% satisfied with reflective abilities, 68% satisfied with ability to conceive and execute new ideas with creativity, 49% satisfied with recipe development skills and 56% satisfied with recipe problem-solving ability (see Table 4.5).

Learning Outcome	Very Dissatisfied	Dissatisfied	Neither Satisfied or Dissatisfied	Satisfied	Very Satisfied
Knife skills	0.0% (0)	6.30%	12.50%	50.00	31.30%
Culinary knowledge of commodities	0.0% (0)	6.30%	12.50%	56.30%	25.00%
Health and safety regarding using kitchen equipment	0.0% (0)	6.30%	6.30%	50.00%	37.50%
Knowledge of applying appropriate cooking methods	0.0% (0)	6.30%	0.0% (0)	75.00%	18.80%
Creativity with food commodities	0.0% (0)	6.30%	6.30%	68.80%	18.80%
Knowledge of classical and modern cuisine	0.0% (0)	6.30%	12.50%	62.50%	18.80%
Competency in classical and modern cuisine	0.0% (0)	6.30%	18.80%	68.80%	6.30%
Menu Innovation	0.0% (0)	12.50%	<b>43.80%</b>	37.50%	6.30%
Ethnic food knowledge	0.0% (0)	6.30%	43.80%	50.00%	0.0% (0)
Problem solving abilities in food production, cooking and service	6.30%	0.0% (0)	31.30%	50.00%	12.50%
Compliance with health and safety legislation in food production and service	0.0% (0)	6.30%	6.30%	68.80%	18.80%
Teamwork abilities	0.0% (0)	6.70%	0.0% (0)	60.00%	33.30%
Quality of their culinary work	0.0% (0)	13.30%	0.0% (0)	60.00%	26.70%
Ability to plan, organise and execute kitchen tasks	0.0% (0)	6.30%	18.80%	50.00%	25.00%
Reflective abilities (able to reflect on tasks and learn from them)	0.0% (0)	6.30%	6.30%	62.50%	25.00%
Conceiving and executing new ideas with creativity	6.30%	0.0% (0)	25.00%	56.30%	12.50%
Recipe development skills	6.30%	0.0% (0)	<b>43.80%</b>	43.80%	6.30%
Recipe problem-solving abilities	6.30%	0.0% (0)	37.50%	43.80%	12.50%

**Table 4.5: Satisfaction Rate with Acquired Learning Outcomes**

#### 4.5.7 Gender and Age Demographic

All respondents were male with one in the age group of 26 -31, five were in the 32 – 38 age group, ten were in the 39 – 45 year age group and one was in the 45+ age group.

#### 4.6 Employers Comments on Module Content

Employers were given a comprehensive list of the module content for all the hot kitchen classes on the BA (Hons.) in Culinary Arts. The questionnaire was designed so that employers had to answer all questions in section two before moving on.

##### 4.6.1 Employers Comment on Kitchen and Larder 1

Employers were given a list of the content for the 12 classes in kitchen and larder 1 see Appendix 7. Employers were asked to give their opinions on the content and emerging themes were identified (see Table 4.6). Employers are concerned with the course content being out of date regarding cooking methods, no molecular techniques, menu content and the use of modern equipment such as water-baths and thermomixers. Nine of the employers stated that the course content was extensive and covered a lot of the basics. Two employers suggested adding more larder content i.e. butchery of meat, smoking preserves and drying. Two employers also suggested that students need more time in practical classes.

Employers opinion on the content of kitchen and larder 1	Emerging themes
	Dated
	More modern techniques needed at foundation level
	Covers all the basics
	Extensive training programme
	Not enough time in practical classes

**Table 4.6: Employers Opinion on Kitchen and Larder 1**

#### 4.6.2 Employers Comments on Kitchen and Larder 2

Employers were given a list of the content for the 12 classes in kitchen and larder 2 (see Appendix 7). Emerging themes are identified in Table 4.7. Employers stated that the content for kitchen and larder 2 was extensive, comprehensive, progressive, well planned, covers all the important aspects and is a solid building block. However employers are concerned that the content is out of date with modern menus and techniques. Employers suggested the promotion of seasonal dishes and ingredients also more emphasis on “*vegetarian and dietary classes to broaden the mindset*”. One employer suggests the use of menu French is not required and dishes should have English names. Again employers are concerned with the practical contact time for students.

<b>Employers opinion on the content of kitchen and larder 2</b>	<b>Emerging themes</b>
	Extensive, progressive & comprehensive
	Good module content
	Dated menu items
	Seasonal dishes need to be promoted
	Why use menu French
	More time needed in practical class

**Table 4.7: Employers Opinions on Kitchen and Larder 2**

#### 4.6.3 Employers Comments on Kitchen and Larder 3

Employers were given a list of the content of kitchen and larder 3 see Appendix 7. Emerging themes are highlighted in Table 4.8. The majority of employers agreed that the module content was good and covered a lot of the basics and the inclusion of ethnic cuisine is seen as positive. However Irish cuisine needs to be modernised as it is out of date with current industry trends. Employers also noted that the content was dated, dishes need to be modernised and students need to understand where ingredients are sourced. Again employers noted that more time is needed in practical classes.

<b>Employers opinion on the content of kitchen and larder 3</b>	<b>Emerging themes</b>
	Good module content
	Good use of ethnic cuisine
	Irish cuisine needs to be modernised
	Dated content
	More time needed in practical classes

**Table 4.8: Employers Opinions on Kitchen and Larder 3**

#### **4.6.4 Employers Comments on Major Hot Kitchen 1**

Employers were given a list of the module content of major hot kitchen 1 see Appendix 7. Emerging themes are identified in Table 4.9. Overall employers were satisfied with the module content however; employers felt some dishes could be updated. Employers are particularly satisfied that students are given more independence to create their own dishes. Employers state that menu items are creative and innovative but items need to be kept simple. One employer voiced concern over the amount to be covered in a five hour class.

<b>Employers opinion on the content of Major hot kitchen 1</b>	<b>Emerging themes</b>
	Good module content
	Students independence very good aspect
	Innovate and creative
	Keep items simple
	A lot to cover in class

**Table 4.9: Employers Opinions of Major Hot Kitchen 1**

#### **4.6.5 Employers Comments on Major Hot Kitchen 2**

Employers were given a list of the module content of major hot kitchen 2 see Appendix 7. Emerging themes are identified in Table 4.10. Employers state that there is a need to change some of the dishes to more modern dishes. Employers felt that content more suitable for international kitchens and not Irish kitchens. Overall employers were happy with range of products used and the techniques mastered by students. Some employers said menu French is not necessary in Irish cuisine today.

<b>Employers opinion on the content of major hot kitchen 2</b>	<b>Emerging themes</b>
	Need to modernise dishes
	Not relevant to Irish catering industry
	Wide range of products and techniques used
	Good content
	No need for culinary French

**Table 4.10: Employers Opinions of Major Hot Kitchen 2**

# **Chapter Five: Discussion, Conclusions and Recommendations**

## **5.1 Discussion of Findings**

The research aim of this thesis is to investigate the current course content on the BA (Hons.) in Culinary Arts hot kitchen modules and to ascertain whether the content is adequate in meeting the needs of the stakeholders. This research examines the hot kitchen module content of the BA (Hons.) in Culinary Arts in DIT Cathal Brugha Street. In the previous chapter the main findings from the interviews and questionnaires were presented. Chapter Two reviewed relevant literature and this was triangulated with the data from Chapter Four. This chapter will discuss the primary findings in relation to the key objectives of the research:

1. Investigate the history of culinary education internationally and in Ireland.
2. Examine the current programme content of the hot kitchen and larder modules on the BA in Culinary Arts in the Dublin Institute of Technology using the course document.
3. Explore the opinions of culinary arts educators in DIT of the module content of the hot kitchen modules.
4. Assess current students and graduates satisfaction rating of the delivered hot kitchen modules on the BA (Hons.) in Culinary Arts.
5. Examine employers perceptions of Culinary Arts Degree hot kitchen modules.

## **5.2 Findings from Interviews with Culinary Arts Lecturers**

### **5.2.1 Modularisation**

DIT strategic plan *Vision for Development 2001-2015* introduced modularisation to the Institute. DIT states that “the major purpose of introducing modularisation is to offer students more choice and freedom with respect to how they construct and participate in a programme of study. Albeit any such programme must meet the academic requirements of the particular area of study. It is hoped that opportunities for more inter-disciplinary studies will be afforded to students” (DIT, 2012b). In 2004 the School of Culinary Arts and Food Technology became modularised as did the BA (Hons.) in Culinary Arts. Lectures on the hot kitchen modules of the BA (Hons.) in Culinary Arts state that modularisation overall is positive particularly for students however modularisation has reduced practical hours in kitchens which lecturers feel is detrimental to the course and the students. Before modularisation students received

more practical hours per week and the programme was delivered over 30 weeks rather than the 24 weeks currently received.

Year	Current Culinary Modules	Art	Hour per (12weeks)	Content week	Pre Modularisation Culinary Subject	Arts	Hour Content per week
Year 1	Kitchen Larder 1	and	4 hours		Culinary Performance	Arts	8 hours for 30 weeks
	Kitchen Larder 2	and	4 hours				
Year 2	Kitchen Larder 3	and	4 hours		Culinary Performance	Arts	8 hours for 30 weeks
Year 3	Major Kitchen 1	Hot	5 hours		Culinary Major Elective	Arts 1	8 hours for 15 weeks
Year 4	Major Kitchen 2	Hot	5 hours		Culinary Major Elective	Arts 2	8 hours for 15 weeks

**Table 5.1: Hour Content of Modules and Subjects**

### 5.2.2 Creating Modules and Updating Modules

Currently the hot kitchen modules for kitchen and larder 1 and 2 have been written by lecturers who teach these modules but kitchen and larder 3 was written by a now retired lecturer. Major hot kitchen 1 and 2 are written by one of the lecturers who delivers these modules but not by the other two lecturers who also deliver these modules. Curriculum development and evaluation is a dynamic process (Gustafson *et al*, 2005) and institutions must ensure that currency is met at all times to ensure credibility (Baker *et al*, 1995). Lecturers feel that because they have not been involved in the development of modules they do not believe in the content they must deliver according to the programme document. Lecturers have taken it upon themselves to change the module content leading to classes receiving different module content.



The current modules being delivered were written in 2004. As is evident from *Coursewise* (see Appendix 7) the module aims, learning outcomes and content have been amended by persons other than the module authors (Field Note, 2012g). Learning outcomes are repeated several times and terminology such as a “wedge and cubes” are used instead of culinary terms such as “paysanne”. These changes were carried out without lecturers’ and module authors’ knowledge or consent leading to confusion amongst the lecturing staff. The content of the modules currently being delivered has also changed and doesn’t reflect what is recorded on the *Coursewise* document.

### **5.2.3 Teaching Techniques used in Delivering Modules**

The lecturers use a variety of teaching techniques on the BA (Hons.) in Culinary Arts. These techniques range from reflective journals to research on commodities. HACCP and costings are required by some lecturers for some modules, group work is used by some lecturers, recipes given to students by some lecturers, students’ research of recipes used by other lecturers and demonstrations for students by some lecturers. These teaching techniques assist students in learning and thinking, however there are many different learning styles in use. According to Honey and Mumford (1992, p.1), people learn in two ways the first through teaching and the second through experience. There are four types of people with preferences for each stage of the learning cycle (see Appendix 4). The Honey and Mumford learning cycle shows there is a strong link between thinking and doing/applying to create an effective learning process (Beard & Wilson, 2006) which practical classes can achieve. Cartelli (2006, p.137) states that “knowledge of learning styles can be used to increase the self-awareness of students and lecturers about their strengths and weakness as learners”. The lecturing team need to focus on agreed teaching and learning styles rather than inconsistency used across modules.

### **5.2.4 Collaboration between Lecturers on Module Content for Year One to Four**

There is a certain amount of collaboration between some lecturers on the modules content. Each lecturer has an opinion as to what should be delivered in the modules and how it should be delivered. The lecturing staff have not to date been brought together to standardise the module content by management. The majority of lecturers

feel that all the modules need to be re-evaluated enabling the teaching team to become more aware of the content of all the hot kitchen modules on the BA (Hons.) in Culinary Arts. At present there is no clear progression path between the modules as the modules were written by lecturers individually rather than as a programme team. This has led to students becoming frustrated by repetition in modules.

### **5.2.5 Learning Outcomes**

Lecturers are aware of the learning outcomes on the different modules they teach however lecturers differ in choosing whether to adhere strictly to the learning outcomes. George (2009) states that aims, objectives, and outcomes should be central as a starting point for designing and understanding the design of learning. One lecturer highlighted that the learning outcomes have been changed by persons who do not teach on the modules and lecturing staff were not informed. Another lecturer states that the learning outcomes were written at a time when there were adequate resources within the organisation. Factors that affect curriculum development are determined by student outcomes and the organisation's ability to provide resources (Harrington *et al*, 2005). This indicates the need for the aims and learning outcomes to be re-evaluated.

### **5.2.6 Review of Modules**

All lecturers agree that all the modules need to be reviewed. A school review was carried out in 2009 but this did not include a module review. Lecturers also believe that the modules need to be modernised to reflect current industry trends. Zopiatis (2010) emphasises the need for industry and education to look at the competencies required and explore what can be done to close the gap. Zopiatis research also found that technical culinary specific competencies rank first in importance.

### **5.2.7 Internship**

Internship is viewed by lecturers as a very positive experience for the students in terms of the confidence they gain and the skills they acquire. Internship is seen as a major benefit to the students' participation in subsequent modules. Internship can benefit the student by providing work based learning opportunities, mixing with professionals and increase skills that are difficult to develop in a classroom laboratory

environment (Lauber *et al*, 2004). Lecturers one, two and four don't teach students in first year and are therefore unable to comment on the benefits of internship in year one of the BA (Hons.) in Culinary Arts. Lecturer three who is also involved in the internship programme stresses the importance of internship for the students. The benefit of internship is evident in research by Mac Con Iomaire (2004 and 2009) and for International internship by Cullen (2010 and 2012).

### **5.2.8 Assessment Techniques**

Lecturers are satisfied with assessment techniques used and suggest students are motivated by assessment. However, the assessment techniques used in the modules are not outlined to the students on *Coursewise*. In curriculum development George (2009, p. 161) states that it is vital first of all to determine precisely and fully what the purpose of the proposed learning is, and to keep this in mind consistently throughout the whole process of planning and delivery. Assessment drives learning and determines what is learned: it interprets and communicates the learning aims for the learners. Learning needs must be anticipated, defined and planned for in accord with the aims and assessments this in turn will define the kind of teaching provided.

### **5.3 Discussion of Students/Graduates Questionnaire**

The majority of students/graduates that completed the questionnaire applied for entry on the BA (Hons.) in Culinary Arts through the Central Applications Office (CAO). Thirty three of the applicants had prior kitchen experience before commencement of their culinary arts programme. This experience assisted students/graduates in terms of skills, working under pressure and improved kitchen abilities. Students/graduates feel that college work is very limited and to expand their knowledge they have to work in kitchens however this in turn can affect attendance in college. Seventy two students/graduates continued to work while completing their degree in culinary arts and of these, 63 students/graduates found this to be beneficial to their participation on the BA (Hons.) in Culinary Arts. Students/graduates were asked if the course content currently offered has benefited them in their work experience to date, 60% agree however 63% of students/graduates are satisfied with the course content. The common reasons for dissatisfaction is the lack of practical hours in college, module

content needs to be modernised, very repetitive, learning skills not required in industry and the need for a more standard curriculum taught across the modules.

### **5.3.1 Kitchen and Larder 1 Satisfaction Rate**

Students/graduates were asked to rate their satisfaction with the learning outcomes of kitchen and larder 1 as per the module document on *Coursewise*. Students/graduates knowledge of stocks and marinades rated at 63% satisfaction. Marinades are only made once for demonstration purposes in kitchen and larder 1 and are never used in completed dishes. Fresh stocks are made in the majority of kitchen and larder 1 class's everyday and students are given the task of making a different stock every week. This is normally carried out by a group of four students therefore it could be observed that students need to complete the task individually to understand fully the principles of making fresh stocks. Knife skills are a very important skill for culinary arts students/graduates and 65% are satisfied with their knife skills on completion of kitchen and larder 1. Students' knife skills can only be improved with more practice either in college or working. If a student didn't work or practice it is possible that after 12 weeks in college they will have only chopped a limited number of vegetables. Students are advised by their lecturers of the need to practice their knife skill at home and also ideally in the workplace. Industry expects culinary arts degree students to have required a high level of knife skills. Culinary knowledge is taught in a one hour theory class in conjunction with the kitchen and larder 1 practical class and only 38% of students are satisfied with their culinary knowledge. The culinary theory one hour class may need to be delivered to all students on the BA (Hons.) in Culinary Arts before their practical classes to give the students a better understanding of the culinary techniques employed in class. The butchery/larder skills that students acquire in kitchen and larder 1 are boning out a chicken twice, demonstration of butchery of a short sirloin of beef, preparation of a fair end of lamb French style once, trimming a fillet of beef and short sirloin for steaks once. As students/graduates satisfaction with their acquired boning skills is 51% it could be deduced this is due to lack of practice. Students/graduates satisfaction with knowledge of methods of cookery rates highly with 75% satisfied. Students' do wet (2) and dry (2) methods of cookery over four classes therefore students have a better understanding of the different methods

employed. Students/graduates 81% are competent in operating kitchen equipment. The overall satisfaction rate with kitchen and larder 1 was 73%.

### **5.3.2 Kitchen and Larder 2 Satisfaction Rate**

Students/graduates were asked to rate their satisfaction with the learning outcomes of kitchen and larder 2 using the module document on *Coursewise*. Students/graduates level of understanding the reasons for cooking is 73% satisfaction. Students would have completed 24 weeks of kitchen and larder modules therefore knowledge of cooking methods and reason for cooking would have improved. Applying methods of cooking had an 81% satisfaction rate and a 69% satisfaction rate for knowledge of nutrition and texture. Fifty one of the 85 students/graduates who completed the questionnaire have a good knowledge of stocks and emulsions. Fresh stocks are made in seven of the 12 classes in kitchen and larder 2 giving students more confidence in the principles of making stocks. Emulsions are made in five of kitchen and larder 1 classes and four of kitchen and larder 2 classes. Normally students would make their own emulsion to achieve an understanding of the techniques involved. Nine classes in kitchen and larder 2 feature classical dishes and students competency in preparing classical dishes is 67%. It should also be noted that the 12 classes in kitchen and larder 1 all feature classical dishes therefore students have 21 weeks of classical training. Students/graduates satisfaction with the content of kitchen and larder 2 is 66%.

### **5.3.3 Kitchen and Larder 3 Satisfaction Rate**

The kitchen and larder 3 module takes place at the end of January in semester two of year two this must be taken into account when students/graduates are rating the learning outcomes of this module. Students haven't been in a hot kitchen class in almost eight months. Forty seven out of 85 respondents were competent with assessing and applying major culinary elements of classical and modern cuisine. Five of the 12 classes contain some classical dishes while the remaining seven classes are divided between ethnic and modern cuisine. Fifty eight students are competent that they are creative and innovate with a wide variety of food. Every main dish in this module is different therefore students encounter a wide variety of ingredients. Ethnic cooking accounts for four classes in this module:

1. Thai Cuisine
2. Spanish Cuisine
3. Italian Cuisine
4. Irish Cuisine

Twenty seven of the 86 students/graduates feel incompetent in cooking ethnic food. Students only receive a flavour of each ethnic cuisine due to time constraints yet it is an element of the module that students/graduates particularly enjoy because of the variety, novelty, and range of dishes produced through group work, which is very different from classical cuisine, (Field Notes, 2012h). Seventy eight students/graduates are competent in health and safety legislation regarding food production and service. HACCP plans form part of the students' portfolios which they must complete for one dish every week also students have completed theoretical classes on food safety. Students/graduates ability to demonstrate culinary techniques from past and present culinarians rates at 51% satisfaction. Four of the classes feature main dishes from Gordon Ramsay's cooking programme 'The F Word'. Students are able to watch videos online of Gordon cooking the main dish and they then reproduce it in class however students feel the dishes are not challenging enough. Students/graduates problem-solving abilities in relation to food preparation, cooking and service rates at 74% satisfaction. Everyday students encounter problems with equipment and ingredients in classes and they quickly learn to adapt. Students work a lot in groups on this module particularly for the ethnic classes. Consequently, students/graduates level of satisfaction with their interpersonal, individual and teamwork skills rate at 78% satisfaction. Students/graduates rate the module content at 66% satisfaction.

Students/graduates were asked to rate their level of satisfaction with the teaching techniques used in kitchen and larder 1, 2 and 3 (see Table 4.3). Tasting new dishes, in-class demonstrations, keeping portfolios and experiencing new foods all rated high levels of satisfaction. The use of a foreign language, costing of dishes, reflection on classes and peer feedback received lower ratings. The School of Culinary Arts and Food Technology has recently developed a culinary cuisine language class this may improve students perception of using a foreign language in writing recipes. Currently

students do not have any business modules on the first two years of the BA (Hons.) in Culinary Arts unlike their predecessor who had a business and communication class for 30 weeks for the first two years. These classes taught students food costing. Currently students are shown by practical lecturers how to do a food costing and are then expected to provide costing for each class. Food costing could be included in the food and beverage studies, which takes place in semester 1 year 1. Reflecting on classes teaches students to critically analyse the consequence of their actions in class and how they can improve, however, if the student never has the chance to correct their mistake due to not working with the commodity again how can they learn? Peer feedback happens at the end of class before the students eat their prepared dishes. In some classes students prepare the same commodities using different techniques and at the end of class assess through peer review their preferred method of cooking this can be very rushed due to time constraints so students may not be benefiting from this exercise.

#### **5.3.4 Major Hot Kitchen 1 Satisfaction Rate**

Major hot kitchen 1 takes place in semester 1 in year 3. Students have completed their national placement with the majority of students (60 – 70%) gaining full-time employment for the summer months in highly regarded professional kitchens. The learning outcomes for this module were taken from *Coursewise*. Fifty one students/graduates answered the questions relating to major hot kitchen 1. Students/graduates had 82% competence rate in their confidence and ability to plan, organise and execute a culinary art performance. A reason for this could be the confidence gained on the summer work experience as one lecturer noted “*you can tell who worked for the summer in a kitchen*” (Lecturer two). Students were asked if the BA (Hons.) in Culinary Arts prepared them to become reflective practitioners, 72% agreed. This is compared to 59% agreeing after completing kitchen and larder 1, 2 and 3. It could be concluded that students have learnt from their internship the benefits of reflecting on their actions and the opportunity to learn from their action due to repetition of actions in professional kitchens. The use of the portfolio as a learning tool 68% of students/graduates rated it as an important tool. This compares to 79% of students/graduates seeing it as an important learning tool in kitchen and larder 1, 2 and 3. Students may conclude from their internship that their portfolio contains

outdated recipes and techniques that don't reflect what is currently used in professional kitchens. Students/graduates rated the content of major hot kitchen 1 at 72% satisfaction.

### **5.3.5 Major Hot Kitchen 2 Satisfaction Rate**

Major hot kitchen 2 takes place in semester 1 year 4 of the BA (Hons.) in Culinary Arts. The majority of the students have completed a 12 week international internship in some of the top restaurants in Europe. When rating competency in conceiving, executing, new ideas and concepts with creativity and flair in culinary art performance 79% of students/graduates were competent. Lecturer one highlighted that there is a major difference in the students particularly in fourth year if the *“student has been to a good strict kitchen and because they have been there for 12 weeks”*. Twenty one of the 34 students/graduates are competent in formulating new recipes. Students are given classical menus for the first six weeks of major hot kitchen 2 and there after are given a list of ingredients to create new recipes and dishes using seasonal produce. This gives the students confidence to formulate new recipes. Because students have six weeks to practice formulating new recipe ideas, 25 of the 34 students/graduates are satisfied with their theoretical knowledge and analytical tools to develop solutions for culinary arts challenges in developing recipes. Students have been given the acquired time to develop these skills and therefore 82% state that their personal development skills have developed. The learning outcomes for major hot kitchen 2 are very precise and the course content ensures that they are achieved. Students/graduates gave a 79% satisfaction rate to the course content for major hot kitchen 2 the highest rating of all the hot kitchen modules. It could be concluded that students now working on their own using the confidence, techniques and skills acquired in college and on internship are producing dishes they feel reflect their culinary style.

## **5.4 Discussion of Employer's Questionnaire**

Eighteen employer's filled in the online questionnaire using the SurveyMonkey website. The majority of the employer's have attained City & Guilds qualification as their highest culinary qualification. Also the majority of the employer's have 20 – 30 years experience in professional kitchens. Therefore it can be concluded that when



employers were receiving culinary education training City & Guilds of London carried out the role of awarding certificates in Ireland. In 1977 the City & Guilds of London programmes in advanced kitchen/larder and pastry (706/3) were seen as major developments in Irish culinary history (Mac Con Iomaire, 2010). Five of the employer's have 706/3 certificates. The majority of employers are currently working in the restaurant industry. Thirteen of the employers have employed more than four BA (Hons.) Culinary Arts graduates with one employer employing eight graduates. Some of the Irish catering industry organisations tried to block the BA (Hons.) in Culinary Arts fearing that it might affect the inexpensive labour that the apprenticeship system offered. Their fears proved to be unfounded as the students on the BA (Hons.) in Culinary Arts introduced a better educated cohort of students to the industry. Irish graduates from the BA (Hons.) Culinary Arts are working in many of the leading restaurants in Ireland and across the world (Mac Con Iomaire, 2008).

#### **5.4.1 Employer's Satisfaction with Learning Outcomes of Hot Kitchen Modules**

All employers are male and the majority are in the 39 – 45 year age bracket. Overall employers are satisfied with the learning outcomes graduates displayed upon employment. However employers have issues with menu innovation, ethnic knowledge, problem solving abilities in food production, cooking and service, recipe development skills and recipe problem-solving skills. Fifty eight of eighty six students believe that they are competent in menu innovation however 44% of employers state that they are neither satisfied or dissatisfied with graduates competency. Ethnic cooking knowledge has been highlighted by students and employers as not satisfactory. Students only receive four ethnic cooking classes in the four years of the BA (Hons.) in Culinary Arts. Problem solving abilities in food production, cooking and service 74% of employers are satisfied with their abilities however 32% of employers are neither satisfied nor dissatisfied. These learning outcomes that employers have highlighted as not satisfactory are learning outcomes from kitchen and larder 3. Employers also rated neither satisfaction nor dissatisfaction with graduates recipe development skills (44%) and recipe problem-solving skills (38%) all learning outcomes from major hot kitchen 2.

#### **5.4.2 Employer's Comments on Kitchen and Larder 1**

Employers state that the course content of kitchen and larder 1 is outdated however it does cover a lot of the basic knowledge students would require. Employers state that the use of more modern cooking techniques such as molecular gastronomy and the use of more modern equipment such as *sous vide* water baths should be inserted on the module. The employers are aware of the course content but not how the content is currently delivered in the practical kitchen classes where the use of modern equipment is introduced to students i.e. the use of thermomix in producing soups. Employers have also suggested adding more larder/butchery classes. Lecturers agree with employers regarding larder/butchery classes and only 36% of students are satisfied with their boning out skills. Currently the course content of kitchen and larder 1 concentrates on skills development weeks one to five and introduction to cooking methods week six to eleven of this 12 week module. Time constraints on this module have been emphasised by employers, lecturers and students.

#### **5.4.3 Employer's Comments on Kitchen and Larder 2**

Again employers have drawn attention to the time constraints of this module. Employers are satisfied with the module content stating it was extensive, comprehensive, progressive, well planned, covers all aspects and is a solid building block. More seasonal and vegetarian items were the employers' suggestions to be added to the content of the module. The vegetarian class in this module is the only vegetarian class on the BA (Hons.) in Culinary Arts however there are certain menu items that could be used throughout the four years as vegetarian items. Lecturers feel the course content should be reduced to allow for more individual cooking and more testing.

#### **5.4.4 Employer's Comments on Kitchen and Larder 3**

Lack of practical class time has been emphasised as an issue in this module also. Employers stated that the introduction of ethnic cookery is a positive step but that the Irish cookery class needs to be modernised to reflect current trends in professional kitchens in Ireland. Employers believe the course content is dated and students need to understand where ingredients have been sourced from. However, students are taken

on a number of culinary trips to increase their knowledge of different cultures and ingredients such as:

- Howth in Co. Dublin to gain an understanding of the Irish fishing industry.
- Rungis food market in Paris the biggest food market in Europe.
- Rome and Pompeii to visit the ruins and gain an understanding of early gastronomy.
- Bologna and Florence to visit art galleries, vineyards, Michelin Star restaurant gastronomic experience and culinary tour of Bologna the capital of the Slow Food Movement.
- Barcelona to visit vineyards, La Boqueria food market, chocolate museum and gastronomic experiences.
- Occasional talks from guest lecturers such as speakers from Sheridan's Cheese Mongers.

All these activities are extra curricular and require a lot of good will on the part of lecturers, suppliers and students.

#### **5.4.5 Employer's Comments on Major Hot Kitchen 1**

Employers are satisfied with this module content as students are given more independence to create their own dishes. Employers noted that the module content was dated and there was a lot to cover in classes and two of the lecturers agree. Students have highlighted their satisfaction with the course content of this module.

#### **5.4.6 Employer's Comments on Major Hot Kitchen 2**

This module needs to be modernised and menu French not to be emphasised as it is not used in Irish kitchens. Employers may not be aware that students complete an International internship and having menu French is a benefit to the student. Employers are satisfied with the products and techniques used in this module.

## **5.5 Conclusion**

### **5.5.1 Introduction**

The BA (Hons.) in Culinary Arts provided by the DIT in Cathal Brugha Street is unique in that it is a 4 year honours degree programme compared to the majority of 1 - 4 year degree programmes offered in England, United States of America and France. The BA (Hons.) in Culinary Arts in DIT is the only honours degree of its kind in Ireland. Programmes offered in France and England focus more on technical and professional skills (see section 2.3.2 and 2.4).

The BA (Hons.) in Culinary Arts in DIT has culinary arts practice included in all four years of the programme. Also, internship on the programme, both national and international, consists of twenty four weeks (6 months) in total. However, students in France and England receive more practical work whether in college or on internship than the BA (Hons.) in Culinary Arts students. A major criticism of the BA (Hons.) in Culinary Arts in DIT is the lack of practical class time, according to all stakeholders - lecturers, industry and students/graduates (see section 4.3, 4.4.7, 4.6.1, 4.6.2 and 4.6.3.). It is imperative that students on the BA (Hons.) in Culinary Arts are encouraged to continue to work in professional kitchens when their five week internship finishes in first and second year due to the module time constraints on the programme.

While students and employers are satisfied with the course content of the hot kitchen modules, certain aims, learning outcomes and modernising of the module content need to be addressed. The programme teaching team for the hot kitchen modules should be brought together and a clear progression path for all the hot kitchen modules agreed upon. When deciding on the course content all stakeholders should be consulted before aims and learning outcomes are determined.

A foundation stone of the BA (Hons.) in Culinary Arts is that students' skills would be developed along with their intellectual and moral capacity. The success of the BA (Hons.) in Culinary Arts is incorporating aspects of vocational education to liberal education therefore providing a holistic education that reflects both traditions (see section 2.7). The philosophy of the BA (Hons.) in Culinary Arts was to move beyond

the utilitarian and traditional craft-based apprenticeships in professional cookery and move towards an academic and scholarly form which reflected high status knowledge thereby improving culinary arts education (Hegarty, 2001) and this has been achieved but at what cost to practical skills? The introduction of modularisation in DIT and on the BA (Hons.) in Culinary Arts has diminished the professional cookery elements of the degree therefore leading to a reduction in student's skill levels.

*Coursewise* is a very useful tool in giving students exact knowledge of the programme material on their chosen course in DIT. However, *Coursewise* doesn't accurately reflect the hot kitchen modules on the BA (Hons.) in Culinary Arts and should be addressed as a matter of urgency.

### **5.5.2 Aim and Objectives of the Research**

The aim of this thesis is to investigate the current course content on the BA (Hons.) in Culinary Arts hot kitchen modules in the Dublin Institute of Technology, and to ascertain whether the content is adequate in meeting the needs of the stakeholders.

This research provides an in-depth comparative analysis of lecturers, students/graduates and employer's attitudes to the course content of the hot kitchen modules on the BA (Hons.) in Culinary Arts. Both quantitative and qualitative data was obtained from the four hot kitchen module lecturers, 86 students/graduates and 18 employers. An extensive literature review was undertaken and recorded in Chapter Two; it examined other researcher's writings in the area of culinary arts education, the development of the BA (Hons.) in Culinary Arts, curriculum development and learning styles.

The objectives of the research were to:

1. Investigate the history of culinary education internationally and in Ireland.
2. Examine the current programme content of the hot kitchen and larder modules on the BA in Culinary Arts in the Dublin Institute of Technology using the course document.
3. Explore the opinions of culinary arts educators in DIT of the module content of the hot kitchen modules.

4. Assess current students and graduates satisfaction rating of the delivered hot kitchen modules on the BA (Hons.) in Culinary Arts.
5. Examine employer's perceptions of Culinary Arts Degree hot kitchen modules.

### **5.5.3 Meeting the Objectives**

An important element of all research is the objectives set out at the beginning. Five objectives were set out for this research. The following will show how the different methods were employed to achieve the research objectives.

### **5.5.4 Objective One: Investigate the History of Culinary Education Internationally and in Ireland**

Objective one was achieved by an extensive literature review of all relevant material. Early gastronomy was investigated and found that in classical Athens professional cooks learnt and transmitted knowledge by word of mouth and by example (Dalby, 1999). The establishment of the food guilds in the 15<sup>th</sup> century saw the regulation of apprenticeship training system which lasted seven years (Albala, 2003, p.109). The guilds controlled the system of apprenticeship, holidays, hours worked and wages (Worshipful Company of Cooks, 2010). The guilds retained their power of regulation through the 1600s and 1700s in England and France. After the French Revolution chefs now employed by nobility began to write cookbooks and educated apprentices (Brown, 2005). The growth of fashionable eating establishments led to advances in culinary practices and the need for properly trained chefs (James, 2002). This culinary education consisted of practical production skills, the use of specialised equipment, artistry, visual, olfactory and taste references (Trubek, 2000). Antoine Carême famous for his decorative centrepieces and writings where he emphasised the importance of fresh ingredients and kitchen organisation (Chon & Maier, 2010) was the founder of French classical cookery.

During the middle to late 1800s societies (*Société des Cuininiers Francais and Société Universelle pour le Progress de L'art Culinaire*) were established to promote and train culinary staff (Stengal, n.d.). In 1883 culinary schools were opened in England and France. Unfortunately *L'Ecole Professionnelle de Cuisine et des Sciences* where famous chefs such as Escoffier taught had to close its doors in 1892

(Stengal, n.d.). The establishment in 1883 of Agnes B Marshall's National Training School in cookery was the first culinary training school in England (Snodgrass, 2004; Veron, 2007). The Technical Instruction Act of 1889 in England led to the development of post school cookery courses (Monroe, n.d.). The late 1800s saw the emergence of culinary education in Ireland in Kevin Street Technical School. It ran evening courses in plain cookery. The City & Guilds of London Institute (1884) for the Advancement of Technical Education, later renamed City & Guilds College (1910), trained and paid for prospective chefs and people already employed in catering to attend colleges to obtain cooking qualifications. In Ireland French culinary classics courses ran in Parnell Square Vocational School from 1926 (Mac Con Iomaire, 2010). The first "Atelier École" offering professional training in food service was opened in Paris in 1932 (École Grègoire Ferrandi, 2011). St Mary's College of Domestic Science was purpose built and opened in Dublin in 1941 and renamed the Dublin College of Catering in the 1950s. CERT was established in 1963 to provide education, recruitment and training of staff for hotel, catering and tourism industry in Ireland (Coolahan, 2002). In 1974, CERT provided education, training and recruitment for entire catering sector. The establishment of the NCCCB in 1982 allowed Irish catering education to set their own standards as they had been following City & Guilds standards (Corr, 1987). In 1984 the School of Culinary Arts developed a course in Diet Cookery which was reviewed and renamed Certificate in Culinary Arts (Catering for Health) in 1995. Then in 1999 the School of Culinary Arts and Food Technology developed the BA (Hons.) in Culinary Arts. In 2007 Paul Bocuse Institute was award the first ministerial decree allowing the institute to have a BA in Culinary Arts in France (Institute Paul Bocuse, 2011).

There are many degrees in culinary arts (see section 2.6) however, the BA (Hons.) in Culinary Arts in DIT is unique in it is the only four year honours full time course on offer. The other degree courses offered range from one to four years in culinary management in England and associated degrees in culinary arts topped up with a business or system degree in the United States (see section 2.6). In France the Paul Bocuse Institute is the only Institute offering a degree in culinary arts. French students in culinary arts normally study for a *CAP* and then progress to a *Brevet Professionnel* or *Brevet de Technicien Supérieur*. French Institutes deliver a *Professional Licence* which is a two year degree only obtainable once the *Brevet Professionnel* or *Brevet de*

*Technicien Supérieur* has been completed (see section 2.3.2). Each country has different levels of education awards (see section 2.3.2, 2.4.1 and 2.5.2).

While French and English culinary education remain more vocationally oriented the development of the BA (Hons.) in Culinary Arts in DIT moved culinary education in Ireland to a more liberal approach. The programme team decided that “knowledge has an intrinsic value of its own, that is to substantiate a realistic, relevant or useful curriculum it is necessary to relate it to human values and not just to the immediate demands of market materialism” (Hegarty, 2001, p.46). The liberal and vocational background of the BA (Hons.) in Culinary Arts allows students to determine for themselves their own learning, career choices and development as human beings (see section 2.7).

#### **5.5.5 Objective Two: Examine the Current Programme Content of the Hot Kitchen and Larder Modules on the BA in Culinary Arts in the Dublin Institute of Technology using the Course Document**

Objective two was achieved by examining the past and present course documents. The BA (Hons.) in Culinary Arts has seen two major changes since its establishment. The research highlighted the difference between the programme pre-modularisation and the modularised programme. Subjects taught on the BA (Hons.) in Culinary Arts became modules in 2004 (see section 2.9). Modularisation forced the School of Culinary Arts and Food Technology to rewrite all the then subjects into a DIT module template. For the hot kitchen and larder modules 1, 2 and 3 on the BA (Hons.) in Culinary Arts the module content was taken from the existing Culinary Arts Certificate Course and transposed on to the module template with changes made to achieve level eight criteria of the NFQ. For major hot kitchen 1 and major hot kitchen 2 the existing culinary major elective content was also transposed on to the new module templates and adjusted to allow for reduction in teaching hours. The changes that occurred can be seen in section 2.8.2. The biggest change was the time allocation to the different modules. When examining the current programme content of the hot kitchen modules it was important to understand curriculum development (section 2.10) and the types of learning styles (section 2.10.1, 2.10.2 and 2.10.3) used on the BA (Hons.) in Culinary Arts to be able to assess the modules. Each module aims,



learning outcomes and learning styles were then examined in detail (see section 2.12, 2.12.1, 2.12.2, 2.12.3, 2.12.4 and 2.12.5).

### **5.5.6 Objective Three: Explore the Opinions of Culinary Arts Educators in DIT of the Module Content of the Hot Kitchen Modules**

Interviews were carried out with the four culinary arts lecturers who teach the hot kitchen modules currently on the BA (Hons.) in Culinary Arts using pre-determined set of questions (see Appendix 8) to achieve objective three. Other lecturers who taught hot kitchen modules pre-modularisation on the BA (Hons.) in Culinary Arts were not considered due to lack of knowledge of the current course content. The interviews were analysed using grounded theory (see section 3.9.1) and grouped into themes (see section 4.2). The objective of each question asked was outlined and the responses given are displayed in detail (see section 4.3). The findings from the interviews are shown in (section 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7 and 5.2.8). The reduction of module time in terms of hours and weeks was seen by lecturers as detrimental (see Table 5.1). Three of the current lecturers in hot kitchen modules were not involved in writing the modules they teach and this has had an effect on the delivery of the modules (see question 4 and 5 in section 4.3 and section 5.2.2). Lecturers are using a number of teaching techniques in delivering the modules (see question 6 in section 4.3 and 5.2.3). Lecturer's opinions on the module content vary and lecturer's knowledge of the content in the entire hot kitchen modules is limited (see question 8 in section 4.2). The lecturing team have never been brought together to examine all the hot kitchen modules. Learning outcomes have been shown to be an important aspect of learning and lecturers highlighted that the current learning outcomes are not being adhered to for numerous reasons (see question 9 in section 4.3 and section 5.2.5). Lecturers agree that the modules need to be reviewed (see question 11 and 12 in section 4.3 and section 5.2.6). Lecturers see internship as a major benefit to the students learning and research has been carried out on the benefits (see section 2.8.2 and section 5.2.7). Lecturers are content with assessment methods used but would like to have the assessment criteria for modules agreed and outlined in *Coursewise* (see question 16 in section 4.3 and 5.2.8).

### **5.5.7 Objective Four: Assess Current Students and Graduates Satisfaction Rating of the Delivered Hot Kitchen Modules on the BA (Hons.) in Culinary Arts**

To meet objective four students and graduates were surveyed using a questionnaire (see Appendix 9). The questionnaires were then analysed using P.A.S.W 18 for Windows (see section 3.9.1, 3.9.6 and 3.9.11). Students/graduates were asked general questions to begin with and then asked specific question relating to the hot kitchen modules. Students/graduates were asked to rate their satisfaction of the learning outcomes on all the hot kitchen modules (see all section 4.4). Students/graduates' satisfaction rating of the hot kitchen modules are outline in section 5.3.

### **5.5.8 Objective Five: Examine Employer's Perceptions of Culinary Arts Degree Hot Kitchen Modules**

Objective five was achieved by phoning known employers of graduates of the BA (Hons.) in Culinary Arts and explaining the purpose of the research and obtaining email addresses to send a link to complete an online questionnaire (see Appendix 11). The employers were given the module content for each hot kitchen module and asked for their feedback (see all of section 4.5). The employers were also asked to rate their level of satisfaction with graduates learning outcomes (see section 4.5.6). The employers perceptions of the culinary arts degree are outlined in section 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5 and 5.4.6.

## **5.6 Recommendations**

A number of recommendations are being put forward on the basis of the research undertaken:

- Amend *Coursewise* module templates with correct information urgently. This information should not be available to the general public because of copyright issues.
- All hot kitchen modules on the BA (Hons.) in Culinary Arts need to be reviewed and re-developed.

- More practical classes needed, this could be addressed by increasing class contact time or the introduction of a 12 week larder module in year two semester 1. This would allow students to continue their skill development in kitchen classes.
- The BA in Culinary Arts programme committee should bring all lecturers of the hot kitchen modules together to create and agree the module content taking into considerations the stakeholders' opinions, the aims, learning outcomes, learning styles, assessment methods and showing a clear progression path from the different modules.
- A survey of internship employers should be carried out to ascertain their opinions on the skills levels of the students once internship has been completed. This would help in deciding what skills lecturers need to focus on.
- Modernise the course content. Teaching French classical cuisine is an important foundation of culinary education but this should be achieved in the first year. The subsequent years hot kitchen modules need to reflect what is currently happening in professional kitchens to prepare students adequately for careers in culinary arts. This can be achieved by modernising the classics in consultation with industry.
- Internship is a major benefit to students therefore they should be encouraged to seek work in professional kitchens while attending college provided it doesn't interfere with attendance at college (weekend work) and once national internship is completed the students should be persuaded to remain for the remainder of the summer. The international internship is diminishing every year due to financial constraints on students and some students are leaving internships before completion. This needs to be address immediately. Internship should be central to the BA (Hons.) in Culinary Arts.
- The kitchen and larder 3 module requires a complete review. Ethnic cuisine, vegetarian and molecular cooking needs to be incorporated into any new modules.
- Lecturers need to focus students research on the origins and seasonality of commodities used to develop a better understanding.

- The timing of culinary theory classes should be organised to provide more culinary knowledge of methods of cookery and commodities used before practical classes.
- Guest lecturers should give a presentation to all culinary students in DIT. These guest lecturers can be the food suppliers of the School of Culinary Arts. This will provide the students with a better understanding of the commodities used in classes.
- The School of Culinary Arts and Food Technology needs to facilitate culinary arts lecturers in hot kitchen modules by providing courses or internships in industry at home and abroad.
- Assess the culinary arts kitchen modules in relation to the overall course aims and objectives.
- Continue to take students on national and international field trips to broaden their culinary knowledge.

## **References**

- Abramson, J (2007) *Food Culture in France*, Greenwood Press, Connecticut.
- Adamson, M (2004) *Regional Cuisines of Medieval Europe: A Book of Essays*, Routledge, New York.
- Aim25 (2008) *Archives in London*. [Online]. Available: [http://www.aim25.ac.uk/cgi/bin/search2?coll\\_id=1076&inst\\_id=3](http://www.aim25.ac.uk/cgi/bin/search2?coll_id=1076&inst_id=3) [Accessed 19 September 2011].
- Albala, K (2003) *Food in Early Modern Europe*, Greenwood Press, Westport CT.
- Albala, K and Eden, T (2011) *Food and Faith in Christian Culture*, Columbia University Press, New York.
- Alexander, M (2007) Reflecting on Changes in Operational Training in UK Hospitality Management Degree Programmes, *International Journal of Contemporary Management*, 19(3).
- Aliga, M and Gunderson, B (2002) *Interactive Statistics*, Thousand Oak, California.
- American Culinary Federation (2009) Online Portal Development Feedback Page. [Online]. Available: [http://www.google.ie/imgres?imgurl=http://4.bp.blogspot.com/\\_I7UvOaqyc7Y/Sx-4kWKt9pI/AAAAAAAAACU/zpL47kxj0Y/s320/EscoffierBrigadeSystem.jpg&imgrefurl=http://acfportal.blogspot.com/2009/12/escoffier-brigade-system.html&usq=\\_\\_uAkUbyjMmyWIC1amMiUd-0tML8=&h=248&w=320&sz=20&hl=en&start=1&zoom=1&tbnid=fgSSDLUObzc1UM:&tbnh=91&tbnw=118&ei=jtUOUI29BcixhAfbkIGADQ&prev=/search%3Fq%3Descoffier%2Bbrigade%2Bsystem%26hl%3Den%26tm%3Disch&itbs=1](http://www.google.ie/imgres?imgurl=http://4.bp.blogspot.com/_I7UvOaqyc7Y/Sx-4kWKt9pI/AAAAAAAAACU/zpL47kxj0Y/s320/EscoffierBrigadeSystem.jpg&imgrefurl=http://acfportal.blogspot.com/2009/12/escoffier-brigade-system.html&usq=__uAkUbyjMmyWIC1amMiUd-0tML8=&h=248&w=320&sz=20&hl=en&start=1&zoom=1&tbnid=fgSSDLUObzc1UM:&tbnh=91&tbnw=118&ei=jtUOUI29BcixhAfbkIGADQ&prev=/search%3Fq%3Descoffier%2Bbrigade%2Bsystem%26hl%3Den%26tm%3Disch&itbs=1) [Accessed 20 February 2012].
- Amouretti, M C (1999) *Urban and Rural Diets in Greece. Food: A Culinary History from Antiquity to the Present*, J.-L. Flandrin and M. Montanari, Columbia University Press, New York. (79-89).
- Anderson, L and Krathwohl, D (2001) *Bloom's Taxonomy: A Forty-year Retrospective*, University of Chicago, Chicago.
- Antun, J and Salazar, J (2005) "The Impact of Learning Transfer Outcomes on Employed Culinary Arts Graduates' Perceptions of Career Success", *Journal of Culinary Science & Technology*, Vol. 4(1) 75 – 87.
- Atherton, J (2011) *Learning and Teaching; Bloom's Taxonomy*. [Online]. Available: <http://www.learningandteaching.info/learning/bloomtax.htm> [Accessed 2 April 2012].

- Babbie, E, Halley, F S, Wanger, W and Zanio, J (2007) *Adventures in Social Research*, 7<sup>th</sup> ed, Pine Forge Press, California.
- Baker, M, Cattet, A and 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*, Vol. 7 No. 5, 21-4.
- Ballerini, L (2005). *The Art of Cooking: The First Modern Cookery Book*, University of California Press Berkeley, Berkeley.
- Barberet, J (1889). *Le Travail en France – Monographie Professionnnelle*, Berger-Levrault, Paris.
- Baum, T. (2005) “Global Tourism Education the British Isle Experience”. *Journal of Teaching in Travel & Tourism*, 5, (1/2/3).
- Beard, C, and Wilson, P (2006) *Experiential Learning*, 2<sup>nd</sup> ed, Kogan Page Limited, London.
- Berta, D (2005) *Growing Field of Culinary Schools Difficult to Evaluate*, Nation’s Restaurant News, 39(37), 1-16.
- Birdir, K and Pearson, E T (2000) Research Chefs Competencies: A Delphi Approach. *Journal of Contemporary Hospitality Management* 12(3), 205-209.
- Bowe, B and Fitzmaurice, M (N.D.) *Guide to Writing Learning Outcomes*, Dublin Institute of Technology, Dublin.
- Brough, D (2008) *The Relationship of the Required Knowledge and Competencies of the American Culinary Federation Foundation Accreditation Commission for the Post-secondary Culinary Arts Programmess to the Perceived Needs of the Work Place*, ProQuest LLC. Michigan.
- Brown, J (2005) “A Brief History of Culinary Arts Education in America”. *Journal of Hospitality & Tourism Education*, 17 (4), 47-54.
- Burton, A (2011) Adrienne Burton International Project Manager, Ecole Grégoire-Ferrandi. [email] (personal communication with Pauline Danaher 03/11/2011).
- Cairns, J, Gardner, R and Lawton, D (2000) *Values and the Curriculum*, Woburn Press, London.
- Campbell, A, Danaher, P and Zaidan, P (2009) Kitchen and Larder 1, *TFCA1021 Kitchen and Larder 1* [Online via Coursewise] Available: <http://www.ltcc.ie/coursewise/> [Accessed 18 February 2012].

- Campus France (2010) The Licences Professionnelles. [Online] Available: [http://ressources.campusfrance.org/catalogues\\_recherche/diplomes/en/licencepro\\_en.pdf](http://ressources.campusfrance.org/catalogues_recherche/diplomes/en/licencepro_en.pdf) [Accessed 9 February 2012].
- Carberry, J (2009a) Major Hot Kitchen 1. *TFCA 3023 Major Hot Kitchen 1* [Online via Coursewise] Available: <http://www.lttc.ie/coursewise/> [Accessed 10 February 2012].
- Carberry, J (2009b) Major Hot Kitchen 2. *TFCA 3024 Major Hot Kitchen 2* [Online via Coursewise] Available: <http://www.lttc.ie/coursewise/> [Accessed 10 February 2012].
- Carberry, J (2012) Interview with Pauline Danaher in the School of Culinary Arts and Food Technology, Dublin Institute of Technology, Dublin. (13/03/2012).
- Cartelli, A (2006) *Teaching in the Knowledge Society: New Skills and Instruments for Teachers*, Information Science Publishing, Hershey.
- Chon, K and Maier, T (2010) *Welcome to Hospitality: An Introduction*, Delmar Cengage Learning, New York.
- City & Guilds of London (2012) Guidance on the Right Course. [Online] Available: <http://www.cityandguilds.com> [Accessed 20 February 2012].
- Civitello, L (2004) *Cuisine and Culture: A History of Food and People*, John Wiley & Sons, Inc, Hoboken, New Jersey.
- Clancy, J (2012) Interview with Pauline Danaher in the School of Culinary Arts and Food Technology, Dublin Institute of Technology, Dublin. (13/03/2012).
- Clarke, M and Refaüssé, R (Eds.) (1993) *Directory of Historic Dublin Guilds*, Dublin Public Libraries, Dublin.
- Cohen, L, Manion, L and Morrison, K (2001) *Research Methods in Education*, 5<sup>th</sup> ed, RoutledgeFalmer, London.
- Connell, G (2009). Kitchen and Larder 3. *TFCA 1022 Kitchen and Larder 3* [Online via Coursewise] Available: <http://www.lttc.ie/coursewise/> [Accessed 10 February 2012].
- Coolahan, J (2002) *Irish Education: Its History and Structure*, Institute of Public Administration, Dublin.
- Corr, F (1987) *Hotels in Ireland*, Jemma Publications, Dublin.
- Course-Document (1998) Document in Support of an Application to Academic Council, Dublin Institute of Technology for a Bachelor of Arts Degree in Culinary Arts, Dublin Institute of Technology, Dublin.



- Cousins, J, Gorman, K and Stierand, M (2009) Molecular Gastronomy: Cuisine Innovation or Modern Day Alchemy? *International Journal of Hospitality Management*. 22 (3) 399-415.
- Culinary Schools U (2012) *Culinary Arts Degrees & Culinary Arts Culinary Schools*. [Online] Available: <http://www.culinaryschools.com/program.php?discipline=culinary-arts&id=2> [Accessed 12 February 2012].
- Cullen, F (2010) "Phenomenological Views and Analysis of Culinary Arts Student Attitudes to National and International Internships: The "Nature of Being" Before, During, and After International Internship", *Articles*. Paper 120. <http://arrow.dit.ie/tfschafart/120>
- Cullen, F (2012) An Investigation in Culinary Life and Professional Identity in Practice during Internship, *Journal of Food Service Business Research*. 2012.
- D'Arms, J. H (1991) *Slaves at Roman Convivia. Dining in a Classical Context*, University of Michigan Press, Michigan. pp.171-183.
- Dalby, A (1995) "Archestratos: Where and When?", Exeter University Press, Exeter.
- Dalby, A (1999a). *Classical Rome. The Oxford Companion to Food*, Oxford University Press, Oxford. pp.191-193.
- Dalby, A (1999b). *Classical Greece. The Oxford Companion to Food*, Oxford University Press, Oxford. pp. 189-191.
- Danaher, P, Mac Con Iomaire, M and Zaidan, P (2009) Kitchen and Larder 2. *TFCA 1022 Kitchen and Larder 2* [Online via Coursewise] Available: <http://www.ltcc.ie/coursewise/> [Accessed 10 February 2012].
- Denzin, N K and Lincoln, Y S (1994) *Handbook of Qualitative Research*, Sage Publication, Thousand Oaks, California.
- Denzin, N K and Lincoln, Y S (2000). *Handbook of Qualitative Research*, 2<sup>nd</sup> ed, Sage Publication, London.
- Denzin, N K and Lincoln, Y S (2005) *The Sage Handbook of Qualitative Research*, 3<sup>rd</sup> ed, Sage Publication Inc, Thousand Oaks, California.
- Department of Education and Skills (2011) *National Strategy for Higher Education to 2030 – Report of the Strategy Group*. [Online]. Available: [http://www.heai.ie/files/files/DES\\_Higher\\_Ed\\_Main\\_Report.pdf](http://www.heai.ie/files/files/DES_Higher_Ed_Main_Report.pdf) [Accessed 11 March 2012].

- Dillman, D A (2000) *Mail and Internet Surveys: The Tailored Design Method*, Wiley & Sons Inc, New York.
- Domegan, C and Fleming, D (2003) *Marketing Research in Ireland: Theory and Practice*, Gill & Macmillian Ltd, Dublin.
- Dreher, G and Bretz, R (1991) Cognitive Ability and Career Attainment: Moderating Effects of Early Career Success, *Journal of Applied Psychology*, 76(3), 392-397.
- Dublin Institute of Technology (1999) *Course Document for the BA in Culinary Arts*. [Course document]. September 1999. Dublin Institute of Technology, Dublin.
- Dublin Institute of Technology (2009) MSc Culinary Innovation and Food Product Development. [Online]. Available:  
<http://www.magictouch.ie/modules/02/DT414.pdf> [Accessed 18 February 2012].
- Dublin Institute of Technology (2011) *Ethics Guidelines*. [Online] Available:  
<http://www.dit.ie/researchandenterprise/researchsupportoffice/ethicsindit/content/guidelines/> [Accessed 18<sup>th</sup> June 2012].
- Dublin Institute of Technology (2012a) Mairtin Mac Con Iomaire. [Online] Available:  
<http://www.dit.ie/culinaryartsandfoodtechnology/staffinformation/mairtinmacconiomaire/> [Accessed 18 February 2012].
- Dublin Institute of Technology (2012b) *Modularisation*. [Online]. Available:  
<http://modularisation.dit.ie/index.htm> [Accessed 11 March 2012].
- Dublin Institute of Technology (2012c) *Modularisation*. [Online]. Available:  
[http://modularisation.dit.ie/h\\_mod\\_explained.htm](http://modularisation.dit.ie/h_mod_explained.htm) [Accessed 11 March 2012].
- Duff, T, Hegarty, J, and Hussey, M (2000) *The Story of the Dublin Institute of Technology*, Blackhall Publishing, Dublin.
- Dulgarian, T T (2008) The Impact of Internship on Accounting Students: A Bowie State University study – 2007, *The Business Review, Cambridge*, 10(1), pp. 281-288.
- École Gregoire Ferrandi (2011) Les ateliers Grégoire, L'école où la Matière Prend Forme et FERRANDI, L'école Française de Gastronomie. [Online] Available:  
<http://www.egf.ccip.fr/international/escf-ferrandi.asp> [Accessed 16 September 2011].
- Edelstein, S (2011) *Food, Cuisine and Cultural Competency of Culinary Hospitality and Nutrition Professionals*, Jones and Bartlett Publishers, Sudbury.

- Edmunds, H (1999) *Focus Group Research Handbook*, NTC Business Books, Chicago.
- Emms, S (2005) *The Modern Journeyman: Influences and Controls of Apprentice Style Learning in Culinary Education*, Unpublished Master of Education, Auckland University of Technology, Auckland.
- Field Notes (2003) Higher Certificate in Culinary Arts Review Process. Minutes of Meetings. Mr Patrick Zaidan.
- Field Notes (2010a) Danaher, P. *Internet Research on British Culinary Arts Degrees*. Unpublished. [Online] Available: [http://www.hotcourses.com/pls/cgi-bin/hc2\\_search.adv\\_col\\_do?x=16180339&y=&search\\_what=Z&search\\_how=R&search\\_range=15&ref\\_id=&lucky=&crs\\_search=search&search\\_category=&phrase\\_search=culinary+arts&which\\_search=undergraduate&qualification=A%2CM%2CN&a=220704&area=&postcode=](http://www.hotcourses.com/pls/cgi-bin/hc2_search.adv_col_do?x=16180339&y=&search_what=Z&search_how=R&search_range=15&ref_id=&lucky=&crs_search=search&search_category=&phrase_search=culinary+arts&which_search=undergraduate&qualification=A%2CM%2CN&a=220704&area=&postcode=) [Accessed 13 February 2010].
- Field Notes (2012b) Danaher, P. Conversation with Mr Anthony Campbell lecturer in Culinary Arts, School of Culinary Arts and Food Technology, Dublin Institute of Technology, Dublin.
- Field Notes (2010c) Danaher, P. Conversation with Dr Aodan O Cearbhaill Head of School, School of Culinary Arts and Food Technology, Dublin Institute of Technology, Dublin.
- Field Notes (2012d). Danaher, P. *Internet Research on British Culinary Arts Degrees*. Unpublished. [Online] Available: [http://www.hotcourses.com/pls/cgi-in/hc2\\_search.adv\\_col\\_do?x=16180339&y=&search\\_what=Z&search\\_how=R&search\\_range=15&ref\\_id=&lucky=&crs\\_search=search&search\\_category=&phrase\\_search=culinary+arts&which\\_search=undergraduate&qualification=A%2CM%2CN&a=220704&area=&postcode=](http://www.hotcourses.com/pls/cgi-in/hc2_search.adv_col_do?x=16180339&y=&search_what=Z&search_how=R&search_range=15&ref_id=&lucky=&crs_search=search&search_category=&phrase_search=culinary+arts&which_search=undergraduate&qualification=A%2CM%2CN&a=220704&area=&postcode=) [Accessed 13 February 2012].
- Field Notes (2012e) Danaher, P. Conversation with Mr Pat Zaidan, then Chairperson of Culinary Arts Certificate Course, School of Culinary Arts and Food Technology, Dublin Institute of Technology, Dublin.
- Field Notes (2012f) Danaher, P. Problem Based Learning Event, Lecturer on module, Dublin Institute of Technology, Dublin.
- Field Notes (2012g) Danaher, P. Conversation with all culinary art lecturers, School of Culinary Arts and Food Technology, Dublin Institute of Technology, Dublin.

- Field Notes (2012h) Danaher, P. Feedback from Students on Kitchen and Larder 3 Ethnic Classes, School of Culinary Arts and Food Technology, Dublin Institute of Technology, Dublin.
- Flandrin, J L (1999) *The Early Modern Period. Food: A Culinary History from Antiquity to the Present*, J.-L. Flandrin and M. Montanari, Columbia University Press, New York. pp. 359-373.
- Focus on Greece (2007) The Greek Cuisine. [Online]. Available: [http://www.focusmm.com/greece/gr\\_coumn.htm](http://www.focusmm.com/greece/gr_coumn.htm) [Accessed 10 February 2012].
- Forehand, M (2005) Bloom's Taxonomy: Original and Revised. In Orey, M (Ed). *Emerging Perspectives on Learning, Teaching and Technology*. [Online] Available: <http://projects.coe.uga.edu/epltt/> [Accessed 2 April 2012].
- Freedman, P (2007) *Food: The History of Taste*, Thames & Hudson Ltd, London.
- Gabaudan, O (2012) Interview with Pauline Danaher in Dublin Institute of Technology, Dublin. (14/03/2012).
- George, J (2009) Classical Curriculum Design. *Arts and Humanities in Higher Education*, Vol. 8 (2) pp. 160-179.
- Germov, J, and Williams, L (1999) *Sociology of Food and Nutrition: The Social Appetite*, Oxford University Press, Melbourne.
- Gillespie, C (2001) *European Gastronomy into the 21st Century*, Butterworth-Heinemann, Oxford.
- Gisslen, W (2011) *Professional Cooking*, John Wiley & Sons Inc, Hoboken, New Jersey.
- Gorman, G E and Clayton, P (2005). *Qualitative Research for the Information Professional: A Practical Handbook*, 2<sup>nd</sup> ed. Facet Publishing, London.
- Grace, G (1989) Education: Commodity or Public Good?, *British Journal of Educational Studies*, 37(3) 207-221.
- Gustafson, C M, Love, C and Montgomery, R J (2005) Expanding the Food Service Curriculum: Who has Added Fine Dining to the Menu?, *Journal of Culinary Science and Technology*, Vol. 4 No. 2, 53-68.
- Hague, P and Jackson, P (1998) *Business Enterprise – Do Your Own Market Research*, Kogan Page Limited, London.
- Hand, F (2012). *School Review Process When did it Take Place for Modularisation*. [Phone] (Personal Communication, 10 March, 2012).

- Harrington, R J, Mandabach, K, Thibodeaux, W and VanLeeuwen, D (2005) “A Multi-lens Framework Explaining Structural Differences Across Foodservice and Culinary Education”. *International Journal of Hospitality Management*. Vol. 4 No. 4, 195-218.
- Hart, C (2004) *Doing a Literature Search: A Comprehensive Guide for the Social Sciences*, 5<sup>th</sup> ed, Sage Publication, London.
- Heal, F (1990) *Hospitality in Early Modern England*, Clarendon Press, Oxford.
- Hegarty, J (2001) *Standing the Heat: A Case Study of Culinary Arts Curriculum Development in Higher Education*, Ed.D. The University of Sheffield School of Education, Sheffield.
- Hegarty, J (2004) *Standing the Heat*, The Haworth Press Inc, New York.
- Hegarty, R (2011) “Sharpening Our Skills”, *Hotel and Catering Review*. 7<sup>th</sup> August 2011, 24-26
- Herbage, P (1982) *A History of the Worshipful Company of Cooks*, Cook's Guild, London.
- Hertzman, J and Stefanelli, J (2008) Developing Quality Indicators for Associate Degree Culinary Arts Programmes: A Survey of Educators and Industry Chefs. *Journal of Quality Assurance in Hospitality & Tourism*. 9(2) 135-158.
- Hindley, M (2011) Mairé-Antoine Carême Cake Boss. *Lapham's Quarterly*. [Online] Available:  
<http://www.google.ie/imgres?imgurl=http://laphamsquarterly.org/roundtable/images/> [Accessed 12 February 2012].
- Homg, J S and Lee, Y C (2009) What Environmental Factors Influence Creative Culinary Studies? *International Journal of Contemporary Hospitality Management* 21(1), 100-117.
- Honey, P and Mumford, A (1992) *The Manual of Learning Styles*, 3<sup>rd</sup> ed, Peter Honey Publications, Maidenhead.
- House of Oireachtas (2003) *National Tourism Development Authority Act 2003*, Office of the Houses of Oireachtas, Dublin.
- Hsu, K (2006) “Global Tourism Higher Education Past, Present and Future”. *Journal of Teaching in Travel & Tourism* 5, (1/2/3).

- Institute Paul Bocuse (2011) *Ecole de Management Hôtellerie Restauration & Arts Culinaires* [Online] Available:  
<http://www.institutpaulbocuse.com/fr/ipb/histoire> [Accessed 19 September 2011].
- Irish Statute Book (1992) *Dublin Institute of Technology Act 1992*, The Stationary Office, Dublin.
- James, K (2002) *Escoffier: The King of Chefs*, Hambledon and London, London.
- Kavanagh, M (2009) "Curriculum Evolution at the Department of Baking Technology (National Bakery School), DIT, Kevin St. 1998-2008". MA unpublished dissertation, [Online] Available:  
<http://arrow.dit.ie/cgi/viewcontent.cgi?article=1008&context=Itcdis>  
 [Accessed 17 June 2012].
- Klein, S (1972) *Procedures for Comparing Instructional Programmes*, Centre for the Study of Evaluation, UCLA Graduate School of Education, Los Angeles.
- Kothari, C (1990) *Research Methodology: Methods and Techniques*, New Age International, London.
- Kumar, R (2011) *Research Methodology: A Step by Step Guide for Beginners*, Sage Publication Ltd, London.
- Lauber, A, Ruh, L, Theuriand, P M and Woodlock, P (2004) Road to the Future: Use Internships to Contribute to the Younger Generations and Get a Good Look at Potential Hire. *Journal of Accountancy*, 182(6), 41-47.
- Lawson, J, and Silver, H (1973) *Social history of education in England*, Methuen & Co, London.
- Lehmann, G (1999) *English Cookery Books in the 18<sup>th</sup> Century*, In A. Davidson (ed.) *The Oxford Companion to Food*, Oxford University Press, Oxford. pp. 277-9.
- Le Cordon Bleu Foundation (2011) *Le Cordon Bleu Cuisine Foundations*, Delmar Cengage Learning, New York.
- Le Cordon Bleu (2012). MOF or Best Craftsman of France. [Online] Available:  
<http://www.cordonbleu.edu/index.cfm?fa=NewsEventFrontMod.DisplayNewsPage&ElementID=195&SetLangID=1> [Accessed 9<sup>th</sup> February 2012].
- Malhotra, N (1999) *Marketing Research: An Applied Orientation*, 3<sup>rd</sup> ed, Prentice Hall, Upper Saddle River, New Jersey.
- Malhotra, N (2007) *Marketing Research: An Applied Orientation*, 5<sup>th</sup> ed. Prentice Hall, Upper Saddle River, New Jersey.

- Mallos, T (1979) *Greek Cookbook*, Summit Books, Sydney.
- Mandabach, K (1998) “American Professional Culinary Education Prior to WWII: The History of the Founding of the Washburne Trade School Chef’s Training Programme”, Unpublished UMI dissertation, University of Houston College of Education, Houston, TX.
- Mandabach, K, Revalas, D and Cole, R (2002) “Pioneers of American Culinary Education: Lessons from the Depression for Culinary Education Today”. *PRAXIS, The Journal of Applied Hospitality Management*. Vol. 5 No. 1, 68-85.
- Mason, L (2004) *Food Culture in Great Britain*, Greenwood Press, New York.
- Mac Con Iomaire, M (2004) Mentoring: A Model for the Future Nurturing of Culinary Talent, in Hosking, R. (ed) *Nurture Footwork*, Bristol. 190-203.
- Mac Con Iomaire, M (2008) Understanding the Heat - Mentoring: A Model for Nurturing Culinary Talent. *Journal of Culinary Science & Technology*, 6(1), 43-62.
- Mac Con Iomaire, M (2009) *The Emergence, Development, and Influence of French Haute Cuisine on Public Dining in Dublin Restaurants 1900-2000: An Oral History*. Ph.D. Thesis, Dublin Institute of Technology, Dublin.
- Mac Con Iomaire, M (2011) The Changing Geography and Fortunes of Dublin's Haute Cuisine Restaurants, 1958-2008. *Food, Culture and Society: An International Journal of Multidisciplinary Research*. Vol. 14, Issue 4, 525-545.
- McDaniel, C and Gates, R (2008) *Marketing Research Essentials*, 5<sup>th</sup> ed. John Wiley & Sons, New Jersey.
- McDonald, M (2002) *Systematic Assessment of Learning Outcomes: Developing Multiple-Choice Exams*, Jones and Bartlett Publishers, Sudbury MA.
- Mariani, J (2011) *How Italian Food Conquered the World*, Palgrave MacMillan, New York.
- Mayer, A (1908) “A Cook’s School for Winona”, *The Hotel Monthly*. Vol 9, No.1908, 13.
- Mennell, S, Murcott, A and Von Otterloo, A (1994) *The Sociology of Food Eating, Diet and Culture*, Sage Publication, London.
- Mennell, S (1996) *All Manners of Food Eating and Taste in England and France from the Middle Ages to the Present*, 2 ed, Illini Books, Chicago.
- Merriam, S B (2009) *Qualitative Research A Guide to Design and Implementation*, Jossey-Bass, San Francisco.

- Meyer, J and Rowan, B (1977) Institutionalised Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83(2) 340-363.
- Mitchell, M and Jolley, J (2010) *Research Designed Explained*, Cengage Learning, Wadsworth.
- Monroe, P (n.d.) *A Cyclopedia of Education*, Forgotten Books: [www.forgottenbooks.org](http://www.forgottenbooks.org).
- Morrison, A and O'Mahony, B (2003) The Liberation of Hospitality Management Education. *International Journal of Contemporary Hospitality Management*. 15/1, 38-44.
- Morrison, A and O'Gorman, K (2008) Hospitality Studies and Hospitality Management: A Symbiotic Relationship. *International Journal of Hospitality Management*. 27, 214-221
- Montanari, M (1999) Introduction: Food Systems and Models of Civilization. *Food: A Culinary History from Antiquity to the Present*, J.-L. Flandrin and M. Montanari, Columbia University Press, New York. pp. 69-78.
- Muijs, D (2004) *Doing Quantitative Research in Education*, Sage Publication Ltd, London.
- Muller, K, VanLeeuwen, D, Mandabach, K and Harrington, R (2009) The Effectiveness of Culinary Curricula: A Case Study. *International Journal of Contemporary Hospitality Management*, 21(2) 167-178.
- National Framework of Qualifications (2012) Interactive Fan. [Online] Available: [http://www.nfq.ie/nfq/en/fandigram/nqai\\_nfq\\_08.html](http://www.nfq.ie/nfq/en/fandigram/nqai_nfq_08.html)> [Accessed 4 February 2012].
- National Qualification Authority of Ireland (2003) Policies and Criteria for the Establishment of the National Framework of Qualifications. [Online]. Available: <http://www.nqai.ie/docs/publications/12.pdf> [Accessed 4 April 2012].
- National Qualification Authority of Ireland (2010) Review by the National Qualifications Authority of Ireland (NQAI) of the Effectiveness of the Quality Assurance Procedures of the Dublin Institute of Technology (DIT). [Online]. Available: [http://www.dit.ie/media/documents/services/qualityassurance/terms\\_of\\_ref.doc](http://www.dit.ie/media/documents/services/qualityassurance/terms_of_ref.doc) [Accessed 18 February 2012].
- Neergaard, H and Uhløi, J (2007) *Handbook of Qualitative Research Methods in Entrepreneurship*, Edward Elgar Publishing Limited, Cheltenham.



- Nicholls State University (2010) Bachelor of Science Degree in Culinary Arts.  
 [Online] Available:  
<http://www.nicholls.edu/catalog/2009-2010/html/university-college/culinary-institute/> > [Accessed 30 October 2010].
- Nijhof, W, Heikkinen, A and Nieuwenhuis, L (2002) *Shaping Flexibility in Vocational Education and Training*, Kluwer Academic Publishers, Doordrecht.
- O'Kelly, E ([emer.Okelly@dit.ie](mailto:emer.Okelly@dit.ie)), 11 June 2012. Re: Alumni data base. Email to P Danaher (Pauline.danaher@dit.ie).
- Page, E B and Kingsford P W (1971) *The Master Chefs: A History of Haute Cuisine*, Edward Arnold, London.
- Pascarella, E and Terenzini, L (1991) *How College Affects Students*, Jossey-Bass Publishers, San Francisco.
- Pearse, P (1991) "Locating Tourism Studies in the Landscape of Knowledge". Paper presented at New Horizons Conference, University of Calgary, Calgary, Alberta.
- Pegg, S (2008) *The Forme of Cury: A Roll of Ancient English Cookery*. [Online] Available: < [www.forgottenbooks.org](http://www.forgottenbooks.org).> [Accessed 30 January 2012].
- Peters, R (1966) *Ethics and Education*, George Allen & Unwin, London.
- Peyer, H C (1999) *The Origins of Public Hostelrys in Europe. Food: A Culinary History from Antiquity to the Present*. J.-L. Flandrin and M. Montanari. Columbia University Press, New York. pp. 287-294.
- Pitte, J R (1999) *The Rise of the Restaurant. In Food: A Culinary History from Antiquity to the Present*, edited by J.L. Flandrin and M. Montanari. Columbia University Press, New York.
- Prescott, J (1987) *Le Viandier de Taillevent, 14<sup>th</sup> Century Cooking*, Alfarhaugr Publishing, Oregon.
- Organisation for Economic Co-operation and Development (2006) *Higher Education in Ireland*, OECD2006, Paris.
- Riley, G (2007) *The Oxford Companion to Italian Food*, Oxford University Press, Oxford.
- Sackett, L, Gisslen, W and Pestka, J (2009) *Professional Garde Manger: A Comprehensive Guide to Cold Food Preparation*, John Wiley & Sons, New Jersey.
- Saunders, M, Lewis, P and Thornhill, A (2009) *Research Methods for Business Students*, 5<sup>th</sup> ed. Pearson Education, Harlow.

- Scully, D E and Scully, T (2002) *Early French Cookery: Sources, History, Original Recipes and Modern Adaptations*, University of Michigan Press, Michigan.
- Silverman, D (2000) *Doing Qualitative Research*, Sage Publication Ltd, London.
- Smith, B (2012) Interview with Pauline Danaher. [Personal communication], (10/03/2012).
- Snodgrass, M E (2004) *Encyclopaedia of Kitchen History*, Fitzroy Dearborn, New York.
- Spang, R (2000) *The Invention of the Restaurant: Paris and Modern Gastronomic Culture*, Harvard University Press, Cambridge.
- Steinberger, M (2010) *Au Revoir to All That: The Rise and Fall of French Cuisine*, Bloomsberg Publishing, London.
- Stengel, K (n.d.) L'enseignement Culinaire au Carrefour de L'histoire: Focus sur L'école Hôtelière de Paris. [Online]. Available: [http://independent.academia.edu/KilienStengel/Papers/1285339/Lenseignement\\_culinaire\\_au\\_carrefour\\_de\\_lhistoire\\_focus\\_sur\\_lecole\\_hoteliere\\_de\\_Paris](http://independent.academia.edu/KilienStengel/Papers/1285339/Lenseignement_culinaire_au_carrefour_de_lhistoire_focus_sur_lecole_hoteliere_de_Paris) [Accessed 29 March 2012].
- Stevenson, D J (Ed.) (2002) *The History of Europe: From Ancient Civilizations to the Dawn of the Third Millennium*, Mitchell Beazley, London.
- Stewart, D W, Shamdasani, P, N, and Rook, D W (2007) *Focus Groups Theory and Practice*, Sage Publication Inc, California.
- Stone, D (2005) *User Interface Design and Evaluation*, Morgan Kaufmann Publishers, San Francisco.
- Strauss, A and Corbin, J (1998) *Basic of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, Sage Publication, Thousand Oaks, California.
- Tannahill, R (1975) *Food in History*, Paladin, St Albans, Herts.
- The Worshipful Company of Cooks (2010) *Control, Power and Punishment*. [Online]. Available: <http://www.cookslivery.org.uk> [Accessed 19th July 2011].
- Tribe, K (2000) Balancing the Vocational: The Theory and Practice of Liberal Education in Tourism". *Tourism and Hospitality Research*. Vol. 2 No.1, 9-26.
- Tribe, K (2003) Demand for Higher Education and the Supply of Graduates. *European Educational Research Journal*. 2(3), 463-471.
- Trubek, A (2000) *Haute Cuisine: How the French Invented the Culinary Profession*, University of Pennsylvania Press, Philadelphia.

- Tull, D S and Hawkins, D (1993) *Marketing Research: Measurement and Method*, Macmillian Publishing Company, New York.
- Veron, J (2007) *Hunger: A Modern History*, Harvard University Press, Harvard.
- Walker, J (2008) *The Restaurant: From Concept to Operation*, John Wiley & Sons Inc, Hoboken.
- Wheaton, B (1983) *Savouring the Past: The French Kitchen and Table from 1300 – 1789*, Chatto & Windus, The Hogarth Press, London.
- Williams, G (2009) Build Your Training Portfolio, *Career Planning & Talent Management*. Vol. 26, Issue 0905.
- Willy, J (1910) Education, *The Hotel Monthly*. 09/1910, 22.
- Willan, A (1992) *Great Cooks and Their Recipes: From Taillevent to Escoffier*, Pavillion Books, London.
- Wisker, G (2001) *The Postgraduate Research Handbook*, Sage Publication, London.
- Wollin, M and Graves, S (2002) A Proposed Curriculum and Articulation Model for Two-year Degree Programmess in Culinary Arts. *Journal of Hospitality and Tourism Education*, 14(2), 46-53.
- Zaidan, P (2012) Patrick Zaidan interview with Pauline Danaher in Dublin Institute of Technology, Dublin. (12/03/2012).
- Zopiatis, A (2010). Is it Art or Science? Chef's Competencies for Success. *International Journal of Hospitality Management*, 29, (2010) 459-467.

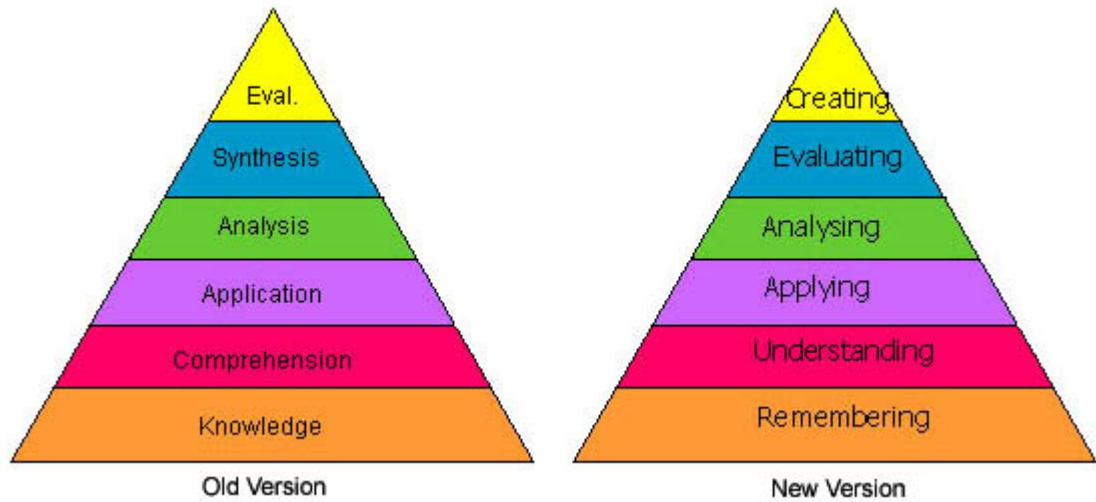
# **Appendices**

## Appendix 1: NQAI Award Type Descriptor

<b>Title</b>	Honours Bachelor Degree
<b>Class of Award-type</b>	Major
<b>Purpose</b>	This is a multi-purpose award-type. The knowledge, skill and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training.
<b>Level</b>	8
<b>Volume</b>	Large
<b>Knowledge - breadth</b>	An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning
<b>Knowledge - kind</b>	Detailed knowledge and understanding in one or more specialised areas, some of it at the current boundaries of the field(s)
<b>Know-how and skill - range</b>	Demonstrate mastery of a complex and specialised area of skills and tools; use and modify advanced skills and tools to conduct closely guided research, professional or advanced technical activity
<b>Know-how and skill - selectivity</b>	Exercise appropriate judgement in a number of complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing
<b>Competence - context</b>	Use advanced skills to conduct research, or advanced technical or professional activity, accepting accountability for all related decision making; transfer and apply diagnostic and creative skills in a range of contexts
<b>Competence - role</b>	Act effectively under guidance in a peer relationship with qualified practitioners; lead multiple, complex and heterogeneous groups
<b>Competence - learning to learn</b>	Learn to act in variable and unfamiliar learning contexts; learn to manage learning tasks independently, professionally and ethically
<b>Competence - insight</b>	Express a comprehensive, internalised, personal world view manifesting solidarity with others
<b>Progression &amp; Transfer</b>	Transfer to programmes leading to Higher Diploma (Award-type <b>l</b> ). Progression to programmes leading to Masters Degree or Post-graduate Diploma (Award types <b>m</b> or <b>n</b> ), or in some cases, to programmes leading to a Doctoral Degree (Award-type <b>o</b> ). Progression internationally to second cycle (i.e. "Bologna masters") degree programmes
<b>Articulation</b>	

## Appendix 2: Revised Bloom's Taxonomy Charts

### *Cognitive Domain*



<i>Affective Domain</i>	<i>Psychomotor Domain</i>
<p>Characterization by Value Set</p> <p>Organization</p> <p>Valuing</p> <p>Responding</p> <p>Receiving</p>	<p><b>Psycho-Motor Domain</b> based on Dave (1975)</p> <p>Naturalisation</p> <p>Articulation</p> <p>Precision</p> <p>Manipulation</p> <p>Imitation</p>

## Appendix 3: Bloom's Table

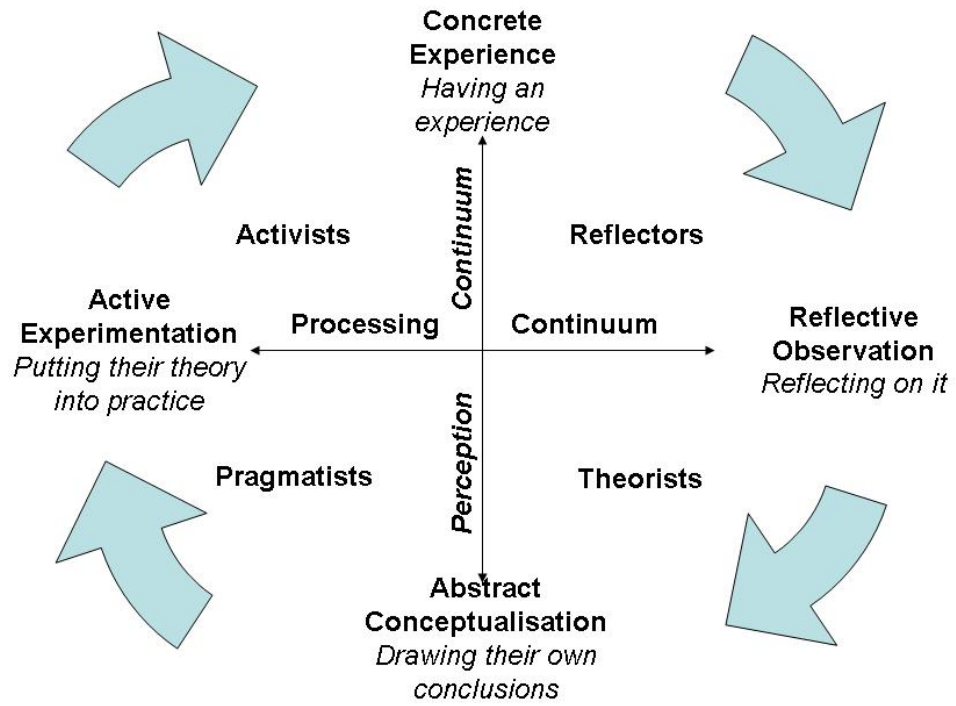
<b>The Knowledge Dimension</b>	<b>The Cognitive Process Dimension</b>					
	<u><a href="#">Remember</a></u>	<u><a href="#">Understand</a></u>	<u><a href="#">Apply</a></u>	<u><a href="#">Analyze</a></u>	<u><a href="#">Evaluate</a></u>	<u><a href="#">Create</a></u>
<u><a href="#">Factual Knowledge</a></u>	<u><a href="#">List</a></u>	<u><a href="#">Summarize</a></u>	<u><a href="#">Classify</a></u>	<u><a href="#">Order</a></u>	<u><a href="#">Rank</a></u>	<u><a href="#">Combine</a></u>
<u><a href="#">Conceptual Knowledge</a></u>	<u><a href="#">Describe</a></u>	<u><a href="#">Interpret</a></u>	<u><a href="#">Experiment</a></u>	<u><a href="#">Explain</a></u>	<u><a href="#">Assess</a></u>	<u><a href="#">Plan</a></u>
<u><a href="#">Procedural Knowledge</a></u>	<u><a href="#">Tabulate</a></u>	<u><a href="#">Predict</a></u>	<u><a href="#">Calculate</a></u>	<u><a href="#">Differentiate</a></u>	<u><a href="#">Conclude</a></u>	<u><a href="#">Compose</a></u>
<u><a href="#">Meta- Cognitive Knowledge</a></u>	<u><a href="#">Appropriate Use</a></u>	<u><a href="#">Execute</a></u>	<u><a href="#">Construct</a></u>	<u><a href="#">Achieve</a></u>	<u><a href="#">Action</a></u>	<u><a href="#">Actualize</a></u>

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<http://oregonstate.edu/instruct/coursedev/models/id/taxonomy/#table>

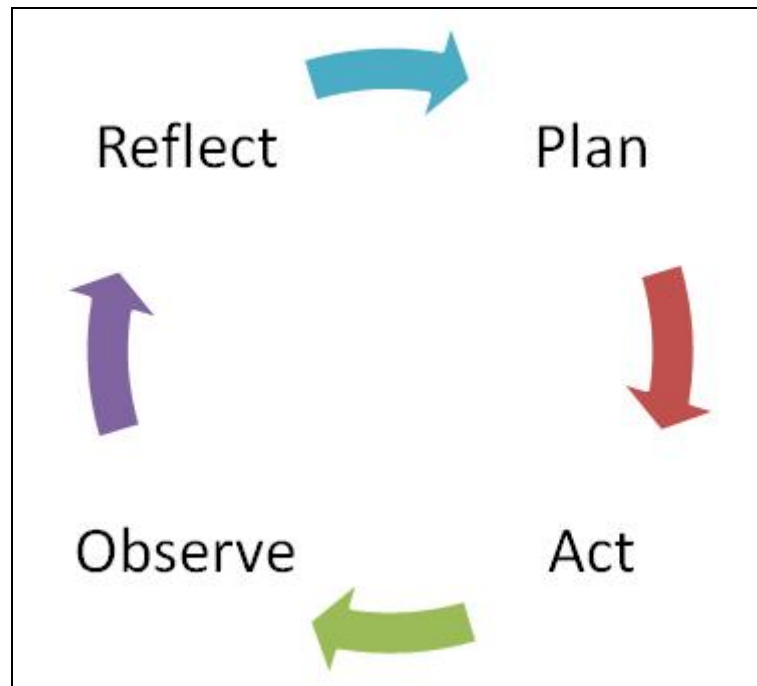
Designer/Developer - Dianna Fisher

## Appendix 4: Honey and Munford Learning Styles

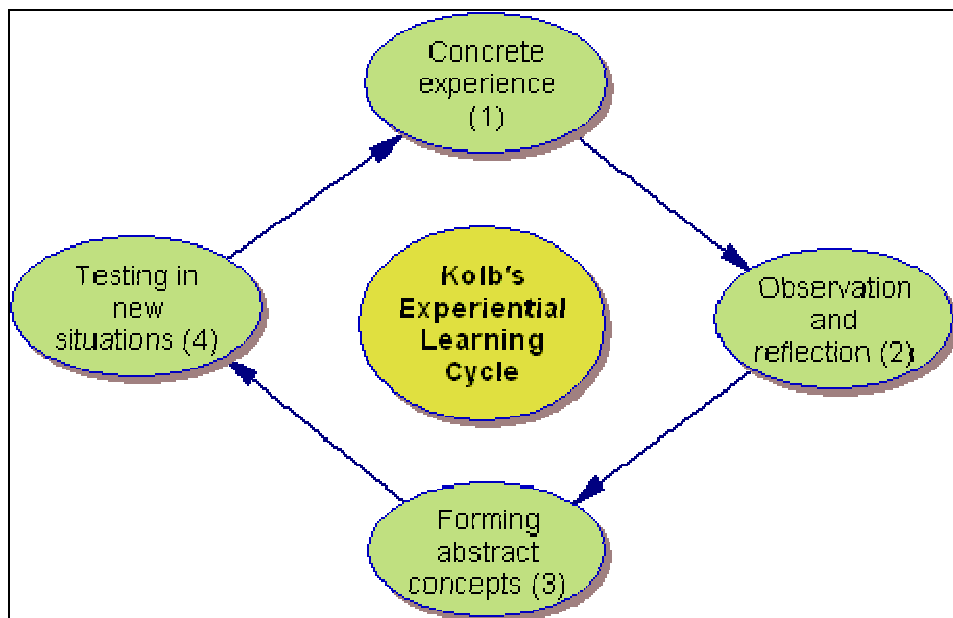




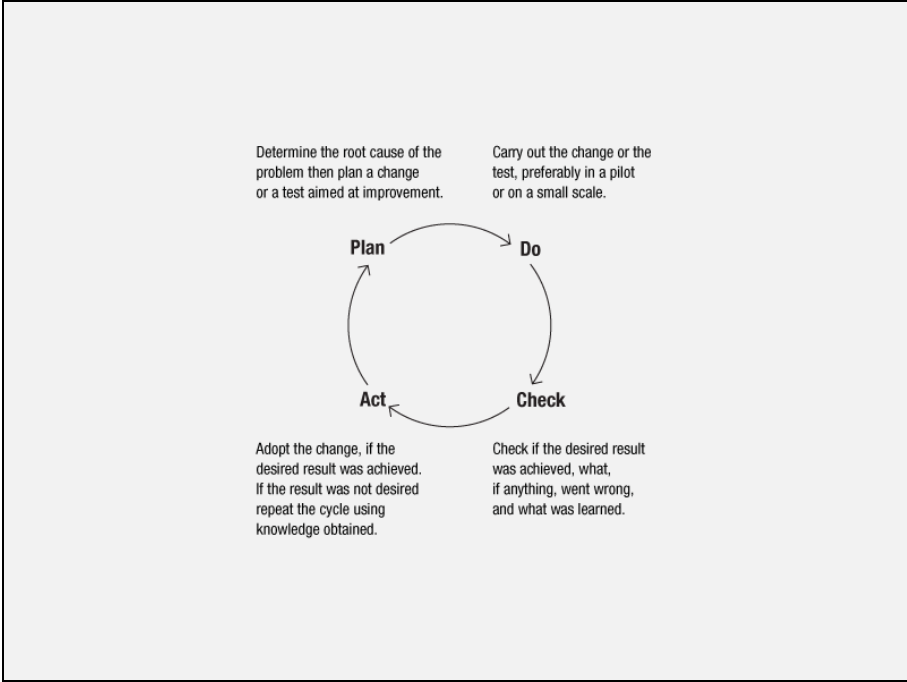
**Appendix 5: Lewin, Kolb and Shewhart/Deming Models of Learning**



*Lewin's Model of Learning*



*Kolb's Model of Learning*



*Shewhart/Deming's Cycle of Continuous Improvement*

## Appendix 6: Module Template for DIT

**Module author:** Person(s) responsible for writing the module.

### Module description:

In this section a brief description of the general subject of the module. Statements about how the module is structured into Knowledge (breadth, kind, range), Know-how and skill (range and selectivity) and Competence (context, role, learning to learn, insight). Structure should map onto the learning outcomes.

### Module aim:

The aim of this module is to.....

### Module outcome:

On completion of this module, the learner will be able to.....

### Learning and Teaching Methods:

When designing the module, tutors should consider the variety of learning methods, which may be used to achieve the module learning outcomes. This section should state these processes for the module. For example: lectures, discussion, role-play, case study, problem-solving exercises, video, film, work-based learning, readings, project work, self-directed learning, dissertation, computer-based learning, ODL, correspondence, or a combination of methods.

### Module content:

Description of syllabus content covered in module.

### Module assessment:

Statements on proportion of marks allocated to each element of assessment in the Module (Practical, Theory, Continuous Assessment etc).  
Statements on performance requirements in individual elements of Module, if any: e.g.- minimum performance threshold.  
Statement about module assessment based on RPL (APCL and APEL) including the methods of assessment to be used to measure the achievement of the stated learning outcomes of the module.

### Recommended Reading: (author, date, title, publisher)

### Web references, journals and other:

**Further Details:** e.g. class size, contact hours. To be delivered in one semester or year- long.

**Date of Academic Council approval:** \_\_\_\_\_

## Appendix 7: Hot Kitchen Modules as per Coursewise

Module code	Title			
TFCA1021	Kitchen & Larder 1			
	Pre-Requisite Module Code(s)	Co-Requisite Module Code(s)	Last Revision Date	ECTS Credits
				5
Contact Hours	Max Class Size	Duration	Date approved	Approved Checked
60		1 Semester	March 31, 2009	√ √

<b>School of delivery:</b> School of Culinary Arts & Food Technology
<b>Author:</b> Pauline Danaher Anthony Campbell Pat Zaidan
<b>Description:</b> This module introduces the learner to the essential, underlying kitchen and larder principles and practices of preparing and cooking a range of foods in a safe, efficient and hygienic manner
<b>Aims:</b> This module aims to give the learner knowledge and understanding of the selection, combination, preparation, cooking and presentation of food. The aim is to move learners beyond the trial and error learning of behaviourism towards a careful recognition and definition of concepts through which they organise and control the materials they encounter, such that their insights become meaningful. This will include the importance of hygiene and safety û personal, premises and practices to be used in restaurants/kitchens; identify critical control points and the implementation of HACCP in converting raw commodities into safe and wholesome dishes and meals for human consumption:

<b>Learning Outcomes:</b>
<b>Outcome:</b>
1. Prepare basic stocks and marinades 2. Identify and specify kitchen/restaurant equipment and utensils, operate them safely and correctly 3. Demonstrate capacity to make common cuts fine dice, julienne, cube, slice, baton, wedge, etc 4. Identify the cuts of meat, poultry and fish 5. Bone elements of beef, veal and lamb and fish 6. List and apply appropriate methods of cookery to the appropriate cuts of meat and fish
1. Prepare basic stocks and marinades 2. Identify and specify kitchen/restaurant equipment and utensils, operate them safely and correctly 3. Demonstrate capacity to make common cuts fine dice, julienne, cube, slice, baton, wedge, etc 4. Identify the cuts of meat, poultry and fish 5. Bone elements of beef, veal and lamb and fish 6. List and apply appropriate methods of cookery to the appropriate cuts of meat and fish

<b>Learning and Teaching Methods</b>	
<b>Methods:</b>	
Practical laboratory, demonstrations, tutorials, self-directed independent study.	

<b>Module Content</b>	
<b>Methods:</b>	
Unit 3 Hot mise-en-place• Basic hot preparations for the kitchen •The concept of blanching and refreshing• Steaming as cookery method – healthy cooking	
Unit 4 Introduction to meats• Introduction to Meats: Beef, Veal, Lamb and Pork and Poultry• Demonstrate the effects of preparation on meat, i.e. mincing, removal of fat and connective tissue, marbling- fat level, salting, pickling, larding, barding, stuffing• Braising as a method of cookery	
Unit 5 Introduction to fish and shellfish •Fish – Introduction to Seafood and Freshwater fish: •Composition and Structure of sixteen major groups of fish including shellfish. •Select an appropriate method of cookery to be in each case. •Deep and shallow poaching as methods of cookery	
Unit 6 Stocks and sauces• Basic brown and white stocks – veal; chicken; beef; fish and vegetable• The preparation of roux• Boiling as a method of cookery• Panades	
Unit 1 Introduction to Kitchen/Restaurant in the context of the Hospitality industry Food Safety and Hygiene – the importance of continuous awareness; Fire Safety; Occupational Health i.e., safe practices; Uniform; Equipment; Knives; Knife Drill (techniques/skills); Hands on knowledge of restaurant/kitchen equipment and utensils – the proper and safe utilisation of a variety of utensils and equipment encountered in a working kitchen/restaurant Introduction to Hazard Analysis and Critical Control Points in the Restaurant/Kitchen	
Unit 1 Introduction to Kitchen/Restaurant in the context of the Hospitality industry Food Safety and Hygiene – the importance of continuous awareness; Fire Safety; Occupational Health i.e., safe practices; Uniform; Equipment; Knives; Knife Drill (techniques/skills); Hands on knowledge of restaurant/kitchen equipment and utensils – the proper and safe utilisation of a variety of utensils and equipment encountered in a working kitchen/restaurant Introduction to Hazard Analysis and Critical Control Points in the Restaurant/Kitchen	
Unit 2 Cold mise-en-place Introduction to Ingredients and Commodities; •Vegetable preparation and development of knife skills• Introduction to methods of cookery; moist, dry and oil	
Unit 8 Sandwiches •Preparation of sandwiches Bread variety, Fillings – healthy and Garnishes	
Unit 10 Wet methods of cookery• Poaching• Stewing	
Unit 9 Wet methods of cookery• Braising• Boiling	
Unit 12 Dry methods of cookery• Grilling• Shallow frying• Deep frying	
Unit 11 Dry methods of cookery• Pot-roasting• Roasting• Baking	
Unit 1 Introduction to Kitchen/Restaurant in the context of the Hospitality industry Food Safety and Hygiene – the importance of continuous awareness; Fire Safety; Occupational Health i.e., safe practices; Uniform; Equipment; Knives; Knife Drill (techniques/skills); Hands on knowledge of restaurant/kitchen equipment and utensils – the proper and safe utilisation of a variety of utensils and equipment encountered in a working kitchen/restaurant Introduction to Hazard Analysis and Critical Control Points in the Restaurant/Kitchen	
Unit 7 Hors d'Ouvres/canapés and salads• Preparation and presentation• Oils, vinegars, dressings, cold sauces and marinades	

<b>Assessment information</b>	
<b>Assessment information</b>	
A written in-class assessment will allow the learner to illustrate their knowledge of the culinary arts that may include cuts of meat, poultry and fish, and kitchen equipment and utensils. Learners will demonstrate the boning elements of beef, veal and lamb and fish, prepare basic stocks and marinades and cuts of fine dice, julienne, cube, slice, baton, wedges, and the application of a variety of the methods of cookery.	



<b>Assessment</b>	<b>Description</b>	<b>Type</b>	<b>Component weight</b>
Assessment 1	Continuous assessment	Assessment	70
Assessment 2		Assessment	30

<b>ISBN</b>	<b>Title</b>	<b>Author</b>	<b>Publisher</b>	<b>Published date</b>	<b>Edition</b>
	(. Practical Professional Cookery	Cracknell, H. & Kaufmann, R.	London: Manmillan Press	1999)	3
	The Cookery Repertory	Sauliner, L.	London: Leon Jaeggi & Sons	1982	17
	On Food and Cooking	McGee, H.	().. London: Harper-Collins	1991	

<b>Additional Information</b>
Class delivery consists of 12 x 4 hour kitchen sessions. 12 x 1 hours underpinning theory
Minimum 80% attendance

This module is available in the following programmes:
<a href="#">DT408T</a> , <a href="#">DT460E</a> , <a href="#">DT407</a> , <a href="#">DT416</a> , <a href="#">DT417</a> , <a href="#">DT420</a> , <a href="#">DT424</a> , <a href="#">DT432A</a> , <a href="#">DT444</a> ,

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Module code	Title				
TFCA1022	Kitchen and Larder 2				
	Pre-Requisite Module Code(s)	Co-Requisite Module Code(s)	Last Date	Revision	ECTS Credits
	<a href="#">TFCA1021 (2011-12) Kitchen &amp; Larder 1</a>				5
Contact Hours	Max Class Size	Duration	Date approved	Approved Checked	
60		1 Semester	March 31, 2009		1 

<b>School of delivery:</b> School of Culinary Arts & Food Technology
<b>Author:</b> Pat Zaidan PAULINE DANAHHER MAIRTIN MACCONIOMAIRE MAIRTIN MACCONIOMAIRE
<b>Description:</b> This module is designed to enable learners to develop, understand and apply principles and practices of culinary arts in the provision of excellent, safe, tasty and nutritious food and drink for human consumption within the context of gastronomy. A classical French cookery model is followed in this module where learners develop both practical and cognitive skills.
<b>Aims:</b> The aim of this module is to build on, and extend the range of skills, techniques and knowledge previously acquired. This module aims to interrogate and reflect on the implementing a new coalition of culinary knowledge, skills, and techniques in a new culinary arts discipline. Also, it aims to introduce students to the pursuit of excellence in culinary arts by developing their concepts and skills.

<b>Learning Outcomes:</b>
<b>Outcome</b>
1. Explain and demonstrate an understanding of the reasons for cooking food; 2. Apply moist, dry and oil methods of cooking appropriately to a variety of ingredients/commodities/dishes; 3. Extend their range of particulation and manipulation skills; 4. Define and understand stocks, emulsions (stabilisation and breakdown) as part of culinary preparation; 5. Achieve a balance of nutritional value, texture, flavour and colour of each item prepared with an emphasis on healthy eating 6. Prepare, cook and present a list of dishes from the classical repertory.
1. Explain and demonstrate an understanding of the reasons for cooking food; 2. Apply moist, dry and oil methods of cooking appropriately to a variety of ingredients/commodities/dishes; 3. Extend their range of particulation and manipulation skills; 4. Define and understand stocks, emulsions (stabilisation and breakdown) as part of culinary preparation; 5. Achieve a balance of nutritional value, texture, flavour and colour of each item prepared with an emphasis on healthy eating 6. Prepare, cook and present a list of dishes from the classical repertory.

<b>Learning and Teaching Methods</b>
<b>Methods</b>
Laboratory practice, demonstration, discussions, debates, self-directed study and practice.

<b>Module Content</b>	
<b>Methods</b>	
This module extends the repertoire of Kitchen and Larder 1. The syllabus content of this module includes: Unit 1: classical sauce cookery; Unit 2: Classical sauce cookery Unit 3: Hot and cold soup preparations; Unit 4: moist methods of fish and shellfish cookery; Unit 5: Wet methods of fish cookery Unit 6: Egg Cookery Unit 7: Shellfish Unit 8: Meat cookery; joints, braising, stewing, suitability of cuts Unit 9: Meat Cookery; sauté, deep-frying, compound butters, roasting Unit 10: Meat Cookery; poultry and game, Unit 11: Farinaceous; pasta fresh rice, Unit 12: Vegetable; classifications, garnishes	
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<b>Assessment information</b>	
<b>Assessment information</b>	
Minimum attendance of 80% is normally required to fulfil the requirements of this module	

Assessment	Description	Type	Component weight
	Continuous Assessment (practical)	Assessment	1

<b>Reading - Recommended</b>					
ISBN	Title	Author	Publisher	Published date	Edition
	). On Food and Cooking	McGee, H.	London: Harper-Collins	1991	
	). Classical Food Preparation and Presentation	Bode, W. K. H., & Leto, M. J.	London: Batsford Academic and Educational	1984	
	The Complete Guide to the Art of Modern Cookery	Essoffier, A.	London: William Heinmann Ltd	1986	

<b>Additional Information</b>
This module to be delivered over one semester as follows: - 12 x 4 hours kitchen sessions; 12 x 1 hour underpinning theory and tutorial

This module is available in the following programes: <a href="#">DT407</a> , <a href="#">DT416</a> , <a href="#">DT424</a> , <a href="#">DT444</a> ,
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Module code	Title				
TFCA2023	Kitchen and Larder 3				
	Pre-Requisite Module Code(s)	Co-Requisite Module Code(s)	Last Date	Revision	ECTS Credits
	<a href="#">TFCA1022 (2011-12) Kitchen and Larder 2</a>				5
Contact Hours	Max Class Size	Duration	Date approved	Approved Checked	
60		1 Semester	March 31, 2009	<input checked="" type="checkbox"/>	1

<b>School of delivery:</b> School of Culinary Arts & Food Technology
<b>Author:</b> GERARD CONNELL
<b>Description:</b> This module supports the learner in developing and deepening their knowledge and culinary skills across a wide range of national and international cuisines.
<b>Aims:</b> Equip the learner with a deep knowledge of International culinary traditions, processes/principles and practices

<b>Learning Outcomes:</b>
<b>Outcome</b>
Critically assess and apply the major culinary elements of classical and modern cuisine Demonstrate a range of culinary techniques of past and present recognised culinarians. Demonstrate creativity and innovation with a wide variety of food commodities. Critically analyse standards of performance appropriate to ethnic food production. Develop a critical, objective and logical approach to problem solving in relation to food preparation, cooking and service. Understand and comply with the legal requirements regarding the production and service of healthy safe nutritious food. Display inter-personnel, individual and teamwork skills.
Critically assess and apply the major culinary elements of classical and modern cuisine Demonstrate a range of culinary techniques of past and present recognised culinarians. Demonstrate creativity and innovation with a wide variety of food commodities. Critically analyse standards of performance appropriate to ethnic food production. Develop a critical, objective and logical approach to problem solving in relation to food preparation, cooking and service. Understand and comply with the legal requirements regarding the production and service of healthy safe nutritious food. Display inter-personnel, individual and teamwork skills.

<b>Learning and Teaching Methods</b>
<b>Methods</b>
Practical laboratory, tutorials, demonstrations, role-playing, and self-directed, exploratory techniques and independent study.

<b>Module Content</b>	
<b>Methods</b>	
Unit 12 Vegetarian Cookery Food production using a wide variety of vegetables aimed at product knowledge of vegetarian requirements, portion control and popular present day menu choices, presentation and product.	
Unit 4 Poultry international Master Class using a wide variety of poultry, game, incorporating larder skills, cooking and presentation techniques.	
Unit 2 Hot Hors-d Oeuvres International Master Class on the preparation and presentation of Modern Hot Hors-d Oeuvres	
Unit 1: International Master Class on the preparation and presentation of Modern Cold Hors-d Oeuvres	
Unit 1: International Master Class on the preparation and presentation of Modern Cold Hors-d Oeuvres	
Unit 7 Ethnic Cookery. The food of China Produce a range of dishes associated with China To include a variety of hors-d oeuvres, soups, sauces, farinaceous, fish, meat, game, poultry and main courses.	
Unit 3 Fish International Master Class using a wide variety of fish incorporating larder skills, cooking and presentation techniques	
Unit 8 Ethnic Cookery. The food of Spain Produce a range of dishes associated with Spain To include a variety of hors-d oeuvres, soups, sauces, farinaceous, fish, meat, game, poultry and main courses.	
Unit 9 Ethnic Cookery. The food of Thailand Produce a range of dishes associated with Thailand To include a variety of hors-d oeuvres, soups, sauces, farinaceous, fish, meat, game, poultry and main courses.	
Unit 5 Meats International Master Class using a wide variety of meats, beef, lamb, pork and veal incorporating larder skills cooking and presentation techniques.	
Unit 10 Pates and Galantines develop further skills in the larder preparation, cooking, and presentation of meat pates and galantines.	
Unit 6 Ethnic Cookery The food of Italy Produce a range Italian of dishes To include a variety of hors-d oeuvres, soups, sauces, farinaceous, fish, meat, game, poultry, main courses and cheese.	
Unit 11 Cold Fish and Shellfish Terrines develop further skills in the larder preparation, cooking, and presentation of fish and shellfish pates, mousse and terrines.	
Unit 1: International Master Class on the preparation and presentation of Modern Cold Hors-d Oeuvres	

<b>Assessment</b>	<b>Description</b>	<b>Type</b>	<b>Component weight</b>
	Continuous Assessment	Assessment	1
	Written in-class assessment/project	Assessment	

<b>Reading - Recommended</b>					
<b>ISBN</b>	<b>Title</b>	<b>Author</b>	<b>Publisher</b>	<b>Published date</b>	<b>Edition</b>
	The Food and Cooking of China	Halvorsen, Francine	John Wiley and Sons Inc	1996	
	Introduction to Chinese Cooking	Yans, Martin	Pavilion Books.	2002	
	The Wine and Food of Spain	Read, Jan, Manjo, Maitte and Johnson, Hugh	Lincola	1987	
	Classical & Contemporary Italian Cooking for Professionals	Ellmer, B	Wiley	1989	
	The Return of the Naked Chef	Oliver, Jamie	Penguin New York	2000	

<b>Web References</b>	
<b>Title</b>	<b>URL</b>
World Wide Web, Buffet and Larder-Catering Control (CD-Rom) Futura Training Meat Butchery and Cookery. Poultry and Game (CD-Rom), Futura Training	<a href="#">World Wide Web, Buffet and Larder-Catering Control (CD-Rom) Futura Training Meat Butchery and Cookery. Poultry and Game (CD-Rom), Futura Training</a>

<b>Additional Information</b>
Supplemental Reading: Escofier. A. (1986) The Complete Guide to Modern Cookery, London William Heinmann Ltd Bobe, W.K.H. and Letto, Mj. (1983) "The Larder Chef" London W. Heinmann Cracknell and Kaufmann, (1999).Third Edition, "Practical Professional Cookery". London Macmillan The Roux Brothers (1992) "French Country Cooking" Papermac Mossimann A.,and Hofmann H., (1993) "Shellfish" Hearst Books, New York. David, E., (1998) A Book of Mediterranean Food, Penguin: Rodent, C, (1998) Invitation to Mediterranean Cooking, Macmillan. 12 Units to be taught as 12 x 4 hours and 12 x 1 hour underpinning theory. Forty hours allocated to self-directed learning. Maximum class size 16 Students Minimum attendance of 80% is required to fulfill the requirements of this module
Minimum 80% attendance

This module is available in the following programmes:
<a href="#">DT407</a> , <a href="#">DT432A</a> , <a href="#">DT444</a> ,

Viewed 03-Apr-2012: 5:36 p.m.

Module code	Title			
TFCA3023	Major Hot Kitchen 1 (Culinary Arts)			
	Pre-Requisite Module Code(s)	Co-Requisite Module Code(s)	Last Date	Revision
				5
Contact Hours	Max Class Size	Duration	Date approved	Approved Checked
60		1 Semester	March 31, 2009	<input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/>

<b>School of delivery:</b> School of Culinary Arts & Food Technology
<b>Author:</b> James Carberry
<b>Description:</b> An in depth study and evaluation of the culinary style of published contemporary culinarians.
<b>Aims:</b> Create awareness of a wide range of culinary styles and trends and for the learner to move to a higher level of knowledge and understanding and be able to organize, critique, and assess their own performance and that of their peers.

<b>Learning Outcomes:</b>
<b>Outcome</b>
Express confidence and capability in the planning, organising and execution of Culinary Arts performance. Accurately record, document and critically review their Culinary Arts activity. Record accurately the outcomes of laboratory sessions. Produce quality written accounts of practical and applied culinary work accompanied with photographic evidence. Reproduce the documented work of selected culinarians to a high standard.
Express confidence and capability in the planning, organising and execution of Culinary Arts performance. Accurately record, document and critically review their Culinary Arts activity. Record accurately the outcomes of laboratory sessions. Produce quality written accounts of practical and applied culinary work accompanied with photographic evidence. Reproduce the documented work of selected culinarians to a high standard.

<b>Learning and Teaching Methods</b>
<b>Methods</b>
Demonstrations, lectures, learning by doing experiential), individual tuition, discussions, tutor and peer appraisal.

<b>Module Content</b>
<b>Methods</b>
1. Appraisal of suitable commodities. 2. Implementation of HACCP, fire safety and general safe work practices. 3 -5 Production of contemporary cuisine of a refined nature. 6- 9. Production of aesthetic and highly palatable plated dishes. 10. Sensory analysis applied. 11. Development of interpersonal and verbal presentation skills. 12. Information technology skills pertaining to word processing and digital photographic software.
1. Appraisal of suitable commodities. 2. Implementation of HACCP, fire safety and general safe work practices. 3 -5 Production of contemporary cuisine of a refined nature. 6- 9. Production of aesthetic and highly palatable plated dishes. 10. Sensory analysis applied. 11. Development of interpersonal and verbal presentation skills. 12. Information technology skills pertaining to word processing and digital photographic software.
1. Appraisal of suitable commodities. 2. Implementation of HACCP, fire safety and general safe work practices. 3 -5 Production of contemporary cuisine of a refined nature. 6- 9. Production of aesthetic and highly palatable plated dishes. 10. Sensory analysis applied. 11. Development of interpersonal and verbal presentation skills. 12. Information technology skills pertaining to word processing and digital photographic software.

<b>Assessment information</b>	
<b>Assessment information</b>	
The learner must obtain a minimum mark of 25% for each element of the module assessment and that each element is a required element. Failure to achieve a 25% mark in any/all elements will result in a non aggregated overall mark for the module.	

<b>Assessment</b>	<b>Description</b>	<b>Type</b>	<b>Component weight</b>
	Continuous Assessment	Assessment	1

<b>Reading - Recommended</b>					
<b>ISBN</b>	<b>Title</b>	<b>Author</b>	<b>Publisher</b>	<b>Published date</b>	<b>Edition</b>
	Advanced Practical Cookery	Ceserani, V. Foskett, D.	None	2002	
	The Science of Cooking	Barham Peter	None	2001	
	Great Chefs of France	Quentin ,Crewe & Anthony, Blake	None	1978	
	La Rousse Gastronomique	Hamlyn, Paul	None	1988	
	The Café Paradiso Cookbook	Cotter, Dennis	None	1999	

<b>Web References</b>	
<b>Title</b>	<b>URL</b>
<a href="http://www.fatduck.co.uk/intro.html">http://www.fatduck.co.uk/intro.html</a>	<a href="http://www.fatduck.co.uk/intro.html">http://www.fatduck.co.uk/intro.html</a>

<b>Additional Information</b>
Twelve sessions of four hours (and 12 x 1 hour supporting theory) Preparation for class may involve library research and preparation in an 'open' kitchen. Each learner to provide own photographic equipment. 80% attendance is normally required.

This module is available in the following programmes: <a href="#">DT407</a> , <a href="#">DT432A</a> ,
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Viewed 03-Apr-2012: 5:37 p.m.

Module code	Title				
TFCA3024	Major Hot Kitchen 2 (Culinary Arts )				
	Pre-Requisite Module Code(s)	Co-Requisite Module Code(s)	Last Date	Revision	ECTS Credits
	<a href="#">TFCA3023 (2011-12) Major Hot Kitchen 1 (Culinary Arts)</a>				10
Contact Hours	Max Class Size	Duration	Date approved	Approved Checked	
120		2 Semesters	March 31, 2009	<input checked="" type="checkbox"/>	1

<b>School of delivery:</b> School of Culinary Arts & Food Technology
<b>Author:</b> James Carberry
<b>Description:</b> This module gives the learner an opportunity to express, further develop and deepen their unique culinary style drawing upon their education, learning and experience. The learner will write original modern renditions of classical French dishes and exhibit this work in a laboratory kitchen.
<b>Aims:</b> Enable learners to create, develop reflect and record the further development of their own style of culinary art performance which will include a range of appropriate culinary art dishes and a higher level of understanding of commodities, culinary arts performance and aesthetic judgement.

<b>Learning Outcomes:</b>
<b>Outcome</b>
1. Conceive and execute new ideas and concepts in Culinary Arts performance with creativity and flair. 2. Formulate food recipes suitable for publication and produce critical, evaluative written accounts of the practical kitchen laboratory work carried out accompanied with photographic evidence 3. Express confidence and capability in the planning, organising and the execution of Culinary Arts performance. 4. Apply theoretical knowledge and analytical tools in developing solutions for culinary art challenges in developing recipes 5. Further develop their intellectual and personal abilities while facilitating and advancing their own learning
1. Conceive and execute new ideas and concepts in Culinary Arts performance with creativity and flair. 2. Formulate food recipes suitable for publication and produce critical, evaluative written accounts of the practical kitchen laboratory work carried out accompanied with photographic evidence 3. Express confidence and capability in the planning, organising and the execution of Culinary Arts performance. 4. Apply theoretical knowledge and analytical tools in developing solutions for culinary art challenges in developing recipes 5. Further develop their intellectual and personal abilities while facilitating and advancing their own learning

<b>Learning and Teaching Methods</b>
<b>Methods</b>
Self directed learning, discussion and debate, research and culinary performance and reflection in the kitchen laboratory

<b>Module Content</b>	
<b>Methods</b>	
Unit 1: Selection and identification of suitable commodities with implementation of HACCP, fire safety and general safe work practices. Unit 2: Development and analysis of appropriate interpersonal and verbal presentation skills. Development of information technology skills pertaining to word processing and digital photographic software. Unit 3 - 11: Production of Classical Cuisine in an individual style with a focus on producing aesthetically and highly palatable plated dishes. Application of sensory analysis. Unit 12: Review	
Unit 1: Selection and identification of suitable commodities with implementation of HACCP, fire safety and general safe work practices. Unit 2: Development and analysis of appropriate interpersonal and verbal presentation skills. Development of information technology skills pertaining to word processing and digital photographic software. Unit 3 - 11: Production of Classical Cuisine in an individual style with a focus on producing aesthetically and highly palatable plated dishes. Application of sensory analysis. Unit 12: Review	
Unit 1: Selection and identification of suitable commodities with implementation of HACCP, fire safety and general safe work practices. Unit 2: Development and analysis of appropriate interpersonal and verbal presentation skills. Development of information technology skills pertaining to word processing and digital photographic software. Unit 3 - 11: Production of Classical Cuisine in an individual style with a focus on producing aesthetically and highly palatable plated dishes. Application of sensory analysis. Unit 12: Review	

<b>Assessment information</b>	
<b>Assessment information</b>	
The learner must obtain a minimum mark of 25% for each element of the module assessment and that each element is a required element. Failure to achieve a 25% mark in any/all elements will result in a non aggregated overall mark for the module.	

Assessment	Description	Type	Component weight
	Continuous	Assessment	1

<b>Reading - Recommended</b>					
ISBN	Title	Author	Publisher	Published date	Edition
	Professional Charcuterie	Kinsella, J. & Harvey, D	None	1996	
	Roast chicken and other stories	Hopkinson, Simon	None	1994	
	Great Chefs of France	Crewe, Quentin & Blake, Anthony	None	1978	
	The Café Paradiso Cookbook	Cotter, Dennis	None	1999	
	The Science of Cooking	Barham, Peter	None	2001	

<b>Web References</b>	
Title	URL
<a href="http://www.fatduck.co.uk/intro.html">http://www.fatduck.co.uk/intro.html</a>	<a href="http://www.fatduck.co.uk/intro.html">http://www.fatduck.co.uk/intro.html</a>

<b>Additional Information</b>
Further Details: Twelve four hour sessions and 12 x 1 hour underpinning theory which may be laboratory based. Preparation for these classes may include study and preparatory work in an 'open' kitchen.80% attendance is normally required. Each learner to provide own photographic equipment.

This module is available in the following programmes: <a href="#">DT407</a> .
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Viewed 03-Apr-2012: 5:37 p.m.

## Appendix 8: Lecturers Interview Questions

Interview questions for culinary educators

1. How long are you teaching on the BA.
2. What modules do you teach?
3. What do you think of modularisation?
4. Were you involved in creating the modules you teach.
5. Have you been involved in any updates of the modules you teach?
6. What teaching techniques do you use in the different years i.e. portfolio, reflection, HACCP plan, what type of research you require
7. Do you confer with other colleagues regarding the module delivery?
8. What is your opinion of the hot kitchen modules for the different years?
9. Are you aware of the learning outcomes for the modules you teach and do you adhere to them?
10. What additional if any learning outcomes would you suggest should be added?
11. What changes would you make to the course content on the modules you teach?
12. Do you think the modules need to be reviewed?
13. What is your opinion on the timing of the modules should they be run concurrently or as they are?
14. Students do a 5 week internship in yr 2 and 12 weeks in yr 3 do you see a difference in the students because of internship?
15. Should students do longer internships in 1<sup>st</sup> and 2<sup>nd</sup> yr?
16. What assessment techniques do you think should be used for the different modules that you teach?



## Appendix 9: Student Questionnaire



### Student Questionnaire

**This questionnaire only applies to kitchen and larder modules 1, 2 & 3 and hot major 1 and 2.**

The purpose of this survey is to obtain the views of **students on their experience in hot kitchen and larder classes** on the BA in Culinary Arts. This feedback will enable the researcher to review how the modules are delivered.

**You are kindly requested to signal your opinion on the scales given to a series of statements relating to the kitchen and larder modules as you experienced it, and then return the completed form.**

**No personal comments in relation to other students or staff members should be made.**

*Please DO NOT sign your name on the form but indicate your course year.*

Thank you for participating in this survey. Please read the questions carefully and only answer questions that apply to your year.

**Please circle your answer.**

2<sup>nd</sup> year students only to answer section 1 & 2.

3<sup>rd</sup> year students only to answer sections 1, 2 & 3.

4<sup>th</sup> year students and alumni to answer all sections.

## Section 1

### Question 1

*Gender* Male Female

### Question 2

*Age* 18-24 25-31 32-38 38+

### Question 3

How did you apply for a place on the BA in Culinary Arts?

1. CAO
2. Mature Student (CAO)
3. Advance Entry (Already complete certificate course)

### Question 4

Did you have professional kitchen experience before beginning the BA?

Yes No

### Question 5

If you had prior professional kitchen experience what area was it in?

1. Commis chef
2. Kitchen porter
3. Chef
4. Other

Please specify other \_\_\_\_\_

### Question 6

If you continue to work in a professional kitchen while attending college has this been of **benefit to your participation in the hot kitchen and larder modules and hot major modules** (1 = very non beneficial, 2 = non beneficial, 3 = neither beneficial or non beneficial, 4 = beneficial, 5 = very beneficial)

1 2 3 4 5

Any comments \_\_\_\_\_

### Question 7

Having completed certain hot kitchen and larder modules and hot major modules rate **how beneficial the content of these modules was in relation to your work experience to date** (1 = very inadequate, 2 = inadequate, 3 = neither adequate or inadequate, 4 = adequate, 5 = very adequate).

1                      2                      3                      4                      5

### Question 8

Rate **your level of satisfaction with the course content** ((1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

Please give reasons for your answer

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## Section 2

### Question 9

Rate your level of satisfaction on a scale of one to five on **your level of knowledge of stocks and marinades** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 10

Rate your **competency in operating kitchen equipment** in a safe and hygienic manner (1 = very incompetent, 2 = incompetent, 3 = neither competent nor incompetent, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

### Question 11

On a scale of one to five **how satisfied are you with your knife skills** in executing the cuts of vegetables (fine dice, julienne, cube, slice, baton and wedge) (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 12

Are you satisfied with your **competent in your culinary knowledge to identify cuts of meat, poultry and fish** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 13

Are you satisfied with your **competency in boning out elements of beef, veal, lamb and fish** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 14

Rate your **satisfaction with your acquired knowledge of appropriate methods of cookery** for the appropriate cuts of meat and fish (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 15

How satisfied are you with your **ability to demonstrate and understand the reasons for cooking** food (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 16

Are you **satisfied that you can apply appropriate methods of cookery to ingredients/commodities and dishes** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 17

Rate **your level of knowledge of stocks and emulsions** (1= very poor knowledge, 2 = poor knowledge, 3 = minimum level of knowledge, 4 = good knowledge, 5 = very good knowledge).

1                      2                      3                      4                      5

### Question 18

Rate your **satisfaction of your acquired level of knowledge of nutritional value, texture, flavour, colour and healthy eating** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 19

Rate your **level of competence in preparing, cooking and presenting classical dishes** (1 = very incompetent, 2 = incompetent, 3 = neither competent nor incompetent, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

### Question 20

Rate your **competency to assess and apply major culinary elements of classical and modern cuisine** (1 = very incompetent, 2 = incompetent, 3 = neither competent nor incompetent, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

**Question 21**

Are you **satisfied you can demonstrate culinary techniques from past and present culinarians** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

**Question 22**

Rate your **competency in being able to be creative and innovate with a wide variety of food** (1 = very incompetent, 2 = incompetent, 3 = neither competent nor incompetent, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

**Question 23**

Rate your competency in cooking ethnic food (1 = very incompetent, 2 = incompetent, 3 = neither competent nor incompetent, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

**Question 24**

Rate your **problem-solving abilities in relation to food preparation, cooking and service** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

**Question 25**

Rate your **ability to comply with health and safety legislation in regard to food production and service** (1= very incompetent, 2= incompetent, 3 = neither competent nor incompetent, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

### Question 26

Are you **satisfied that your interpersonal, individual and teamwork skills improved in the kitchen and larder modules** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 27

Rate the following **teaching and learning techniques** used in kitchen and larder modules (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

(a) Research (commodities)	1	2	3	4	5
(b) Research (Recipe)	1	2	3	4	5
(c) Culinary Vocabulary	1	2	3	4	5
(d) Lecturer Feedback	1	2	3	4	5
(e) Peer Feedback	1	2	3	4	5
(f) Photo log of classes	1	2	3	4	5
(g) Reflection on class	1	2	3	4	5
(h) Costing of dishes	1	2	3	4	5
(i) Use of foreign language	1	2	3	4	5
(j) Tasting of dishes	1	2	3	4	5
(k) Experiencing new foods	1	2	3	4	5
(l) Keeping portfolio of work	1	2	3	4	5
(m) In-class demonstration	1	2	3	4	5
(o) In-class discussion	1	2	3	4	5

### Question 28

Rate your level of satisfaction **of the following modules content** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1. Kitchen and Larder One	1	2	3	4	5
2. Kitchen and Larder Two	1	2	3	4	5
3. Kitchen and Larder Three	1	2	3	4	5
4. Hot major one	1	2	3	4	5
5. Hot major two	1	2	3	4	5

## Section 3

### Question 29

Rate your **confidence and ability to plan, organise and execute a culinary arts performance** (1= very incompetent, 2= incompetent, 3 = neither, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

### Question 30

Has the BA in culinary arts prepared you to become **a reflective practitioner** (1= very unprepared, 2 = unprepared, 3 = neither prepared or unprepared, 4 = prepared, 5 = very prepared)

1                      2                      3                      4                      5

### Question 31

How important would you rate the use **of portfolios as a learning tool** (1 = very unimportant, 2 = unimportant, 3 = neither important or unimportant, 4 = important, 5 = very important).

1                      2                      3                      4                      5



## Section 4

### Question 32

Rate your competency in **conceiving, executing, new ideas and concepts with creativity and flair in culinary art performance** (1= very incompetent, 2= incompetent, 3 = neither, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

### Question 33

How competent are you in **formulating new recipes** (1= very incompetent, 2= incompetent, 3 = neither, 4 = competent, 5 = very competent).

1                      2                      3                      4                      5

### Question 34

Are you satisfied that you have **acquired theoretical knowledge and analytical tools to develop solutions for culinary art challenges in developing recipes** (1 = very dissatisfied, 2 = dissatisfied, 3 = neither dissatisfied or satisfied, 4 = satisfied, 5 = very satisfied).

1                      2                      3                      4                      5

### Question 35

Do you feel that you have **developed your intellectual, personal and self learning abilities completing the hot kitchen and larder modules and the hot major modules** (1 = very undeveloped, 2 = undeveloped, 3 = neither developed or undeveloped, 4 = developed, 5 = very developed)

1                      2                      3                      4                      5

***THANK YOU FOR YOUR CO-OPERATION IN COMPLETING THIS  
QUESTIONNAIRE.***

## Appendix 10: Sample of PAWS Analysis

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	37	43.0	43.0	43.0
	Female	49	57.0	57.0	100.0
	Total	86	100.0	100.0	

### Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	59	68.6	68.6	68.6
	25-31	20	23.3	23.3	91.9
	32-38	4	4.7	4.7	96.5
	38+	3	3.5	3.5	100.0
	Total	86	100.0	100.0	

### Benefit of work experience on BA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very non beneficial	2	2.3	2.8	2.8
	non beneficial	2	2.3	2.8	5.6
	neither beneficial or non beneficial	5	5.8	6.9	12.5
	beneficial	29	33.7	40.3	52.8
	very beneficial	34	39.5	47.2	100.0
	Total	72	83.7	100.0	
Missing	System	14	16.3		
Total		86	100.0		

### Satisfaction with course content

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very dissatisfied	1	1.2	1.2	1.2
	dissatisfied	11	12.8	12.8	14.0
	neither satisfied or dissatisfied	20	23.3	23.3	37.2
	satisfied	45	52.3	52.3	89.5
	very satisfied	9	10.5	10.5	100.0
Total		86	100.0	100.0	

### Prior Kitchen Experience \* Benefit of work experience on BA Crosstabulation

Count

		Benefit of work experience on BA				Total
		Very non beneficial	neither beneficial or non beneficial	beneficial	very beneficial	
Prior Kitchen Experience	Commi Chef	0	0	9	17	26
	Kitchen Porter	0	0	2	0	2
	Chef	0	1	3	2	6
	Other	0	1	0	0	1
	Specified	1	0	0	0	1

**Prior Kitchen Experience \* Benefit of work experience on BA Crosstabulation**

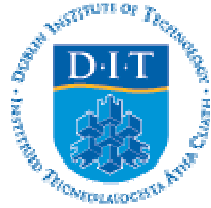
Count

		Benefit of work experience on BA				Total
		Very non beneficial	neither beneficial or non beneficial	beneficial	very beneficial	
Prior Kitchen Experience	Commi Chef	0	0	9	17	26
	Kitchen Porter	0	0	2	0	2
	Chef	0	1	3	2	6
	Other	0	1	0	0	1
	Specified	1	0	0	0	1
<b>Total</b>		<b>1</b>	<b>2</b>	<b>14</b>	<b>19</b>	<b>36</b>

Gender	Very non beneficial	non beneficial	neither beneficial or non beneficial	beneficial	Very beneficial	Total
<b>Male</b>	0	0	2	12	20	<b>34</b>
<b>Female</b>	2	2	3	17	14	<b>38</b>
<b>Total</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>29</b>	<b>34</b>	<b>72</b>

Gender	N	Mean	Std. Deviation	Std. Error Mean	t	df	P<.05	Eta squared
<b>Male</b>	34	4.5294	.61473	.10543	2.395	70	0.254	0.031
<b>Female</b>	38	4.0263	1.07771	.17483				

## **Appendix 11: Employers Questionnaire Template**



### **Questionnaire for Employers of Graduates of the BA in Culinary Arts**

**Thank you for taking the time to complete this questionnaire. The purpose of this questionnaire is to assess employers' satisfaction with graduates of the BA in Culinary Arts and get feedback on the course content. There are two sections to be completed. Section one is background information and your satisfaction rating with BA in Culinary Arts students. Section two has a list of the course content for each of the five modules and I would ask you to give your opinion on the course content at the end of each module.**

**Please circle your answer in section one.**

**Pauline Danaher**

**Lecturer in Culinary Arts.**

**Question 1**

What is your highest culinary qualification?

1. BA (Hons.) in Culinary Arts
2. BA in Culinary Arts
3. City & Guilds 7061
4. City & Guilds 7062
5. City & Guilds 7063
6. City and Guilds Advance courses
7. Fáilte Ireland (C.E.R.T) Certificate
8. Fáilte Ireland Advance Courses
9. Other

Please specify other

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**Question 2**

How many years have you worked in professional kitchens?

- 1-5
- 5-10
- 10-20
- 20 – 30
- 30+

**Question 3**

What type of establishment do you currently work in?

1. Hotel
2. Restaurant
3. Canteen
4. Café (bistro)
5. Industrial catering
6. Michelin star restaurants
7. Ethnic restaurants

#### Question 4

Please indicate how many graduates of the BA (Hons.) in Culinary Arts have you employed in the last eight years.

1. 1
2. 2
3. 3
4. 4
5. More than 4

#### Question 5

Rate your satisfaction with graduate's of the BA in culinary arts competency using the following scale (one = very dissatisfied, two = dissatisfied, three = neither dissatisfied or satisfied, four = satisfied, five = very satisfied).

1. Knife skills

1      2      3      4      5

2. Culinary Knowledge of commodities

1      2      3      4      5

3. Health and safety knowledge regarding kitchen equipment

1      2      3      4      5

4. Knowledge of applying appropriate cooking methods

1      2      3      4      5

5. Creativity with food commodities

1      2      3      4      5

6. Knowledge of classical and modern cuisine

1      2      3      4      5

7. Competency in classical and modern cuisine

1      2      3      4      5

8. Menu Innovation

1      2      3      4      5

9. Ethnic food knowledge

1      2      3      4      5

10. Problem solving abilities in food production, cooking and service

1      2      3      4      5

11. Compliance with health and safety legislation in food production and service

1      2      3      4      5

12. Teamwork abilities

1      2      3      4      5

13. Quality of their culinary work

1      2      3      4      5

14. Health and safety with regard to food production and service

1      2      3      4      5

15. Ability to plan, organise and execute kitchen tasks

1      2      3      4      5

16. Reflective abilities (able to reflect on tasks and learn from them)

1      2      3      4      5

17. Conceiving and executing new ideas with creativity

1      2      3      4      5

18. Recipe development skills

1      2      3      4      5

19. Recipe problem-solving abilities

1      2      3      4      5

**Question 6**

Age            18-24            25-31            32-38            39-45            45+

**Question 7**

Gender            Male            Female

## Kitchen and Larder 1 (4 hour practical class)

<p><b>Lesson 1</b></p> <p>Basic cold mise en place - Knife practice, setting up of work station, HACCP, health and safety in the kitchen, vegetable preparation, vegetable peeling, cutting, chopping, safe use of equipment.</p>	<p><b>Lesson 2</b></p> <p>Essential Kitchen Practice - mise en place Knife skills, basic white chicken stock, blanching, refreshing, salad preparation, citrus preparation, marinades and basic garnishes.</p>	<p><b>Lesson 3</b></p> <p>Stocks and Sauces White stock, veal stock, brown stock, fish stock, reductions, extensions of mother sauces (béchamel, veloutes, demi-glace, hollandaise) into small sauces.</p>	<p><b>Lesson 4</b></p> <p>Essential Larder work - Meat and Poultry Boning, portioning, preparation of poultry cut for sauté. Chicken bourguignon and turned potatoes.</p>
<p><b>Lesson 5</b></p> <p>Essential Larder work – fishmongery. Filleting of flat and round fish, cuts of fishfish stock and glaze, compound butters, frying batters and shellfish preparation. Shallow frying – meuniere (Sole menuire &amp; fillet of Trout Amandine)</p>	<p><b>Lesson 6</b></p> <p>Wet methods of cookery – boiling and braising Paupiettes of beef Jardiniere sauce from cooking liquor, Boiled collar bacon, parsley sauce , Boiled &amp; Braised cabbage, Duchess potatoes and extensions.</p>	<p><b>Lesson 7</b></p> <p>Wet methods of cookery - stewing and poaching Chicken fricassee jardinière, poached salmon hollandaise sauce and fondant potatoes.</p>	<p><b>Lesson 8</b></p> <p>Dry methods of cookery – roasting and pot-roasting Rack of Lamb with mint sauce, chicken/pheasant roasted with garnishes, baked potatoes macaire and byron potatoes.</p>
<p><b>Lesson 9</b></p> <p>Dry methods of cookery (Classical French cookery) Grilled entrecote with garnishes, tournedo clamart, noisette of lamb, grilled salmon warm egg sauces and compound butters.</p>	<p><b>Lesson 10</b></p> <p>Hor d'oeuvres, salads and dressings/cold sauces. Simple Salads, compound Salads, fruit cocktail, melon cocktail, lobster and prawn salad, smoked fish salad, chicken liver pate and salsa.</p>	<p><b>Lesson 11</b></p> <p>Egg cookery - boiled eggs, omelette, poached eggs, fried eggs scrambled eggs, extensions, appropriate sauces and garnishes</p>	<p><b>Lesson 12.</b></p> <p>Practical Assessment</p>

### Question 8

Having reviewed the module content for kitchen and larder one in your opinion what modifications would you recommend?

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## Kitchen and Larder 2 (4 hour practical class)

<b>Lesson 1</b> <b>Soups</b> Purees, Broths, Creams, Veloutes, Bisque, Consommè and Cold Soups. Accompaniments – toasted flutes, aioli	<b>Lesson 2</b> <b>Fish Cookery (wet methods)</b> Bouillabaisse Fillet of lemon sole dugléré Poached Turbot beurre blanc Pommes á l'Anglaise Buttered spinach with garlic	<b>Lesson 3</b> <b>Fish Cookery (dry methods)</b> Grilled sea bass Grenobloise Fillet of sole a l'orly Baked salmon Coulbiac Tempura of vegetables Pommes Amandines	<b>Lesson 4</b> <b>Individual Cookery</b> Spinach Veloute soup with goat's cheese quenelles. Herb-crustè rack of lamb with tomato farci Pommes Fondant
<b>Lesson 5</b> <b>Shellfish Cookery</b> Scampi Provençal Coquille St Jacques Mornay Sauteed Squid with olive oil, garlic and parsley	<b>Lesson 6</b> <b>Stewing and braising</b> Navarin of Lamb Jardinière Spiced slow-cooked lamb shank Jardiniere of Vegetables Pommes berrichonne	<b>Lesson 7</b> <b>Sauté</b> Sauté of Beef Stroganoff Tournedoes Choron Supreme de vollaille maryland Rice pillaf Saute onions, mushrooms and grilled tomatoes	<b>Lesson 8</b> <b>Sauté and roasting</b> Poulet Sauté Hongroise Roast Duckling a l'orange Quail, wild duck, rabbit Pommes Macaire and carrots vichy
<b>Lesson 9</b> <b>Large roast joints and Accompaniments</b>	<b>Lesson 10</b> <b>Pasta and Rice cookery</b>	<b>Lesson 11</b> <b>Vegetarian Cookery</b>	<b>Lesson 12</b> <b>Exam</b>

### Question 9

Having reviewed the module content for kitchen and larder two in your opinion what modifications would you recommend?

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### Kitchen and Larder 3 (4 hour practical class)

<p><b>Lesson 1</b></p> <p>Russian Salad, Avocado with lobster, mango and pepper salsa/mango and spinach</p> <p>Consommé Brunoise</p> <p>Darne de Saumon pouchees, Sauce</p> <p>Moussiline</p> <p>Asparagus Sprue,</p> <p>Pommes a l'anglaise</p>	<p><b>Lesson 2</b></p> <p>Goat Cheese Tartlets pesto sauce and</p> <p>Caramelised Salsify, pesto</p> <p>Black Bream with basil and pea's 'bonne femme'</p> <p>Lemon mash potatoes</p> <p>Carrot &amp; Turnip Puree</p>	<p><b>Lesson 3</b></p> <p>Fried butterflied sardine fillets, Warm soured herrings</p> <p>Soup roux based tomato</p> <p>Fillet of beef with a gratin of mushrooms and potatoes</p> <p>Carrots Glacées, Pommes Anna</p>	<p><b>Lesson 4</b></p> <p>Loin of Lamb with apricot and cumin stuffing</p> <p>Seafood chowder</p> <p>Pommes Fondant</p> <p>Cauliflower mornay</p>
<p><b>Lesson 5</b></p> <p>Pan fried halloumi cheese with crispy salad leaves aubergine relish</p> <p>Breast of Duck a L'orange, and sauté new potatoes</p> <p>Confit duck legs, creamed lentils</p> <p>Braised Cabbage with smoked bacon and peas</p>	<p><b>Lesson 6</b></p> <p>Carpaccio of Beef with roast Aubergine and Balsamic vinegar</p> <p>Butternut quash gnocchi</p> <p>Lemon sole en papillote with red chard</p> <p>Pommes Noisette</p>	<p><b>Lesson 7</b></p> <p>Chicken roulade (served hot or cold with appropriate sauce of your choice)</p> <p>Braised Rabbit à la bourguignonne</p> <p>Mixed turned vegetable sauce beurre blanc</p> <p>Champ potatoes</p>	<p><b>Lesson 8</b></p> <p><b>Italian Cookery</b></p> <p>White bean and noodle soup</p> <p>Antipasto</p> <p>Risotto con porcini</p> <p>Osso Buco alla Milanese</p>
<p><b>Lesson 9</b></p> <p><b>Spanish Cookery</b></p> <p>Tomato Bread, Alioli, Calcotada, Catalan Fish Stew, Patatas Brave, Grilled Vegetables, fried prawns, fried squid.</p>	<p><b>Lesson 10</b></p> <p><b>Thai Cookery</b></p> <p>Tom yam, golden purse, duck in red curry sauce, crispy prawns, pad thai, green curry chicken or vegetable.</p>	<p><b>Lesson 11 Irish cuisine</b></p> <p>Dublin coddle, Irish stew, beef and oyster in Guinness stew, seafood chowder, boxty, colcannon, soda bread, potato cakes, scones, supreme of salmon with leeks and smoked bacon cream, salad of black pudding with red onion jam and caramelised apples.</p>	<p><b>Lesson 12</b></p> <p>In class examination menu to be given 2 weeks in advance.</p>

### Question 10

Having reviewed the module content for kitchen and larder three in your opinion what modifications would you recommend?

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### Major Hot 1 (5 hour practical class)

<b>Lesson 1</b> Preparation of stock, sauces and glazes	<b>Week 2</b> Escalope de foie gras et St Jacques au Sauternes  Roast barbury duck with port and orange sc pomme fondant red cabbage	<b>Week 3</b> Marinated Mackerel diamonds  Tornado Rossini	<b>Week 4</b> Beetroot and Basil consommé  Omelette au foie blonds
<b>Week 5</b> Lobster with white port and angel hair updated  Pan fried fillet of sea bass with golden potato scales	<b>Week 6</b> Aromatic Duck Sweet & Sour Dressing Monkfish in a shellfish crust with carrot sauce	<b>Week 7</b> Plaice Amiral Venison Roe deer dish	<b>Week 8</b> Oxtail tortellini & Guinea Fowl
<b>Week 9</b> Goat Cheese Parcels Trio of pork	<b>Week 10</b> Students are given ingredients to create dishes	<b>Week 11</b> Students are given ingredients to create dishes	<b>Week 12</b> Students are given ingredients to create dishes

### Question 11

Having reviewed the module content for hot major one in your opinion what modifications would you recommend?

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**Major Hot 2 (5 hour practical class).** After lesson 6 students then freestyle with specific ingredients with conditions attached i.e. which course the ingredients is to be used for and or to prepare an amuse bouche selection etc. The ingredients' will change from year to year depending on what's in season.

<b>Menu 1</b> Hareng a la Deippoise Bisque Selle de Lapin au prenaux Pomme fondant Mange tout	<b>Menu 2</b> Salade Niciose Consomme de queue de beuof clair Coulibiac de Saumon Chou-fluer Milanaise	<b>Menu 3</b> Ris de Veau á la Cévenol Minestrone Plie Franche á l'Anglaise Pomme Pont Neuf Pointes d'Asperges	<b>Menu 4</b> Quenelles de Brochet a la sauce Nantua Consommé de Volaille Salmis de Faisan Polenta Haricot Vert Carottes glace a brun
<b>Menu 5</b> Gazpacho (amuse) Oeufs á la Forestière Carré d'Agneau Printanière Pomme Parmentier Salad???	<b>Menu 6</b> Moules a la Mariniere Veloute Doria Confit cuisse de Canard,Sauce, Sauce au Porto Pomme Duchess Salsifis au beurre		

### Question 12

Having reviewed the module content for hot major two in your opinion what modifications would you recommend?

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## Appendix 12: Transcript of Lecturers Interviews

### Interview with Lecturer One

**Interview Duration:** 26 minutes

**How long have you been teaching on the BA in Culinary Arts?**

I've been teaching on the BA ten years now.

**What modules do you teach?**

I teach the third year Hot Kitchen Major and fourth year Hot Kitchen Major.

**Okay. What do you think of modularisation?**

As a whole it has its merits. How could I say it's great that students come in and do an intensive module for a few weeks and then walk away from it and concentrate on something else? It makes it easier for them but from a continuity of a learning point of view I find that sometimes they may not have done a module last year and they could be six months or longer without being in a kitchen and stuff and it can really show on them when they come into class then. Do you understand what I mean?

**Yeah and what do you think of modularisation regarding the hot kitchens?**

I think they're good. I think I'm more fond of the fourth year major than the third year major.

**Why?**

Because I think maybe because I've more control over the fourth year major than I have over the third year one.

**How do you mean more control over the third year one?**

The third year major now there's three groups doing it and there's two other lecturers teaching on it whereas when it was originally written, it was written as an elective and I controlled the elective solely. I felt I was able to do a better job could you say and prepare them better for fourth year because once they came in on third year they had to stay with me for fourth year. Now I've got people coming in on third year and they vanish into pastry or larder in fourth year and then in the fourth year group I end up with people from the other groups that I don't know. I don't know they're strengths, you know that kind of way.

**Yeah.**

So and I think a lot of them find because they don't know me when they come into fourth year, they could be at a disadvantage in the fourth year major.

**Right.**

Because everyone teaches in a different way. Everyone has their own style and say Dermot and George for example could do things a little bit different to the way I could. In third year for me its very much teacher led now, okay and in fourth year its student led. When I wrote the third year major originally it wasn't, I didn't want to have it so teacher led, I wanted it to be student led.

**In the third year one?**

Yes I wanted the third year major to be student led, facilitated by me because I think when they're student led at a higher level you'll get more positive results from the students because they have to work and they have to work really hard to make something happen whereas I find in the third year major I'm working really hard to make things happen.

**Okay.**

And I find I'm doing far too much for the students.

**Okay.**

I don't feel that they're doing enough and that's not their fault. That's just the way things are at the moment.

**Right. Were you involved in creating the modules you teach?**

I was. I wrote both of the modules, the third year Hot Kitchen Major and the fourth year Hot Kitchen Major.

**And have you been involved in any updates and changes to those modules?**

Yes. Originally the written work was fifty percent of the module and now for example its twenty-five because I just felt that it's really about the skills and the cookery and the food. That's where your marks are whereas I couldn't really justify giving people fifty marks for a project at the end of the course. Do you understand?

**Okay.**

I didn't feel it was fair to the very talented people. It's a performing arts module primarily.

**Hmm...**

It's not a written, you know, it's not a written module. That's not what it's about, you know.

**Hmm...**

Even though the portfolio was incredibly important especially in fourth year. I think it's really important because it's a reflection of somebody's culinary style on paper and like whatever about, I'm in the kitchen and I see what they do and I taste their food and all that kind of stuff but like after that nobody else gets to see what they're doing. So at least the portfolio gives them a chance to convey it to somebody else. This is what I did when I was in college and these are the photographs of my food and these are my recipes. So it's a quite comprehensive document in that respect and it's a valuable document that they can use when they leave here. They can use it when they go to job interviews and stuff.

**Hmm...**

And now on other courses in Ireland, nothing to do with culinary arts, like any performing arts element, other people are doing portfolio stuff and they are using them for when they go out into the world of work to display to potential employers that this is what they can do, you know.

**What teaching techniques do you use for the different years? So what do you use in third year, like portfolios, reflection, HACCP plans? What type of research you require?**

Well basically for the third year major I've, at the moment now what I'm doing is I'm looking at contemporary cookery from various people of note. Like for example Marco Pierre White or Gordon Ramsey, people who've published good, really good cookery books and have worked at a very high level in the catering industry. I'm trying to use their recipes. Now I manipulate them and try and make them easier for the students. I rewrite them. Like Gordon Ramsey could write a two hundred word recipe. I could turn that into a thousand words, you know, recipe when I'm finished with it to try and make them understand because they leave out so much and they leave loads of gaps. I can see all the gaps but I know the third years can't so I'm trying to fill in all that kind of stuff so they get a positive outcome. It's very important for me in a class that we get positive outcomes. If we don't get positive outcomes, I'm really unhappy because I feel they haven't seen things done the way it should be and it's a very short space of time and the twelve week module is very short so I'm trying to make it as positive as I can for them. I know that makes a big impression on the students, you know.

**Okay and in third year what do these portfolios, what do you expect? What teaching aids do you use?**

Yeah well basically it's a continuous assessment module, however, the last three weeks of the module is really where the students get to start to cook their own food and they start to write up their recipes and stuff. For the first eight weeks or so of the third year major I'm kind of giving them the notes and they're doing their food but the only thing is there's so many of them in the groups as well, they're cooking in groups rather than individually. I'd like them to be cooking on their own but I can't. I can't do that.

**If you're giving them the notes then are they doing any research on the notes that you give them?**

Yes they're supposed to read up on ingredients and techniques and the actual ingredients to understand like for example if we're using scallops, they have to read up on how to use them, look at other recipes and stuff and that kind of stuff. Now I find the students are not, well some of them are, but I find a lot of them aren't really doing as much work as I'd like them to do.

**Do they have to produce that as a written research?**

Yeah they yeah at the end of the...

**Right.**

And that's all. It's very simple really, you know, there's nothing too it like.

**So at the end of the module they will have a portfolio that will have written work.**

Oh yeah and photographs of everything that they've done.

**Hmm...**

Now the other thing I find is that the students are actually taking photographs of other people's material and putting it into their projects which is a problem.

**Is it?**

Oh yeah.

**Right, okay.**

And it's very hard to police that. It's just that sometimes they use my photographs. They'll use my work and put it into their, like I'll have done something and someone will take a photograph and stick it in their project.

**Okay. So do you use anything else in third year?**

HACCP plans and all that kind of stuff, no. Like the way I take all that as a given. They've done first year and second year. They should know HACCP back to front.

**Hmm...**

And costings and stuff I'm not really interested in either. Really what I'm interested in is really fine cookery. That's what it's about and because it's a short module I want to concentrate all my efforts into that area.

**Okay and what about the fourth year?**

The fourth year major is basically it's a step up from a third year major. Obviously at least we still have an open kitchen in fourth year so the students are going in at nine o'clock on a Thursday morning and doing a class for three hours. In fourth year they all work on their own. There's no group work whatsoever. The students, so they



have to perform. They have no choice, you know, it's like do or die and it's the way it has to be because it's the only way you can really see where somebody's at. In fourth year I don't give them any recipes. I just give them classical references from Escoffier and I ask them to look at them and to try and produce menus or dishes from those classical menus in their own culinary style, a tall order. It's a big ask.

**Hmm...**

You know but it makes people sit down and think and plan and at the end of the day people might say you're, you know, that's very hard and very tough but I mean that's how you learn, you know, when you have to do something and you've no choice and no one else is going to do it for you. You have to learn and I can really see, you know, people's strength and weaknesses then. That's when the real, it's the real thing at that stage, you know. So that's basically what happens for the first eight or nine weeks of the fourth year major and then for the last few weeks I'll just give them lists of ingredients and I'll tell them like, you know, if there's squid on the list, the squid is to be used as a starter. If there's duck on the list, the duck is for the main course. You know I'll give them a little bit of direction, tell them what courses I want, what ingredients are for what and then they do their own thing from there and then they photograph everything and they write up all the recipes for that and they also write reflections on every week. So if they get positive outcomes they say they got positive outcomes and why they got them and if they got negative outcomes, they also can learn from that. I'm a great believer in Donald Shuld effective practitioner whereas he believes that like positive or negative outcomes are still, you still learn from those, you know, so that's where I'm going on that. Now I know from feedback from students that have went through third and fourth year and have done reasonably well and some of them do really well and get first class honours, that they have found it really beneficial to them. It's really made them think. Like I'm trying to make people think. That's one thing that the students I find are very weak. They don't think for themselves. They want everything done for them so I'm trying to make them think and I'm trying to make them plan and I'm trying to make them look at quality. If they are looking at, like I don't expect people to be geniuses and come up with recipes originally. I want them to read around the subject so if they want to read up on Marco Pierre White or Nico or anybody it doesn't matter once its quality stuff and they can manipulate it and change it and make it their own. That's learning, you know, and that's positive so like basically I'm trying to facilitate that and luckily in the last ten years every year we've had a couple of really, talented, strong people so I know I'm doing something right there. So I'm going to keep at that. I'm not going to change that module. I don't think I'll ever change that module in fourth year, you know.

**Perfect. Do you confer with other colleagues regarding the module delivery?**

Well I have to confer with Dermot and George from time-to-time about the module delivery, you know, on what ingredients were used and what week we're using them because we're trying to do the same, we try to do the same thing with the three groups of third years but having said that I understand everybody has an artistic bent and flare and everyone's trained a little bit different and at the end of the day culinary arts, it really is, you are an artist at the end of the day. I know you're a chef and all that kind of stuff but, you know, you can't, I can't control Dermot and George and I know

they can't control me so I've got to give people, you know, a little bit of slack or whatever, you know, creative space, you know. Does that make sense?

**Yeah. What's your opinion on the Hot Kitchen modules for the different years?**

I think they're good. I think the first year, I don't really know that much about them. I know its just basic kind of classical cookery. So I think they're good modules its just that the biggest problem I have when I get them in third year is their motor skills are not as good as I like them to be. Like their ability to say cut julienne or do (13:58) fillet of fish, do larder work is quite poor. Some of them actually, I'm actually flabbergasted when I see some of them, some of their work especially with the first couple of weeks of the third year major. They've got blunt knives, they're uniforms aren't, you know, they're not clean. The, you know, I don't know what's happened to them over the last two years. I know when they're in first year they're all as bright as a button and they're going around in their full uniform so I don't know what happens between first year and second year and then they get into third year and they look like a bunch of conscripts in the kitchen and then I have to pull everybody in again and that frustrates me to no end I can tell you.

**And you don't know why this is?**

I've no idea.

**Okay.**

I think a lot of them on the Culinary Arts Degree, a lot of the students are not interested in being on the degree. That's what I think. I don't know why. I mean because I can't understand that because I love food and my life is all about food. It's devoted to food. Its like, I think about a lot of things but I think about food a lot like and I feel I'm always learning. I never stop and I mean even silly things like you look through an interior design magazine and they'd be a thing at the end from some chef or whatever, someone who's probably quite good and I go wow look at that, you know, I didn't even know it was in this magazine and I'll sit down and read it and make some notes and stuff. So for me I think you've got to be passionate about the culinary arts to excel in them. Its like anything, if you want to excel at golf you've got to love it, you've got to really want to, you've got to want to make it happen and I feel and its not a and I don't want to put the students down but I just think maybe a lot of them are on the Culinary Arts Degree and maybe its not the degree for them. I don't know what they're going to do when they leave the college as graduates but the only good thing about the culinary arts as a whole is, it's a diverse industry and there's places for everybody on that, you know, so (phone rings).

**Okay. Are you aware of the learning outcomes and do you adhere to them?**

Yeah. I mean it's simple really. I want people to come into class, look at the classical references or the notes that I've put up on the R Drive. I want them to read them. I want them to plan, carefully plan before they come to class what they're going to do. If its third year I want them to read all their notes and make sure they know what we're doing when they come in that day and if they don't understand something they can go and find out about it and for the fourth years who have the classical reference

from Escoffier, I need them to sit down, write their recipes out, you know, come up with their ideas and what they're going to do, carefully write their stuff down, come in and do their session in class. Photograph what they've done. They spend a bit of time with me evaluating their food with you know both of us will have a look at what they've done and then afterwards they'll write up a reflective account of how it went, you know, and if it didn't, like I said if it was positive or it was negative, and why it was negative and things likes say for the fourth years a lot of them have problems with making sauce and stuff and you know they might greasy or dirty or they're not reduced properly, you know, and I'm trying to, you know, I'm trying to tease it out of them over the weeks to get them, so when they get to the end they can do it really well, you know, like going back to third year I spend a day making...

**You'd gone off on a tangent now and we're only looking at learning outcomes.**

Okay.

**Okay.**

No, no, yeah but did I answer it properly?

**Yeah.**

I did.

**What additional learning outcomes would you add if you were adding any to Major 1 or 2?**

Well I don't really, I don't, I think I have, I've covered that. I don't think there's anymore I can do with it. I don't want to make it so that there's too much, you know. Like I said to you I'm trying to keep things simple. It's just about quality and...

**Okay.**

You see for me it's not just about the food that ends up on the plate. Its how it arrived there, you know, that's quite important to me.

**Hmm... What changes would you make to the course content on the modules you teach or would you make any?**

I'd like to have a look at the third year Hot Kitchen Major again. I think that needs a bit of work and I find with two other people teaching on it, its very hard to change, very, very difficult and with budgets constraints that we've had, the amount of students that are in the classes, it's a really tough nut to crack.

**And what kind of changes would you like to make to it? Like reduce the quantity, increase the quantity?**

I'd like more time.

**More time.**

I'd like more time. I don't feel they've enough time. We don't really have an open kitchen anymore. You see when I wrote the third Hot Kitchen Major, I basically wanted individual students to look at contemporary chefs and come in and emulate their work over a twelve week period and I did that for the first few years when it was an elective and then when it became a core module and there was other people teaching on it, I couldn't do that anymore because the orders were truly enormous and the Stores wouldn't have been able to cope so we had to change it. So we had to look at contemporary cooking and give them the notes and get them to come in and do that. Now all the ingredients are expensive and the dishes are complicated and technically difficult. I pride myself on exacting standards of mise en place and plating up and taste. There's a lot of elements involved in putting a really good culinary arts dish together, a beautiful dish. It's a very difficult thing to do. I take it for granted because I can do it and it's not a problem for me but I know its very difficult for young children, you know, young students that haven't got a huge amount of experience to copy that, you know.

**Okay.**

But I'm trying to facilitate that as best I can. Like I said its very much teacher led in third year because I'm actually trying to teach them.

**Hmm...**

It's only for the last couple of weeks that I stand back and go right come on, show me what you can do?

**Okay. Do you think the modules need to be reviewed?**

I don't think the fourth year module needs to be reviewed really. It doesn't. If it's left alone as it is its fine. It's a great module. The third year module needs to be reviewed. It needs to a little bit of tweaking up, you know. I think we need the open kitchen back for the third year major to make it really what it is. I mean I just don't have the time. It used to be a six hour module, now it's a five hour module and there's no open kitchens. So they don't have time to be making stocks and reductions. The stuff that I want to see in the kitchen is not happening for me, you know, so.

**Okay. What assessment techniques do you think should be used for the different modules that you teach?**

Well we have the portfolio at the end. That's twenty-five percent and the rest was continuous assessment. Like say its continuous assessment every week, I'm not sure there should be continuous assessment for the first six weeks because I'm just really trying to get people into my way of thinking about cooking. There probably should be no assessment as such but I think maybe, I don't know whether it's silly or not but like an attendance should be part of the assessment. So if you miss two or three of the sessions because its only twelve sessions like, you know, that should be, you know, that should be taken into account because how could you learn when you're not there, you know. Like eighty percent attendance is required so if they missed one or two classes they technically fail the module. That doesn't happen here, you know.

**Okay.**

We're not strict enough but that's the bigger picture I think coming into play.

**Do you think that the Hot Kitchen modules should run concurrently, in other words, that they do Kitchen and Larder 1, Kitchen and Larder 2, Kitchen and Larder 3 in Semester 3? Major 1 in Semester 4.**

I don't know because when they go out in the summer they learn so much. I mean you could meet people that have done third year with me and they'll go to Italy or France for a couple of months and work in a Michelin Star restaurant and then they come back to do the fourth year major with me and I can really see that they've grown and I think they need time and space in that respect. So I think because it's spread out over the four years, I think it brings out the best in them. The ones that are interested, you know, I think if you rushed it and put it all into first, second and third year its going to be information overload and they don't get time to practice. It's all very well bringing someone into a cookery class and showing them how to do something. You need to be doing things over and over and over again at a high level, you know, to get, to be, you know, confident and capable of doing them. These things are not easily done, you know and I know that from a fact. Like I've been cooking twenty-five years, you know, maybe I was a fast learner and you know at a young age I was quite capable but I know people learn at different rates, you know.

**Do you see a difference between...? In second year they do a five week internship.**

Yeah.

**In third year they do a twelve week international internship. Do you see a difference?**

Oh yeah without a doubt. I mean the twelve that's great like especially if they go to a good kitchen and it's like strict and they're disciplined and obviously if they want to learn. If they don't they probably wouldn't last in a place like that but yeah for sure. Five weeks, you're only settling into a place and you're finished, you know and a lot of professionals out there when they know someone is only there for five weeks they probably won't bother with them as much, you know. They won't give them as much of their time that they should maybe because they don't feel... You have to remember it's a two way street, like you get a good chef in a kitchen he's not going to show all his secrets to some fella in five weeks and he knows is just going to walk away. You know it doesn't work that way.

**What assessment techniques do you think should be used on the modules you teach?**

I am happy with the assessment techniques I use at the moment.

**That's it thank you**

## Interview with Lecturer Two

**Interview Duration:** 14 minutes

**Okay how long have you been teaching on the BA in Culinary Arts?**

Seven years.

**Okay and what modules do you teach?**

The BA Three, the Hot Major 1, the Immersion Programme and have done the theory as well.

**The theory for...?**

The second year.

**Kitchen and Larder 3.**

Kitchen and Larder 3.

**Okay, what do you think of modularisation?**

I think it's good for a Culinary Art's Degree, for a degree programme it's appropriate but not for a chef's course but this is appropriate to a degree programme.

**Okay but in relation because I'm only interest in hot kitchen modules, so what do you think?**

Alright.

**That's all I'm interested in. I'm not interested in a degree.**

Ah right.

**I'm only interested in the hot kitchen modules.**

To sure to them, no, in that particular case.

**Hmm...**

Yeah.

**Okay, twelve weeks is too short.**

The way I look at it is I don't do the first year but we need a few of us to get together to look at the progression to what should be in and I know in the second year and the third year in particular. There are certain skills they need, so I'd need to see what's

going on in the first year first and second year, you know, really. Again it's a degree programme, its not focusing on chefs so the content is good. Then getting back to the actual question, what do I think of modularisation? I mean the fact that you have twelve weeks set is good so you can focus on something specific in it, you know, as opposed to going off on the thirty-six week course for example. So I'll leave it at that. It has its pros and cons but I think I'd be more pro.

**Okay. Were you involved in creating the modules you teach?**

Some of them, yeah, after a couple of years.

**As in did you write the modules for Kitchen and Larder 3?**

I haven't written the modules for Kitchen and Larder 3.

**Or Major...?**

I haven't written the Major 1. That was done seven years ago.

**Okay. Have you been involved in any updates of those modules?**

Yeah.

**Yeah.**

Yeah. So whatever updates were taking place, that's obviously between, particularly in the BA Three which was a team effort.

**Hmm...**

On the Major it's left to itself. Individual lecturers and that's based on teaching methods.

**Right.**

Preferential teaching methods.

**Okay. What teaching techniques do you use in the different years between say second and third year, as in portfolios, HACCP plans?**

Well its portfolio. Its in second year I prefer more, I don't know if its my preference that I prefer group work as in working in two's and three's and that developed more because of the resources, more than anything else but they learn more from each other, talking to each other in that stage and I'd rather they do that in second year and then in third year they take a more independence stance with themselves but yeah the portfolio we use, I think is very good.

**Okay.**

Obviously we do continuous assessment there as well.

**Hmm...**

I like to include formal tests particularly in third year.

**How do you mean?**

We have continuous assessment but at the end of, much like our formal exam at the end but have a mid one or maybe two...

**Practical...?**

Two practical mid ones yeah.

**Okay.**

And the portfolio is the only way you can actually achieve assessment within a practical element because there is no theory for third year.

**Okay.**

There's no theory module for third year so continuous assessment, formal test, practical portfolios, obviously the HACCP plans are all in there and food costing.

**Okay. Do you confer with other colleagues regarding the module delivery?**

There are team efforts in some modules and individual efforts in others and that again boils down to whoever wrote the modules and how willing they are to diversify I guess you could say it. The BA three is pretty transparent.

**Kitchen and Larder 3.**

Kitchen and Larder 3, yeah.

**Hmm...**

The Major Hot Kitchen, that really depends on teaching techniques. I have a different teaching style.

**Hmm...**

A completely different teaching style and there are two other lecturers as well and they have very different teaching styles.

**Hmm...**

So for myself I always, it has to be relevant to industry at that level. They're in third year. So I'll go into industry, I'll go to the top restaurants, I'll see their dishes, watch how they're done, get the recipe from the chef of the restaurant like Chapter One, like Derry Clarke, like Guilbauds and I'll bring those dishes in as long as I know the students are capable of doing them and that would be the focus. Now the outcomes of



the module actually state that it has to be an author, recipes from a book so I've chosen books like...

**I'm going to ask you if**

Alright. So basically that's how I achieve the dishes.

**Okay.**

Now the dishes will always relate to the outcomes, to the skill outcome so the dishes will never be the same.

**Alright. What's your opinion on the hot kitchen modules for the different years? Do you see...?**

I think there's more of a team effort needed. What hasn't existed in the seven years that I've been here is that all the lecturers who teach on all the years have never got together in that time, maybe before they have, to see well what is the progression now after seven years. What's the progression from level one to level two? What is it we want to achieve here? So its kind of like the re-evaluation of the programme. Now perhaps that happens at course committee level but we're not invited to any committee meetings so therefore that can't really take place, you know, so its difficult to answer because you're never part of, there's a lot of individual, a lot of individuality around it.

**Okay. Are you aware of the learning outcomes of the modules you teach and do you adhere to them?**

I am yeah. Yeah I do. You can be creative in how outcomes are reached.

**Hmm...**

As I said they typical example there was the Major 3 for example. If I see, if I think, if I believe its not appropriate, if the outcomes is that it's a published author, a recipe that must come from a published author. That's fine, that's one of the outcomes but we mustn't be restricted to a specific published author.

**Hmm...**

We should be looking at skills and techniques still at level three, so therefore instead of taking anybody who's published from England, Germany, Switzerland, why not do it amongst the guys who we're going to send the students to who have published books.

**Hmm...**

Now it may not come from, specifically from that book but its comes from their Michelin Star restaurant but there is books available like Zest which is a combination of all the recipes from all of the chefs around Ireland and the Dublin area.

**Hmm...**

And the recipes are fantastic. They're proven to work.

**Hmm...**

And so the outcomes are achieved in that sense.

**Is there any additional outcomes that you'd suggest for the modules you teach?**

Just before I answer that I think one of the most important things is their outcomes here have changed due to resources in kitchens. So that's a huge factor. So when I started the outcomes were fine, there was enough equipment, there was enough resources for each individual student to achieve the outcomes. You see it's not my outcomes it's the students outcomes but now due to resources and financial constraints and whatever none of the outcomes have actually physically changed in writing yet but the course content has, the hours as such have had so that's an important factor to make. So that's one thing that should be changed.

**Okay. What changes would you make to the course content on the modules? In other words what's done in classes? Do you think there's too much in Kitchen and Larder 3? Not enough? Are we not focusing on skills?**

I think Kitchen and Larder 3 is fine but do we emphasise the skill that's involved or do we emphasise the theme behind it.

**Hmm...**

I think it is fine. I think there should be a little bit more larder elements. If you ask me what I'd change or what I see there. Third years I'd promote industry dishes rather than just these published dishes because it's relevant and you say this is from x restaurant by x chef. It's promoting them. They're always looking for placements. They're always looking for a new place to go to. I have industry chefs coming into my classes from industry demonstrating their dishes. The students absolutely love it. Love it, it's part of the class. It creates a whole new learning kind of feel as well. I would like to see chef demonstrations in there once or twice where they can demonstrate four or five dishes and then the following week they can actually repeat those dishes so there's a lot more, you know, to take on and that's in third year. More relevant research techniques in second year I think are needed because the standard of research for them to write their portfolios in second year is very, very poor so there's something missing there.

**Hmm...**

And then that's not to do with the content of the hot major or sorry the Hot Kitchen but it seriously affects the outcome of it so therefore.

**Hmm...**

I'd have more Larder work in there. I'd have Larder in first year as a module and I'd get rid of the Larder in third year as a module and have Kitchen and Larder as opposed to Hot Kitchen because they are doing Kitchen and Larder and in the Larder module in third year they're doing more Hot Kitchen than they are larder work.

**Right.**

So rather than give them specific larder work in first year or second year and then eliminate the larder completely because progression from, if they take an option in third year to do larder, what they do in fourth year is really very little difference so rather keep the larder option for fourth year.

**Hmm... Okay. The modules you teach, do they need to be reviewed in your opinion?**

In my opinion all modules should be reviewed, every single year regardless.

**Okay.**

But as a team, as an overall team, not just as a module team.

**Okay. What's your opinion on the timing of the modules? Should they run concurrently or as they are?**

Explain what you mean exactly now because as they are?

**In Semester One they'll do Kitchen and Larder 1, in Semester Two, they do Kitchen and Larder 3, in Semester 3 they do Kitchen and Larder 3, in Semester Four they would do Major 1 and in Semester Five they would do Major Two. In other words they'd have no internship. They would only have had five weeks in five year, the five weeks in second year. They wouldn't have done the international internship or do you think the modules should be more spread out so that they're getting internship before...?**

I don't think they should go on internship until they're finished Kitchen and Larder 3.

**Right.**

And that's from close contact with industry and not just one or two places. I'd go round ten or fifteen places and they will always identify that. They said they'd rather have nobody and just wait until they're finished their Hot Major in third year, until they have a placement or at least second year. They'd like to see them finish two years of training before going out.

**Okay.**

And I tend to agree with that based on what we see coming into the Kitchen and Larder 3. They're not equipped or ready for it.

**Hmm...**

There will be a couple who can but I believe we can equip them a hell of a lot better and then send them out but this first year, sending them out in first year I think is just not any good for anybody.

**Okay. Can you see a difference in the students between second year and third year when in second year they've done a five week internship and then they come into you in third year.**

Yeah.

**You do see a difference?**

Absolutely.

**Okay.**

Absolutely, hmm...

**Do you think the students should do a longer internship in first and second year, longer than five weeks?**

Well as I said I don't believe they should have an internship in first year.

**Yeah.**

The end of second year, the longer the better.

**Okay. What assessment techniques do you think should be used to assess the modules?**

I'm happy enough with the existing techniques.

**Okay.**

You know. Within the theory, yeah there's a more formalised. I don't think we cover pretty much everything we do. Portfolio, continuous assessment, formal practical, formal theory and I don't think we can really cover anything more.

**Except for theory, nothing really in third year.**

Yeah. So what we do is we do our best to include whatever knowledge should be applied in the portfolio.

**Thank you.**

## Interview with Lecturer Three

**Interview Duration:** 17 minutes

**Right. How long are you teaching the BA?**

Since the offset, I think in 1999/2000, that year.

**Okay.**

So that's around twelve years or so now.

**Okay what modules are you teaching?**

I teach on Kitchen Larder 1, Kitchen Larder 2, Kitchen Larder 3. They're the main modules I teach, both theory and practice.

**What do you think of modularisation?**

I'm not, I think we had a better system it because there were more, well we had more hours and we had more time, as in when modularisation came in we were cut down from fifteen or thirty teaching weeks to something like twenty-four teaching weeks, so there was a big loss there and also we lost on hours because there used to be two five hour classes so there was ten hours a week and then that reduced then to four hours a week.

**Okay. Were you involved in creating the modules you teach?**

Not really because what had happened is that a number of people took on certain modules when modularisation was starting and you know as I say fifteen people or thirty people or ten people can't write a module or so it was left, you know, some people took responsibility for certain modules and they wrote the modules as such but you know the general jest around the module is that we all cover but it tends to be different.

**Have you been involved in any of the update of the modules that you teach in?**

I have been involved in updating what I teach but I haven't necessarily been involved in updating the module and one of the reasons for that is that's something I disagree with. It is the fact that there was a push by management a number of years ago to try and make these modules generic and these same modules, the modules that were designed originally for the Culinary Arts Degree course were being taught across certificate courses and other courses and I fundamentally had a disagreement with that because I didn't believe that you could teach the same module at a degree course as under certificate courses and that there should be different learning outcomes or higher learning outcomes if its at an honours degree course, a level eight than something that's taught at a level seven or a level six but that I had no control over

that. I just made sure that on the level eight programme that I was teaching within the BA in Culinary Arts itself, that what was delivered was delivered to a level eight standard with the philosophy of the course behind it.

**Okay. What teaching techniques do you use in the different years?**

A number of techniques. We start off by as in we give out a broad outline of the dishes we'll be doing each week. I expect the students to research those dishes. They are not tied in to any one publication or any one textbook. The idea behind that, the philosophy is that they research broadly among different textbooks and that they come in and it means that different people could do two or three different varieties of the same dish depending on which cookbook they looked at and that we would discuss it and compare and contrast and we ask the students then to sort of come up with what they taught was the best or worked best for them. So they keep that as part of their portfolio. They do their research. We ask them to research around the area if we were doing a dish on vegetables, like if we were doing starting off with the cuts of vegetables. We ask them to research around the, you know, the theory of vegetables and that sort of stuff and etc, etc. Another technique we've developed as well is actually giving out; this is more for Kitchen and Larder 2 and Kitchen and Larder 3, where we actually give out a list of vocabulary, sort of what I call culinary vocabulary which is linked into the topics in that they're doing each week. So they need to go away and independently research that and have that in their portfolio. Reflective practice, part of the fundamental philosophy of the course is to develop reflective practitioners, so I ask students at the end of each class as such when they go away to actually reflect on what they learnt? How they learnt? What was good? What was bad? Why something worked or why it didn't? Ask to analyse equally what worked and what didn't so that they can make changes in the following time. I ask them also to do a costings, this is something we developed over the years because there used to be a separate food costing module but with modularisation that got cut, so we decided to work that into our modules as well so that students would be aware of the cost of food and also the idea of a profit and selling price as such. So in first Kitchen and Larder 1 I ask them just to actually cost one dish and as part of that we ask them to actually put the raw materials or the ingredients in whatever language they're doing, whether its Irish, French, Italian, Spanish, so it means that its sort of language, that they're working. They're making the link between modules.

**Okay.**

In a Kitchen and Larder 2 I ask them to come up, you know, a portion, a cost per portion and in Kitchen and Larder 3 I ask them to come up with a selling price, giving a seventy percent gross profit margin, so that you're building on bit by bit as we're going. I suppose what other techniques is the question. Is what techniques we use. I normally have one person associated as a head chef each week so as that they learn about delegating duties and taking responsibility and seeing how a class works. You know we would look at HACCP and making sure that everything is stored properly and that sort of stuff and I think I do a certain amount, naturally you do a certain amount of explanation and a certain amount of demonstration within each class and then one of the techniques is at the end of the class I sort of bring them around in a circle and ask them what did you learn today or ask them about different questions

just to reiterate what was learnt. So I suppose tell them what you're going to do. Tell them and let them do it and then tell them what you've done. (Laughs).

**Okay. Do you confer with other colleagues regarding module delivery?**

I do as in I work in a close team with the first and second year on kitchen, yeah first and second yeah which is Kitchen and Larder 1, Kitchen and Larder 2, Kitchen and Larder 3 with my colleagues who I teach that with. Things have changed slightly this year is in that we've taken four groups for the first time so some new lecturers have come in at short notice and it will take another little bit of time for just, you know, for them to be fully integrated within the system that we use to deliver these modules.

**Okay. What's your opinion on the hot kitchen modules for the different years?**

Well for the years or for what I know of them I think that they're quite good. You know its something we've been working on over the years and we've been trying to continuously improve, naturally you know we can always be continuously improving and perhaps we need to maybe engage in a little bit more individual cookery and also maybe in a little bit more of testing at different stages during the year so as that people aren't let sort of be carried by other colleagues, other classmates.

**Okay. Are you aware of the learning outcomes for the modules you teach and do you adhere to them?**

I'm aware of the original learning outcomes but what I've been made aware of recently is the fact that some of the learning outcomes which are on the reviewed modules don't necessarily reflect the scope of what we actually do in the class, so I don't know if that answers your question. (Laughs).

**Hmm... What additional if any learning outcomes would you suggest to be added?**

Off the top of my head I'm not sure how, I'm not how much of the reflective practice is, I don't know whether that's covered as a learning outcome on the modules as they are even though its been a core issue from the outset of the degree in what we're about. There are, I'm not sure, I'd have to look at it, you know, off the top of my head I'd have to look actually at what, you know, what is currently there in the current modules because you see some of the modules that are up on 'R Drive' or whatever have been sort of copied and pasted over a period of time and don't necessarily reflect. They haven't been changed by people who are not actually teaching on the course.

**Hmm... What changes would you make to the course content on the modules you teach?**

Most of the changes I'd make as in I've been making changes as we've been going along, working as a team we have been, you know, adapting and changing them as we go. You know the idea change is to have a bit more time. That would be the ideal change, number one and as I mentioned earlier I think maybe we might go with a little bit more individual work and also a bit more regular testing of students.

**Okay. Do you think the modules need to be reviewed?**

The modules as they stand and I've only been recently made aware of that, what stands for the student to see as in the module that should be delivered, need to be completely reviewed because they do not represent what we actually teach and this is a historical thing because they've been, actually the modules have been change over a period of time.

**What's your opinion on the timing of the modules? In other word should they be run concurrently or left as they are? You know the ones Kitchen and Larder 1 in Semester 1 and Kitchen and Larder 2 in Semester 2 and Kitchen and Larder 3 in Semester 3. Major 1 in Semester 4, Major 2 in Semester 5. Do you think it's good that they're spread out?**

I think its good that they're spread out because there's a logic that you have to do one and you build on it to go into the other so, you know, it is logical for it to happen that way plus I think what we need to be aware of as well as there are a number of other modules which, what's the word I'm looking for? They basically help with them, you know, as in I do a theory of food and beverage module in first semester which sets, helps up, outlines a lot of the theory and sets it up and helps the kitchen and larder modules and also in third year as well they do an immersion module which very much helps them as well because its like an amalgamation of all their hot kitchen modules and their Pastry modules and their management modules and their wine modules into an operation understanding and you know running of a restaurant which is very good. The other modules which seem to make a big difference as well and another thing that makes a big difference to the success of students in the hot kitchen modules is number one, their previous experience before coming to college. Number two is, you know, whether they're working in good places while they're in college and number three then it's the quality of their internship experiences and what we found is that when you combine all of these things, as in, you know, good internships followed by good part-time work, followed by all the other modules coming together that what you end up at the end of the four years is a very well balanced, very capable graduate.

**Okay. Students do a five week internship in first year and in second year and do a twelve week one in year three. Do you see a difference in the students because of the internship?**

Oh there's a real difference to see to see in the students because of the internship. Yeah there's a, and not just that but there's even a clearer distinction because even though it's a five week internship, four or five week internship they do in first and second year, something like seventy or eighty percent of the students are kept on, are asked to stay on or stay on for the summer. So it's like doing a twelve, you know, but they're being paid, you know, so they get, it's like doing the whole summer and the maturity in them as individuals and their skills and that, for those who do it compared to those who don't, there's a huge difference.

**So therefore do you think students should do a longer internship in first and second year?**



Not, you know, not necessarily because I don't think we can force them to. The thing about the internship is that the internship, the first and second year internship is unpaid and there's no way we could quantify them to stay unpaid for a period, for the whole summer. It would have to be a paid internship and that's quite difficult to force them into that so not necessarily but I definitely see the value of it and I can see it in the students. I do encourage all my students to stay on for the whole summer but in paid employment.

**Okay. What assessment techniques do you think should be used for the different modules that you teach?**

Hmm... Again, you know, we use a variety of assessment techniques but to go back to one of your previous questions which hits on this is I don't think that the assessment techniques we use are fully outlined in the module and I think if there was a bit more clarity from the outset, if students understood maybe better from the outset exactly what techniques we use and how they're actually being assessed that we might hold their attention a bit more. We have managed to do this quite well in outlining and stipulating that there's an eighty percent minimum attendance and that has worked quite well because it focuses their minds and you know there is the technique of checking their work, their homework, you know, each week and that seems to work as well that when they're aware that you're actually checking it and reading it and allocating a mark towards it, it works. So just yeah.

**So you don't think the end of year assessment should be assessed by an external assessor or...?**

I think there should be... See we've had a problem over the last number of years particular, are that originally, you know, is that we've had external assessors for the course who aren't actually qualified in culinary arts performance as such. So by the time the external examiner comes to check the module they come when the students have already finished all their practical modules and are out on internship. So they're really only assessing you on your written work and some of them aren't qualified to do that anyway because they don't know enough about it. We've had in the last two, I think we have a food scientist at the moment and we've had an engineer before that. How that was allowed to happen I'm not sure but previous to that we had a guy from America who was very, very good. John Anton because not only was he a culinary educator and had a PhD but he also was a qualified chef who'd ran a number of restaurants in New York for many years. He was very, very on the ball with both theory and practice and I think a bit more of that wouldn't go astray.

**Okay. Thank you.**

## Interview with Lecturer Four

**Interview Duration:** 6 minutes

**How long are you teaching on the BA in Culinary Arts?**

Seven years.

**Okay and how long are you teaching on the modules, on the hot kitchen modules that you teach?**

Three years.

**Three years. How long are you teaching Kitchen and Larder 3?**

One year.

**Okay. What modules do you teach on the BA, only hot kitchen modules?**

Second year and third year.

**That's Kitchen and Larder 3 and Hot Major 1?**

Yeah.

**What do you think of modularisation?**

(Pause). In the hot kitchen?

**Yeah.**

Yeah it's good, yeah.

**Okay. Were you involved in creating the modules you teach?**

No.

**Okay. Have you been involved in any updates of those modules?**

No.

**Okay. What teaching techniques do you use in the different years, for example in second year do you use portfolios, HACCP plans...?**

Yes, yeah, all of them.

**So what do you use?**

Portfolio method from the learning outcomes to the learning objective and the actual, work recording, picture recording.

**Do you give the students their learning objectives or...?**

Yes, I do, yeah.

**Right and have they...?**

And they had to do their own learning outcomes.

**Okay.**

And also a summary and their view of their day's work over the twelve week period.

**Okay. Do you confer with other colleagues regarding the delivery of the modules you teach?**

On these ones?

**On the two you teach on the BA?**

Yeah.

**You do.**

Yeah.

**You confer with other colleagues?**

Yeah, yeah.

**Okay, what is your opinion of the hot kitchen modules for the different years?**

They vary quite a lot. You're asking me what is the different in my opinion between second year and third year.

**Yeah.**

The big difference when they come into third year because I feel they're focused on doing their own things, in second year from a book and from recipes and when they come into third year it's mostly a hands on me and a four hour practical demonstration for myself. That's the only difference between second year and third year.

**Okay. Are you aware of the learning outcomes and do you adhere to them for the different modules that you teach?**

Yes.

**Okay. What additional if any learning outcomes would you add to both modules?**

I would do actual learning outcomes on the demonstrations we get from the lecturer and also learning outcomes of what they actually think of the twelve week plan. They should put in that end of the portfolio which they don't in this stage.

**Okay.**

Does that make sense, after the twelve weeks...? I ask them but it's not in their curriculum.

**So you would add that as a learning outcome?**

I would add definitely.

**That they...**

They would do a portfolio on their learning outcomes of the whole twelve weeks, not, I know they do one individually on a weekly basis what they thought of the day, what they thought of the class but I find it should be a learning outcome, portfolio, just in the whole twelve weeks what they thought of it.

**Okay. What changes would you make to the course content of the modules that you teach?**

I wouldn't change a lot. The content is good. The content is very good so I wouldn't change a lot. That can be changed between each lecturers when they have that yearly conversation.

**Okay. Do you think the modules need to be reviewed?**

Yes.

**Why?**

Why, because I think they're kind of orientated just for them. I'll give you an example. In the second years they're coming in and they're reading from books and recipes. They don't understand the books and recipes because they're all new to them and you've not got time, say the likes if they're doing five items in one day, as a lecturer you've not got time to show them the five items. So they're coming to me every twenty minutes, what does a jue mean? When do you add the jue? Wee things like that. The content in it is good but they're reading off recipes they've never seen before and they come into a practical classroom. I think they should be taught them. I know they learn them a year before but all these recipes they're taking from the books are changing and all the ingredients is changing. The methods of cooking are not changing and the basics aren't but the only thing I think that needs changing is why are we letting students read off, not just classical which I don't mind the training but why are they teaching off of top ten chefs, the Gordan Ramsey's and your Conrad

Gallagher books and recipes and then they're coming and they don't understand the content in the book and then that's why after...

**So what are you suggesting then?**

I suggest we should be showing with these things first and then letting them cook because I feel as if they get lost within the items we're asking them to do.

**But when you've only got four hours.**

That is the problem. That's when you come to your last question now; I'd like to answer that at the end.

**Okay.**

Does that make sense the actual content?

**No not really. So you would prefer...?**

Ask me the question again.

**You would prefer to cut down on the course content?**

No. Ask me the question again and I'll say it again.

**Okay. (Laughs). Do you think the modules need to be reviewed?**

Yes.

**Why?**

Why? Because I feel as if they're getting crazy recipes and they don't understand, what's the word I'm looking for, they don't understand, what's the words they get at the end of the books?

**The concept?**

Not the concept. I mean they don't understand the techniques even. They don't understand some of the words or the words.

**Right.**

And some of them are taking French recipes. They don't understand. If I asked, to give you an example and what really frustrates me, if I ask them five food items in French they wouldn't know. I mean their third years and they wouldn't know any of the content. They wouldn't know a turnip in French. They wouldn't know cabbage in French. That kind of stuff. The culinary side of it. That frustrates me.

**So that's the language, the issue that you think that they should get a more culinary French?**

Definitely yeah. Culinary French definitely.

**Okay but regarding the course content for the modules that you teach, the Kitchen and Larder 3 like you wouldn't, would you change anything that's on that?**

No.

**No. Would you change anything that's on hot major one, content?**

No.

**Okay. What is your opinion on the timing of the modules? Should they run concurrently or not?**

No it doesn't have to be, no.

**Okay. Students do a five week internship in year two and twelve weeks in year three, do you see a difference between your second years and your third years?**

Yes third years, a big difference between they do internship for longer.

**Okay. Should the students do longer internships in first and second year? They currently only do five weeks?**

I can't speak for that because I'm not involved in what they're doing and where they're sent to and they're all going to different places so I couldn't actually give you a correct answer to that one.

**Okay. What assessment techniques do you think should be used for the different modules that you teach?**

Well the course work assessment is the best one because we mark them daily and at the end of it we give them a review every five or six weeks and then after the twelve weeks they get an exam, so I wouldn't change anything in that.

**Okay, that's it. Thank you.**

## Appendix 13: Module Content

### Kitchen and Larder One (4 hour practical class)

<p><b>Lesson 1</b></p> <p>Basic cold mise en place - Knife practice, setting up of work station, HACCP, health and safety in the kitchen, vegetable preparation, vegetable cuts (paysanne, julienne, brunoise, etc), peeling, cutting, chopping, safe use of equipment.</p>	<p><b>Lesson 2</b></p> <p>Essential Kitchen Practice - mise en place Knife skills, basic white chicken stock, blanching, refreshing, salad preparation, citrus preparation, marinades and basic garnishes.</p>	<p><b>Lesson 3</b></p> <p>Stocks and Sauces</p> <p>White stock, veal stock, brown stock, fish stock, reductions, extensions of mother sauces (béchamel, veloutes, demi-glace, hollandaise) into small sauces.</p>	<p><b>Lesson 4</b></p> <p>Essential Larder work - Meat and Poultry</p> <p>Boning, portioning, preparation of poultry cut for sauté, demonstration of meat for roasting, stewing, sauté and grilling. Chicken bourguignon and turned potatoes.</p>
<p><b>Lesson 5</b></p> <p>Essential Larder work – fishmongery.</p> <p>Filleting of flat and round fish, cuts of fish (fillet, darne, supreme, goujons, paupiettes, delice, en tresse, Colbert, troncon, pave), fish stock and glaze, compound butters, frying batters and shellfish preparation. Shallow frying – meuniere (Sole menuire &amp; fillet of Trout Amandine)</p>	<p><b>Lesson 6</b></p> <p>Wet methods of cookery – boiling and braising</p> <p>Paupiettes of beef Jardiniere sauce from cooking liquor, Boiled collar bacon, parsley sauce , Boiled &amp; Braised cabbage, Duchess potatoes and extensions.</p>	<p><b>Lesson 7</b></p> <p>Wet methods of cookery - stewing and poaching</p> <p>Chicken fricassee jardinière, poached salmon hollandaise sauce and fondant potatoes.</p>	<p><b>Lesson 8</b></p> <p>Dry methods of cookery – roasting and pot-roasting</p> <p>Rack of Lamb with mint sauce, chicken/pheasant roasted with garnishes, baked potatoes macaire and byron potatoes.</p>
<p><b>Lesson 9</b></p> <p>Dry methods of cookery (Classical French cookery) Grilled entrecote with garnishes (vert pre, henry IV, Mirabeau and tyrolienne), tournedo clamart, noisette of lamb, grilled salmon warm egg sauces and compound butters.</p>	<p><b>Lesson 10</b></p> <p>Hor d’oeuvres, salads and dressings/cold sauces. Simple Salads, compond Salads, fruit cocktail, melon cocktail, lobster and prawn salad, smoked fish salad, chicken liver pate and salsa.</p>	<p><b>Lesson 11</b></p> <p>Egg cookery - boiled eggs, omelette, poached eggs, fried eggs scrambled eggs, extensions, appropriate sauces and garnishes</p>	<p><b>Lesson 12.</b></p> <p>Practical Assessment</p>

## Kitchen and Larder Two (4 hour practical class)

<p><b>Lesson 1</b> <b>Soups</b> Purees, Broths, Creams, Veloutes, Bisque, Consommè and Cold Soups. Accompaniments – toasted flutes, aioli</p>	<p><b>Lesson 2</b> <b>Fish Cookery (wet methods)</b> Bouillabaisse Fillet of lemon sole du gléré Poached Turbot beurre blanc Pommes à l'Anglaise Buttered spinach with garlic</p>	<p><b>Lesson 3</b> <b>Fish Cookery (dry methods)</b> Grilled sea bass Grenobloise Fillet of sole a l'orly Baked salmon Coulbiac Tempura of vegetables Pommes Amandines</p>	<p><b>Lesson 4</b> <b>Individual Cookery</b> Spinach Veloute soup with goat's cheese quenelles. Herb-crusted rack of lamb with tomato farci Pommes Fondant</p>
<p><b>Lesson 5</b> <b>Shellfish Cookery</b> Scampi Provençal Coquille St Jacques Mornay Sautéed Squid with olive oil, garlic and parsley</p>	<p><b>Lesson 6</b> <b>Stewing and braising</b> Navarin of Lamb Jardinière Spiced slow-cooked lamb shank Jardiniere of Vegetables Pommes berrichonne</p>	<p><b>Lesson 7</b> <b>Sauté</b> Sauté of Beef Stroganoff Tournedoes Choron Supreme de volaille maryland Rice pillaf Sauté onions, mushrooms and grilled tomatoes</p>	<p><b>Lesson 8</b> <b>Sauté and roasting</b> Poulet Sauté Hongroise Roast Duckling a l'orange Quail, wild duck, rabbit Pommes Macaire and carrots vichy</p>
<p><b>Lesson 9</b> <b>Large roast joints and Accompaniments</b></p>	<p><b>Lesson 10</b> <b>Pasta and Rice cookery</b></p>	<p><b>Lesson 11</b> <b>Vegetarian Cookery</b></p>	<p><b>Lesson 12</b> <b>Exam</b></p>



### Kitchen and Larder Three (4 hour practical class)

<p><b>Lesson 1</b></p> <p>Russian Salad, Avocado with lobster, mango and pepper salsa/mango and spinach</p> <p>Consommé Brunoise</p> <p>Darne de Saumon pouchees, Sauce Moussiline</p> <p>Asparagus Sprue, Pommes a l'anglaise</p>	<p><b>Lesson 2</b></p> <p>Goat Cheese Tartlets pesto sauce and Caramelised Salsify, pesto</p> <p>Black Bream with basil and pea's 'bonne femme'</p> <p>Lemon mash potatoes</p> <p>Carrot &amp; Turnip Puree</p>	<p><b>Lesson 3</b></p> <p>Fried butterflied sardine fillets, Warm soused herrings</p> <p>Soup roux based tomato</p> <p>Fillet of beef with a gratin of mushrooms and potatoes</p> <p>Carrots Glacées, Pommes Anna</p>	<p><b>Lesson 4</b></p> <p>Loin of Lamb with apricot and cumin stuffing</p> <p>Seafood chowder</p> <p>Pommes Fondant</p> <p>Cauliflower mornay</p>
<p><b>Lesson 5</b></p> <p>Pan fried halloumi cheese with crispy salad leaves aubergine relish</p> <p>Breast of Duck a L'orange, and sauté new potatoes</p> <p>Confit duck legs, creamed lentils</p> <p>Braised Cabbage with smoked bacon and peas</p>	<p><b>Lesson 6</b></p> <p>Carpaccio of Beef with roast Aubergine and Balsamic vinegar</p> <p>Butternut quash gnocchi</p> <p>Lemon sole en papillote with red chard</p> <p>Pommes Noisette</p>	<p><b>Lesson 7</b></p> <p>Chicken roulade (served hot or cold with appropriate sauce of your choice)</p> <p>Braised Rabbit à la bourguignonne</p> <p>Mixed turned vegetable sauce beurre blanc</p> <p>Champ potatoes</p>	<p><b>Lesson 8</b></p> <p><b>Italian Cookery</b></p> <p>White bean and noodle soup</p> <p>Antipasto</p> <p>Risotto con porcini</p> <p>Osso Buco alla Milanese</p>
<p><b>Lesson 9</b></p> <p><b>Spanish Cookery</b></p> <p>Tomato Bread, Alioli, Calcotada, Catalan Fish Stew, Patatas Brave, Grilled Vegetables, fried prawns, fried squid.</p>	<p><b>Lesson 10</b></p> <p><b>Thai Cookery</b></p> <p>Tom yam, golden purse, duck in red curry sauce, crispy prawns, pad thai, green curry chicken or vegetable.</p>	<p><b>Lesson 11 Irish cuisine</b></p> <p>Dublin coddle, Irish stew, beef and oyster in Guinness stew, seafood chowder, boxty, colcannon, soda bread, potato cakes, scones, supreme of salmon with leeks and smoked bacon cream, salad of black pudding with red onion jam and caramelised apples.</p>	<p><b>Lesson 12</b></p> <p>In class examination menu to be given 2 weeks in advance.</p>

### Hot Major One (5 hour practical class)

<p><b>Lesson 1</b> Preparation of stock, sauces and glazes</p>	<p><b>Week 2</b> Escalope de foie gras et St Jacques au Sauternes  Roast barbury duck with port and orange sc pomme fondant red cabbage</p>	<p><b>Week 3</b> Marinated Mackerel diamonds  Tornado Rossini</p>	<p><b>Week 4</b> Beetroot and Basil consommé  Omelette au foie blonds</p>
<p><b>Week 5</b> Lobster with white port and angel hair updated  Pan fried fillet of sea bass with golden potato scales</p>	<p><b>Week 6</b> Aromatic Duck Sweet &amp; Sour Dressing Monkfish in a shellfish crust with carrot sauce</p>	<p><b>Week 7</b> Plaice Amiral Venison Roe deer dish</p>	<p><b>Week 8</b> Oxtail tortellini &amp; Guinea Fowl</p>
<p><b>Week 9</b> Goat Cheese Parcels Trio of pork</p>	<p><b>Week 10</b> Students are given ingredients to create dishes</p>	<p><b>Week 11</b> Students are given ingredients to create dishes</p>	<p><b>Week 12</b> Students are given ingredients to create dishes</p>

**Hot Major Two (5 hour practical class).** After lesson 6 students then freestyle with specific ingredients with conditions attached i.e. which course the ingredients is to be used for and or to prepare an amuse bouche selection etc. The ingredients' will change from year to year depending on what's in season.

<p><b>Menu 1</b>  Hareng a la Deippoise  Bisque  Selle de Lapin au prenaux  Pomme fondant  Mange tout</p>	<p><b>Menu 2</b>  Salade Niciose  Consomme de queue de beuof clair  Coulubiach de Saumon  Chou-fluer Milanaise</p>	<p><b>Menu 3</b>  Ris de Veau á la Cévenol  Minestrone  Plie Franche á l'Anglaise  Pomme Pont Neuf  Pointes d'Asperges</p>	<p><b>Menu 4</b>  Quenelles de Brochet a la sauce Nantua  Consommé de Volaille  Salmis de Faisan  Polenta  Haricot Vert  Carottes glace a brun</p>
<p><b>Menu 5</b>  Gazpacho (amuse)  Oeufs á la Forestière  Carré d'Agneau Printanière  Pomme Parmentier  Salad</p>	<p><b>Menu 6</b>  Moules a la Mariniere  Veloute Doria  Confit cuisse de Canard,Sauce, Sauce au Porto  Pomme Duchess  Salsifis au beurre</p>		