Chapter 12 Qualifications for Working in the Food Industry: Understanding All the Available Options for Students and Educators in Victoria, Australia



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Abstract The Australian food industry is vast in its operations and opportunities. It is an industry that can cater to the career or employment needs of almost any person, with almost any skill level and capability. It offers opportunities for unskilled workers as well as for those highly skilled and highly educated. This industry is therefore uniquely placed for the opportunities it offers for the wide range of communities it services.

This chapter is devoted to the discussion of the career opportunities and the less direct methods of gaining the education and skills needed to access the many options for careers and employment for students in Victoria, Australia. It will cover aspects of the food industry and the roles it offers to potential employees, the role of the Food Studies/Food Technology teacher (previously known as Home Economics teacher) and this subject area in the context of "Where to next?" for students. This chapter explores the many pathways to qualifications and professions, the benefits and limitations of these pathways, as well as the methods of informing the key players involved, i.e. students and parents.

Keywords Skills · Career · Students · Food studies · Food technology Qualifications · Pathways

Introduction

For the purposes of this chapter's discussion, the following terminology will be used:

• Food Studies (formerly known as Food and Technology within Victoria), generally offered at years 11 and 12 as a subject in the Victorian Certificate of Education in Victorian schools

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- Food Technology, non-specific food subjects taught at levels below years 11 and 12 in Victorian schools
- Vocational Education and Training (VET) Provider includes Registered Training Organisations (RTOs) usually privately funded and Technical and Further Education Institutions (TAFE) government funded.

Food Studies/Food Technology Teachers in Victoria, Australia

The role of the food studies (and food technology) teacher is quite complex and involves delivering classes based up on curriculum content, from food safety and hygiene practices, menu planning and design process, to human nutrition and running practical classes. Notwithstanding this, time managing and budgeting for these classes is quite a challenge, but very rewarding. The need for teachers to remain up to date in their own skills and knowledge of the key content areas of the curriculum to be delivered includes the new Food Studies, study design introduced in 2017 (Victorian Curriculum Assessment Authority (VCAA), 2017). This in itself may prove to be a challenge for some teachers as its inclusion has increased requirements for the delivery in two key areas 'sustainability' and 'food science'. Added to all of the above, there is always the need for all teachers to inspire their students, for them to do well and be interested in their specific subject area.

The changes to the Food Studies course in 2017 make it a great option for those interested in pursuing work or further studies in the food industry, as it will expose students to a more in-depth look at what makes food do what it does when placed under certain conditions. This knowledge can be used to make new food products, select nutritionally sound food options and utilise sustainable food sources, for both now and into the future (VCAA, 2017). Subject areas about food, hold a very unique place within the education system as they may be the one subject area where students who do not do well in other areas, may excel. This may be due to the practical nature of the subject, or simply the reality of 'food' as the end result. Whatever the reason behind excelling in these classes, the knowledge that this is the case, may also serve as a catalyst to help students find their passion for their futures.

As quoted on the Home Economics website

Our purpose is underpinned by our values and we believe: It is important for individuals to be empowered to make healthy choices and take responsibility for their own health and wellbeing. And "Home economics education facilitates the development of knowledge and skills to assist with the development of independent, resourceful consumer citizens capable of making informed decisions and establishing work/life balance. We believe this is achievable by engaging and educating young people in a variety of home economics contexts such as food; nutrition and health, consumerism and resource management; human development and family studies" (Home Economics Victoria (HEV), 2017).

The role of the Food Studies teacher, as for all teachers, is to be able to direct the students in their charge, to reach the highest level of their potential, not just in their current studies but also to gain the future career they are seeking. Having a strong

knowledge of the food industry and good working relationships with the school career advisors are useful as starting points in exploring what options are available for students to pursue as potential career options for their futures.

Careers Within the Food Industry

Many people will have a number of different careers during their working life. The food industry, with its many options, is an industry that can offer options for role changes, and promotions, training and skill development, alongside further education, leading to new careers. Higher-level qualifications required for jobs at higher skill and knowledge levels may be pursued at any stage. Many school leavers may follow a linear career path and some will not and finding a career pathway that is 'one size fits all' is impossible, though, the skills and knowledge gained along different pathways can be invaluable in finding the 'right fit' of employer or business opportunity.

The food industry has roles for all levels of skill and education and qualifications, making it one of the most flexible and accessible industries in which to work. Students of Food Studies in the Victorian Certificate of Education (VCE or other food technology subjects prior to VCE), will gain a working knowledge of how to work with food safely and hygienically. This places them in a good position to gain employment in the food industry, having already gained some of the most important requirements to do so effectively (Victorian Curriculum and Assessment Authority (VCAA), 2017). A very basic online search for food industry careers using the online job search website of SEEK.com provides a snapshot of what is available in this industry, including everything from food packers and food engineers to food reporters and food stylists (SEEK.com, 2018). A more detailed search reveals the 10 'Cool Jobs' in the Food Industry (Doyle, 2018), listed as a diverse range of options such as craft brewer, food lawyer, mycologist (studies mushrooms) and molecular gastronomist, just to name a few.

The food industry is vast in its offerings and constantly changing over time. Roles that never existed as little as 5 years ago are now becoming commonplace, i.e. vegan chefs. These changes are often consumer or government driven or led, as a consequence of trends or needs. On the other hand, there are many people filling roles within the food industry, that they did not necessarily choose as a career option, but rather as a means to an end. For example, those undertaking postsecondary studies may find temporary employment at a food service level or in bar work, whilst they pursue their chosen professions. There are also numerous casual positions that are regularly available to secondary school students, providing them with their first taste of the workforce and of earning their own money. None of these options require post-secondary study prior to employment. However, there are also those who choose a career in the food industry, and they may need to have completed some post-secondary education prior to gaining employment. These may be at certificate levels for commercial cookery, bakery and patisserie, diploma and higher education levels, such as nutrition, food science or dietetics or an apprenticeship that provides in-service training.

The level of qualification required to work in the food industry is dependent upon the role that is being filled. Qualifications range from the lowest level of Certificate 1 in Food Processing, for those who may work as general labourers or machine operators in the industry, up to Doctorate level for those working in research or other highlevel management and 'decision making' roles in the industry. Many courses available to study for qualifications, can be offered as a part of workplace training after. This is offered as a part of the employment agreement. This form of training is most commonly offered at Cert I-III level, or higher if the company has a need for higher level qualified personnel. Qualifications at degree-level and higher may be required prior to gaining employment for certain roles within the food industry, such as Quality Control Officers, Food Technologists, Laboratory staff, Food Product Developers, Sensory Analysts, etc. This is mostly governed by the potential employer, as there are currently no legislated qualification requirements for these types of roles. However, in order to successfully operate in such roles a person would need to have a certain level of skill and knowledge that demonstrates their ability to function at the required level of expertise in any of the above-mentioned roles.

The student seeking to gain a Higher Education qualification in Food Technology or similar, choosing to study Food Studies (VCAA, 2017) at VCE level (Victoria) is a way to introduce the concepts of food-industry-specific skills and knowledge. This course includes many key areas of study that offer students insights into the food industry. Some of the topics covered in this course include food science and technology, food safety and hygiene, food product development and the functionality of food ingredients.

In order to pursue a career path that requires a Bachelor (degree level) or higherlevel qualification, a successful completion of the Victorian Certificate of Education (VCE) is required for school leavers in order to be offered a place in a higher education degree course at University. However, there is currently no prerequisite for students to have undertaken the Food Studies course during their VCE (VTAC, 2018).

Victorian Certificate of Education (VCE)

Within Victorian schools, the VCE is offered as the final years of study for a secondary school student after completing 13 years of formal studies in school. Students are generally between the ages of 16–18 years when they undertake this certificate. It is completed generally over 2 years, but some subjects may be started earlier, allowing for a 3-year completion of the certificate. It is an accredited, secondary certificate and it is the highest level attainable in education via the school system within Victoria. There are other options as well, for example the International Baccalaureate, which is available only through a limited number of schools and offers international recognition and equivalence to the VCE in most instances, especially in regards to higher education entry. The Victorian Certificate of Applied Learning (VCAL) is also an accredited secondary certificate offered in Victoria but this does not usually lead to direct higher education entry. This chapter will not cover the International Baccalaureate in any depth, as the VCE is the most widely available school certificate in Victoria, which provides higher education entry.

The VCE course is made up of subjects divided into 4 Units, all of which are of one semester in length, some of which must be studied in sequence. Students typically study Units 1 and 2 in their first year, and Units 3 and 4 in their second year of the VCE. You can study Unit 1 or Unit 2 of a subject as stand-alone units, however, you must enrol for Units 3 and 4 of a study in sequence. This sequence needs to be completed in the same year if a study score is to be calculated. Students usually study from 20 to 24 units (five or six subjects) in Years 11 and 12, the final 2 years of formal school studies as mentioned above. You can take longer than 2 years to finish the VCE if required, with some students starting the VCE in Year 10, and some study Units 3 and 4 in Year 11 (Victorian Curriculum and Assessment Authority (VCAA), 2018a, 2018b, 2018c).

To achieve a completion in VCE a student 'needs to successfully complete 16 units including: three units from the English group, two of which must be a Unit 3 and 4 sequence and at least three additional Unit 3 and 4 sequences' (Victorian Curriculum and Assessment Authority (VCAA), 2018a, 2018b, 2018c). VCE Food Studies underwent a major overhaul and a name change from Food and Technology to Food Studies, to better represent the content of the subject, resulting in a new study design introduced in 2017. The new study is designed to have a greater focus on food, where it comes from and how to produce it sustainably and how its different components act and react, thereby providing a greater insight into the related food science. It opened the door for students to gain an in-depth understanding of the many, and varied, aspects of food and how this correlates to options for their employment and studies beyond school.

Australian Tertiary Admission Rank (ATAR)

The ATAR is often the gold standard by which all results, all choices, all studies are measured by within a school, within a home and by students. The ATAR is the number that determines what higher education course may be offered to the successful VCE student but is only of value to those who desire to gain a higher education place and future qualifications at degree or higher levels.

The ATAR is a rank, not a mark, it is a number between 0.00 and 99.95 indicating a student's position relative to all the students in their age group (i.e. all 16 to 20 year olds in NSW) (UAC, 2018). It is calculated by Victorian Tertiary Admissions Centre (VTAC) based on up to six VCE 'scaled' study scores. Study scores are scaled up or down by VTAC according to the performance of students in a study in a particular year—which means scores change each year, making ATARs difficult to predict (Deakin University, 2018).

Students are advised to undertake studies in areas that they like and are good at in order to achieve the best possible ATAR for their efforts. Students often mistakenly choose subjects that are scaled up as they believe this will increase their chances of

a better ATAR. However, if the studies a student undertakes are not interesting or too difficult for them, then the risk is they will gain an overall lower ATAR regardless of any scaling that has occurred.

Benefits to Students' ATAR by Studying Food Studies

A number of schools offer Units 1 and 2 Food Studies at Year 10 level when students are generally between the ages of 15–16 years, then Units 3 and 4 at Year 11 level. This may be advantageous for the final VCE outcome for students undertaking their studies in this manner, especially as they often only take 1 subject at 3 and 4 level in Year 11, which means less subjects need to be studied in Year 12 to complete the VCE. Also if the student performs well in the subject it may help to boost their ATAR. Food studies may help students gain a higher ATAR particularly if this subject area is one that holds a strong interest for them. (Victorian Curriculum and Assessment Authority (VCAA), 2018a, 2018b, 2018c, 2020).

Options Within Schools

Linear progression for students from school with VCE completion into higher education and then professional life may be the ideal outcome after 13 years of formal school education, starting from the early age of 5-6 years right up to the ages of between 16 and 18 years. However there are many students who will not progress in this manner due to a myriad of reasons. Some students may choose a different pathway, which may include taking time off from formal studies to explore the world after VCE completion. Others may explore the world in the workforce by finding a job and then return to studies, or never return to studies at all. Others may not achieve what they set out to do during their final school years in VCE due to unforeseen circumstances in life, or not perform as they should, or would have like to have done, meaning they cannot directly enter into Higher Education courses straight after VCE. Some may not complete the VCE and choose a different route towards their desired qualification and subsequent career path, whilst others may not desire a post-school qualification at all. There are options to help students acheive their goals beyond gaining a desired VCE score or ATAR no matter what circumstances a student finds themselves in.

Vocational Education and Training (VET)

One option for students who need to find a different pathway to gaining the qualifications they need to pursue their dream career is within the Vocational Education and Training (VET) sector. All Australian citizens are eligible to complete a Government-funded VET course (Nationally recognised Certificate level qualification) within their lifetime, provided they meet certain criteria as specified on the website, which includes eligibility rules (DET, 2018). It is important to realise that these eligibility rules are in no way affected by students in schools, who complete training under the VET in schools (VETis) programs (See VETis section below). Courses at certificate and diploma levels via VET can provide for the needs of these students and can lead directly into university courses (Higher Education courses), with many universities offering credits from VET towards their courses.

There are many advantages for students who choose to undertake studies in the VET sector, either by choice or as an alternative entry pathway to higher education options. One factor in the pathway via the VET sector, that can be quite attractive, is that there are usually no VET course entry requirements, except at diploma and above levels (VTAC, 2018). Also, if subject credits are offered by the higher education institutions upon entry to their course, this results in reduced fees for the course. Another advantage is that the type of training a student will gain via the VET sector is much more practical (hands on) than theoretical and may better suit the learning style of those students. Another advantage is that students who complete a VET course will have work-ready skills and be able to enter the workforce immediately.

The VET sector is often perceived as being the 'poor cousin' to the higher education sector, often due to the lower level of qualifications offered, but it may also be due to its history of development. Basically the VET sector was traditionally where tradesmen gained their qualifications to work in their trade, via the apprenticeships scheme, and in the past, trades were not viewed as highly desirable as academic-type qualifications. This is no longer the case, as the VET sector nowadays offers training in many areas from trades to business skills with qualifications higher than Bachelor Degrees in many different disciplines. So a student who was unable to enter a university course directly from VCE can study at VET and pursue higher-level qualifications through this pathway, even without a completed VCE. If they choose to access the VET sector and complete a course in their chosen discipline, such as food science or nutrition or a hospitality certificate course, students are then able to apply for credit points towards a degree course in the future. However, pathways from the VET sector to the higher education sector are not always clear or fully seamless in structure, unless a specific VET provider has been able to negotiate structured pathways with universities. If this is not in place prior to commencing a VET course, students may need to negotiate these pathways themselves and get the agreement from the higher education provider in writing before commencing their VET course.

VET in Schools (VETis)

The VET sector also operates within schools (Secondary schools providing different options for students. Whilst they are still in school, students who do not wish to undertake VCE may select to do the Victorian Certificate of Applied Learning (VCAL) instead, which incorporates the study of a VET subject to complete the certificate or study a VET subject as part of their VCE (VET in schools program (VETis)) or study a school-based apprenticeship. Each of these represents different approaches to finding a way forward for an independent future for students. Each of these is also a great step toward working in the food industry as food-related subject areas play a large part in these offered programs. Currently there is only one approved subject option that can offer a contribution to a study score (in VCE) and that may help with working in the food industry, hospitality, including 2 Certificates, is available and the relevant contributions are listed below:

- *SIT20316 Certificate II in Hospitality*: recognition of two or more units at Units 1 and 2 levels and a Units 3 and 4 sequence
- *SIT20416 Certificate II in Kitchen Operations*: recognition of two or more units at Units 1 and 2 level and a Units 3 and 4 sequence (Victorian Curriculum and Assessment Authority (VCAA), 2018a, 2018b, 2018c)

Another VETis option not directly related to a food subject is Laboratory Operations, which is also an approved study option and this may be of interest for students keen on a science-related career in the food industry. Students can also elect to study VETis without it contributing to a study score, an option useful to those not choosing higher education options.

Students wishing to receive an ATAR contribution for the VET Hospitality program must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the ATAR either as one of the student's best four studies (subjects) (the primary four used to calculate their ATAR) or as a fifth or sixth study.

Note: Where a student elects not to receive a study score for VCE VET Hospitality, no contribution to the ATAR will be available (Victorian Curriculum and Assessment Authority (VCAA), 2018a, 2018b, 2018c).

VETis enables students to gain a Nationally recognised certificate-level qualification prior to leaving school and this qualification does not in any way affect their eligibility for further VET study later (Skills Impact, 2018). VETis also includes School-Based Apprenticeship or Traineeship (SBAT), which are an apprenticeship or traineeship that incorporates at least 1 day per week (time-tabled) spent on the job or in training during the normal school week. These are available to students enrolled in a VCE or VCAL program (Victorian Curriculum and Assessment Authority (VCAA), 2018a, 2018b, 2018c). These allow the student to participate in a paid part-time employment arrangement and training, concluding a nationally recognized qualification of Certificate II-IV, as well as the completion of secondary school (Victorian State Government, 2018).

There are over 500 occupations Apprenticeship Support Australia (2020) that may offer this type of arrangement, and many of these options are available in the food industry. The level of certificate to be completed and the job itself will determine the length of time required for completion as a number of SBATs will not be completed until after secondary school completion.

Apprenticeships

This is an option undertaken by students who either finished secondary school (no certificate completed) or did not complete secondary school, and gained employment as an apprentice (This offers full time employment whilst training for a qualification and differs from an SBAT which is part-time whilst still attending school). This option is often offered within the food industry, particularly in food servicetype roles such as cookery, bakery and also meat processing. Individual employers may require differing prerequisites for employment in such a role, but the training provided by a VET provider does not have any prerequisites, as an apprenticeship qualification is Certificate III level. This option is a good option for students who do not want to complete secondary school but would like to gain a qualification, or those who are seeking paid full-time employment, leading to a qualification whilst they work. The VET sector can be seen to be a very valuable option for students within training and education, especially for qualifications and roles offered within the food industry.

Accessing Information for Students and Teachers

The options presented above are a brief snapshot to showcase the different options available to a school-based student, to ensure those seeking information have a starting point from which to proceed. Teachers and career advisers within schools are often the first point of contact with regard to helping students find the right pathway for their future. Parents or guardians of students often play a role in decision making as well; however, the information that is passed on to all of these key players can be slow in its provision or not easily accessed or understood. There does not seem to be one place to find all information, or the information required, changes so quickly that it is difficult to keep up with the changes. Added to this, the education sectors within Victoria do not always work well together, further complicating the flow of correct information.

Government funding provision for the different education and training sectors adds to the confusion (The government provides funding to reduce course costs, making courses more accessible) as it is difficult to keep up with the information about the level of funding being offered for which courses. Career practitioners and subject teachers need to keep abreast of these factors in order to provide information and advice to students and their parents/guardians. It is also important that students find out as much information as possible to help themselves. Finding course coordinators at post-secondary education providers (Universities, TAFES etc.) is a good start to the process and can be invaluable in finding out what is required. The Victorian Government has also funded Skills and Job Centres based at several VET providers throughout Victoria, and the staff in these centres can also help students seeking advice about their careers (DET, 2018). Changes within the food industry also require an understanding of how to cater for the needs of the industry when such changes occur. Those changes may be legislative; new food safety and hygiene requirements or food labelling requirements, such as Country of Origin labelling, or the changing needs of a changing consumer population, for example how and where consumers purchase their foods, which has significantly changed over the years. These changes, result in the changing needs of the workforce and the training or education of this workforce.

As demonstrated in this chapter, there are many options available in Victoria for students seeking to gain a qualification in order to pursue a career within the food industry and many roles they may fill. The role of the Food Studies teacher should encompass helping students to navigate their way to meeting the students' future needs, particularly if a student shows a desire to work with food. Ensuring students have access to the information to help them pursue their goals should also feature in schools' management, and providing the information to parents and guardians will also help ensure students find the right path toward an independent life for their future.

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