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TECHNOLOGY AND LIVING Newsletter #3

Technology Education Key Learning Area

As one of the elective subjects at the senior secondary level, Technology and Living (TL) provides a progression of challenging experiences for students who wish to build on their knowledge base through in-depth study of the learning elements and concepts relating to food or clothing. Students have the option of selecting either Food Science and Technology strand or Fashion, Clothing and Textiles strand as their area of study.

Katie TSE

Master of Science - Food safety and Toxicology
The University of Hong Kong

I always consider myself a foodie, besides enjoying all types of cuisines and bites, I have also been enjoying developing food products, but yet, I was only a novice back then. Taking Technology & Living (TL) in secondary school was the beginning, which provided me a substantial foundation with guidance, inspiration and coaching from teachers to where I am now, with a broaden horizon, new perspectives towards food and cooking.

Back in the junior years in my secondary school, Home Economics was a compulsory subject, with more practical elements than theoretical elements. When it came to choosing subjects for the senior years and the public exam, Chemistry, Biology, and TL were my electives. At first, I considered TL as it is food-related, which is something I am interested in, and also realised it could interlink with both the science electives. Another critical reason for choosing them is because no matter what career path I am taking in the future, the theories I learnt from these science subjects are still sound facts that could be useful to one's health and applicable in daily life.

During the three years in TL, I did not find it difficult since the curriculum is connected to daily-life, and food is just essential and accessible. Choosing food is no longer merely about its taste and packaging, but also the nutrition and each macronutrient and micronutrient in detail in making up a balanced diet. Cooking is not just about boiling and frying anymore, but also the scientific principles behind cooking e.g. convection current, Maillard reaction, enzymatic browning etc. Besides learning how to develop healthy eating habits and

understand the chemical reactions behind cooking, we also learnt about food production processes, different food culture, food product development etc, not just through handouts and lectures, but also site visits, experiments and recipe innovations. The course of three years in TL really gave me a good foundation on gaining valuable knowledge and transferrable life skills.

After taking the Hong Kong Diploma of Secondary Education Examination (HKDSE), I further took a Higher Diploma in Human Nutrition (CUSUS), a bachelor's degree in Science (OUHK) in the field of food testing and a master's degree in Science (HKU) in the field of food safety and toxicology.

The knowledge gained throughout the years were like building blocks, learnt about the fundamentals of TL and further stacking up on top of the previous ones, being more advanced in different aspects and perspectives, and interestingly the blocks interlink with each other. To this day, I still vividly remember my half year project during my master's degree in developing a new healthy beverage for the Hong Kong market. I applied the skills learnt from TL including the product life cycle, food product development process, and the sensory testing skills. I am amazed how it helped and inspired me even after 6 years, so your own learning experience, and the acquired knowledge and skills are yours forever.

Choosing electives at this moment might be confusing but it is also just the beginning, as there will be lots of turning points that may lead you to fulfil your life goals. Throughout the years, my classmates had explored different career fields and interests, including nutritionist, food hygiene manager, health inspector, nurse, medical sales etc. Discover what you are passionate about, trust your instincts, and you will find a way to follow through.

Food Science and Technology Strand



ETV production of Technology and Living:

Paving the Way for Professional Careers

<http://www.hkedcity.net/etv/resource/8886692774>



Compulsory Part

1. Family Dimension
2. Nutrition, Diet and Health Concerns
3. Food Preparation Technology
4. Consumer Behaviour in Food Choices and Implications

Elective Part

1. Food Culture
2. Food Science and Technology Extended Study
3. Food Product Development

School-based Assessment (SBA)

- Prescribed Task (experiment) and Project
- Put theories into practice
- Apply knowledge and practical skills
- In-depth studies

Further studies

- Food Science
- Food Technology
- Food Product Development
- Food Safety
- Nutrition
- Applied Biology and Biotechnology
- Public Health

Career Prospects

- Food scientist
- Dietician
- Food product developer
- Food researcher
- Health inspector
- Teacher

Mildred TANG

Quality assurance in the Food industry

I would say, I have embarked upon a career in the food industry that Technology and Living (TL) has brought me to where I am today — happy and fruitful. I started studying TL since Secondary One in King Ling College, which I felt grateful for having the opportunity to not only gain valuable knowledge and concepts closely linked with daily life, but also to build up my life skills through practical activities in TL. When I noticed that my school offered TL as one of the electives, I put it as my first choice at once without hesitation.

TL has widened my horizons and increased my awareness and understanding of nutrition, health, well-being and lifestyle. As a secondary school student, topics like molecular gastronomy and well-being were not familiar to us. Our teacher amazed and enlightened us by showing the new food technologies and organising site visits to food manufacturers in the Mainland for us. These were great life experiences and a real eye-opener. In addition, through the variety of meal planning activities, I gained a more in-depth understanding of the relationship between food and health. Food product development was challenging which I enjoyed the most, where we could choose what new food products to design and make based on market research, testing out design ideas and developing prototypes.

I had also selected Biology and Chemistry as my electives in senior secondary, in which these two subjects have a strong linkage with TL on certain topics related to well-being, nutrition, food digestion and absorption, food chemistry, etc. TL helped enhance my understanding on the related topics in

Biology and Chemistry, and it was also beneficial for my further study at The Hong Kong Institute of Vocational Education (Higher diploma in Food and Nutritional Science) and Ulster University UK (Bachelor of Science (Honours) in Food and Nutrition).

After post-graduation, I have joined a local retailer and I am currently working in quality assurance. My duty is to safeguard the quality of food for consumers which involves food labelling inspection, food safety audit, product shelf-life testing, etc. The comprehensive and balanced learning elements in TL have included Hong Kong food legislation, HACCP in food safety management, as well as the basic nutrition concepts. The solid knowledge foundation has really helped me deal with customers' enquiries and daily tasks related to food safety, which in turn helps me nurture my problem solving skills and interpersonal communication skills. I am now becoming more confident in my abilities and determined in my pursuit of a career in the food industry.

TL is fun and unforgettable with a combination of theory and practical activities went hand in hand, which enhanced my understanding of how the concepts behind the theory apply to real-world situations. TL has laid a solid foundation for my further study and career development that will remain rock-solid for years to come. Plenty of opportunities await after graduation, no matter what you will choose in the future, studying TL can certainly give you a meaningful and memorable senior secondary school life for pursuing your dreams if you have a passion in food.



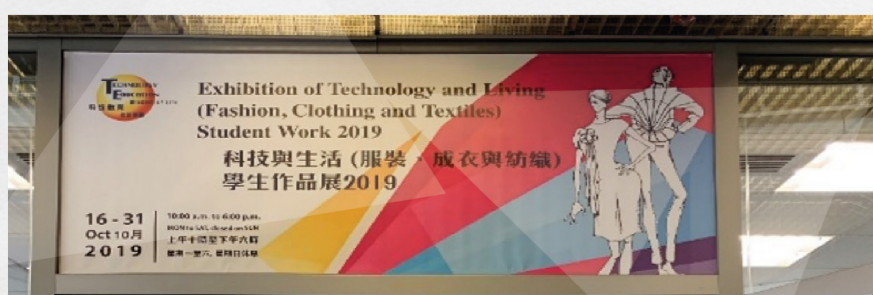
Exhibition of Technology and Living (Fashion, Clothing and Textiles) Student Work 2019

The Exhibition of Technology and Living (Fashion, Clothing and Textiles) Student Work 2019 was held at the Young Achievers' Gallery from 16 to 31 October 2019. The Exhibition aimed to showcase students' achievement in fashion design. It also provided an opportunity for students to learn from each other and deepen their understanding of multiple pathways for Technology and Living.

The exhibition included:

- Works of students taking Technology and Living at the secondary level
- Works of students taking fashion and textiles related programmes in tertiary institutions
- Works of prize winners of the Wool4School Hong Kong Student Design Competition
- Video show for "Multiple Pathways for Technology and Living — Fashion, Clothing and Textiles"

Eight secondary schools offering Technology and Living (Fashion, Clothing and Textiles) at the senior secondary levels, five tertiary institutions and The Woolmark Company were invited with over 70 pieces of student works displayed. There were around 2,100 visitors to the Exhibition.



Tina CHAN

Higher Diploma in Nutrition and Food Management
HKU SPACE Po Leung Kuk Stanley Ho Community College

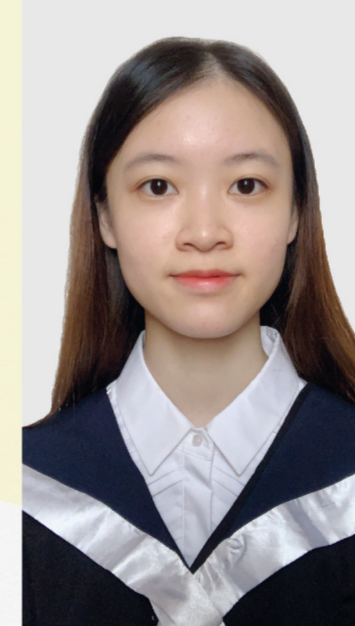
The first time to get connected with Technology and Living (TL) was in my junior secondary years. In the area of food, I remembered TL back then mainly focused on macronutrients in food including carbohydrates, proteins and lipids. The basic knowledge helped me understand more about how these nutrients support and benefit our body health. Since then, I developed an immense interest in food and nutrition, so I chose TL (Food Science and Technology) as one of my electives.

Apart from TL, I also picked Biology and Chemistry as my electives. I have no regrets on selecting these three subjects in my senior secondary years because the curriculum of all the subjects complement well with each other. Learning how nutrients being digested and absorbed in our body involved the contents of Biology, getting into details of each nutrient, such as the chemical structure of macronutrients, is related to Chemistry. Having gained a deeper insight into TL, it changed my lifestyle and habits which have a great impact on my life overall. I have developed the habit of reading nutrition labels before buying food, and have also avoided products high in saturated fat as I know it may cause chronic diseases. I have also encouraged and taught my family how to make wise and healthy food choices in the selection and preparation of foods for balanced meals. Other than nutrition, I had also learnt about food production and processing methods in the elective part, like how pasteurisation and sterilisation ensure the safety and freshness of milk and dairy products for consumption. In short, it is our power of choice that enables us to activate positive changes in our lives, and TL is useful and closely related to our daily life experiences. Graduated from Tak Oi Secondary School,

I am now in my last year of the Higher Diploma in Nutrition and Food Management at HKU SPACE Po Leung Kuk Stanley Ho Community College. The programme has provided me opportunities to synthesise knowledge, concepts and skills learnt in TL in secondary school into new understandings and contexts at the tertiary level. Another exceptional opportunity of learning was the company visit at China Dragon Inspection & Certification (H.K.) Ltd., in which I gained valuable insights into food safety inspection, food and beverage labelling verification services and testing technology. The fruitful experiences broadened my horizons and inspired me to consider a variety of life choices.

As a soon-to-be graduate from HKSPACE, I am eligible to apply for admission as a senior year entry to Year 3 of Bachelor of Science (Food and Nutritional Science) at HKU, so I will continue to pursue my interest in the area of food and nutrition. Upon graduation, I will look into a wide range of careers that are related to this degree course, including nutritionist, dietician (dietitians are more strictly regulated than nutritionists and are required to register overseas in order to work in hospitals in Hong Kong), quality assurance officer, research & development officer, health promoter, medical sales assistant, marketing assistant and management trainee etc.

Time really flies, I have been connected with TL for almost 8 years since Secondary One. What makes me continue to pursue in food science area is my great interest in food ... I really enjoy investigating into the food science behind how different food products are made, how the human body uses and reacts to food, food composition and the role of these components and their interactions in health and disease. Many a little makes a mickle, work hard and you will gain invaluable treasure, and that is knowledge. For students who have a love for food, there is much more to explore than you think. Follow your own interests, do what makes you happy.



Sophos YU

Bachelor of Arts (Honours) in Fashion and Textiles
The Hong Kong Polytechnic University

During my study in the Institute of Textiles and Clothing at the Hong Kong Polytechnic University (PolyU), the most attractive and unforgettable experience for me was participating as a student representative of Hong Kong in an exchange programme with the world-renowned Fashion Institute of Technology in New York. This experience has broadened my horizon as well as helped me learn how I could meet the requirements of the global fashion industry. I am grateful that I have met a lot of experienced professors and like-minded partners. They have inspired many of my innovative design concepts and encouraged me to keep trying. Studying at university has not only allowed me to acquire the skills of garment construction and accumulate the experiences in preparing my personal design portfolios, but has also boosted my confidence in participating in large-scale competitions. It was an honour to me that I could represent PolyU to participate in the "Fashion Future Challenge" sponsored by The Mills. After winning the championship, I was given an internship opportunity to work for The Mills. During my internship, I had the chance to learn about the solutions to chemical pollution caused by the fashion industry and acquire more knowledge about the fashion business. Looking back at all these, everything began with my love for drawing in my childhood and the selection of the elective subjects of Visual Arts and Technology and Living (TL) (Fashion, Clothing and Textiles strand) in secondary school which have consolidated my basic knowledge in drawing and fashion, so that I can realise my dream today.

Having TL as the elective subject in secondary school had prepared me for the interview at PolyU. The mood boards created in TL and design portfolio developed over the years

helped display my passion and capabilities in fashion design at the interview. After entering PolyU, I was a step ahead of my fellow classmates in mastering the basic knowledge of fashion and having more experience in garment construction. I was therefore able to master the contents of the course and meet the requirements successfully which in turn, made my study at PolyU much easier and helped me achieve better performance in examinations and creation. The TL curriculum is very broad which includes fashion history, consumer behaviour, chemical properties of fabrics, materials testing, design elements, different methods of garment construction and finishing. What I like the most is to transform graphic designs into paper patterns and create my own three-dimensional works by applying the design elements and clothing technology that I have learned. TL teachers taught me how to draw illustrations with a good proportion of a human body using cardboard cut-outs, use mood boards to present my design ideas, modify design sketches and draw patterns, as well as the points to pay attention to when laying and cutting out pattern pieces. Being able to complete the design on my own and present my work in class gave me a great sense of achievement and enhanced my self-confidence. Teachers showed fashion magazines of different brands in class to help us understand current fashion trends and to develop our strong interest in design. In addition, they brought us to fashion shows and workshops organised by different institutions and colleges, so that we could understand fashion design courses offered by different colleges and enhance the ability in garment construction.

For students who are interested in design and good at drawing, I believe that you will have great fun and satisfaction in TL, especially when you have the chance to transform things which you are interested into inspiration, realise your own design, make the garments with your own hands, and create your collection. For those who are interested in studying fashion design, gaining a better understanding of your interest and exploring your potentials through TL will lay a very good foundation for you to become a landmark fashion designer in the future.



Moonly WONG

Bachelor of Arts (Honours) in Fashion Design
Technological and Higher Education Institute of Hong Kong

When I was a child, I was interested in sketching and drawing more than writing and reading. I have always felt frustrated about my future career development because most people perceive art as a hobby but not a formal occupation. However, since I studied Technology and Living (TL) at secondary school, I realised that my passion in designing and sketching could turn into my future career.

My study in TL gave me an eye-opening experience in the fashion industry, especially fashion design basics, garment and clothing construction. These experiences allowed me to understand the process of fashion design. For example, how to present my ideas by using the mood board and creatively apply them in the design. On top of that, studying clothing construction enhanced my knowledge of sewing and hand-stitching skills. Hence, I was able to design my work by creating a pattern and using the sewing machine accordingly for construction. I believe that TL has trained me to become a creative person and think outside the box to make innovative designs.

The study of TL fueled my interest in fashion design and the hope of becoming a fashion designer. Besides, I am well prepared to further my study at THEi (Technological and

Higher Education Institute of Hong Kong) for a bachelor's degree in Fashion Design. Looking back over the days in secondary school, I learnt about fashion history, design concept and sewing skills. These topics helped me acquire the skills needed at THEi effectively, especially in pattern drafting and garment construction at the high-end fashion level. I felt grateful that TL has led me to study fashion design at THEi. When I was in my second year, I participated in a course on pattern making in Shanghai, I learnt about the skills in making men's suits and 3D draping techniques of womenswear. After completion of the course and passing the examination, I have obtained a Fashion Pattern Maker Licence.

During my summer vacation, I participated in the fashion design course in London. I undertook a course on "Art, Building and Clothes" at the Kingston School of Art. In order to understand the relationship between art, architecture and fashion, I visited different fashion and textile museums and designer studios. These experiences gave me lots of inspirations to create interesting designs and developed my skills in fast sketching and blind sketching. I am grateful to have studied TL, which in turn leads me to study at THEi and having the opportunity to study abroad.

To my fellow students, if you are passionate about fashion and creative thinking, I sincerely encourage you to choose TL as one of your Hong Kong Diploma of Secondary Education subjects. It could offer you an opportunity to learn about the practical skills, knowledge and concepts needed by the fashion industry. I hope all of you can pursue your dream and work hard on it.



My final year project



My Coursework



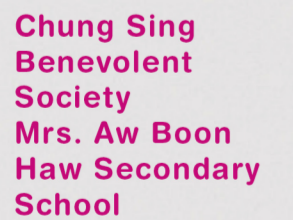
Hotung Secondary School



Society of Boys' Centres - Hui Chung Sing Memorial School



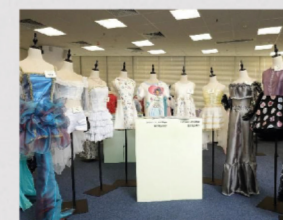
Tung Wah Group of Hospitals C.Y. Ma Memorial College



Chung Sing Benevolent Society Mrs. Aw Boon Haw Secondary School



St. Antonius Girls' College



Caritas Bianchi College of Careers



Shau Kei Wan East Government Secondary School



The Church of Christ in China Kung Lee College



Clothing Industry Training Authority

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Education Bureau
Curriculum Development Institute
Technology Education Section

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Fashion, Clothing and Textiles Strand



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Compulsory Part

1. Family Dimension
2. Fashion Design Basics
3. Textiles and Clothing Technology
4. Consumer Behaviour in Clothing Choices and Implications

Elective Part

1. Culture and Fashion Design
2. Textiles and Textile Technology
3. Apparel Industry

School-based Assessment (SBA)

- Prescribed Task (experiment) and Design Folio
- Put theories into practice
- Apply knowledge and practical skills
- In-depth studies

Further studies

- Fashion and Textiles
- Fashion Design and Marketing
- Fashion Technology
- Fashion Retailing
- Fashion Merchandising

Career Prospects

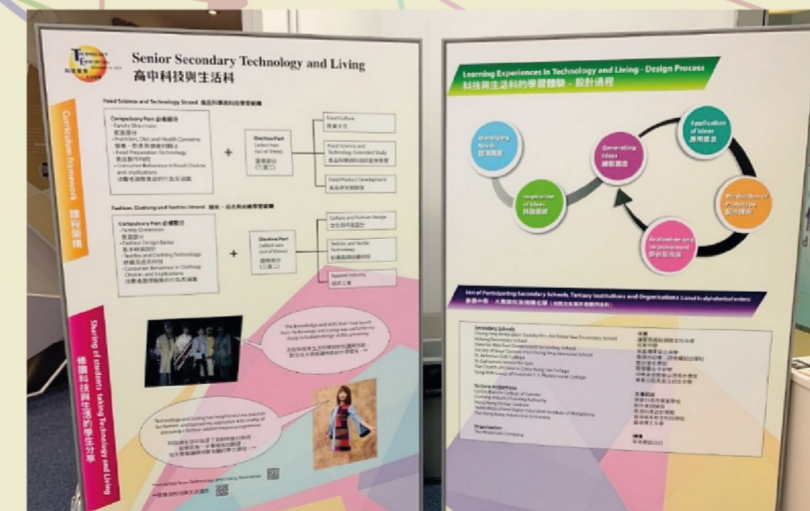
- Fashion designer
- Image design consultant
- Creative director
- Fashion magazine journalist
- Fashion merchandiser
- Teacher

Participated Secondary Schools:

- Chung Sing Benevolent Society Mrs. Aw Boon Haw Secondary School
- Hotung Secondary School
- Shau Kei Wan East Government Secondary School
- Society of Boys' Centres - Hui Chung Sing Memorial School
- St. Antonius Girls' College
- St. Catharine's School for Girls
- The Church of Christ in China Kung Lee College
- Tung Wah Group of Hospitals C.Y. Ma Memorial College

Participated Tertiary Institutions and Organisation:

- Caritas Bianchi College of Careers
- Clothing Industry Training Authority
- Hong Kong Design Institute
- Technological and Higher Education Institute of Hong Kong
- The Hong Kong Polytechnic University
- The Woolmark Company



St. Catharine's School for Girls



Technological and Higher Education Institute of Hong Kong



The Hong Kong Polytechnic University



Wool4School Hong Kong Student Design Competition