

SCHOOL &  
JOB  
MATCHING  
HANDBOOK



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Joel Filipe Dias da Cunha, 13 years old

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Rui Pedro Miranda da Silva, 13 years old

Tomás Costa Dias, 13 years old

Tomás Pinto da Costa, 13 years old

## 7<sup>th</sup> B

Alice Maria Magalhães Soares Pontvianne Ferreira, 12 years old

André Francisco Bessa Martins, 13 years old

André Filipe Macedo da Silva, 12 years old

David Luís Pereira Pinto, 14 years old

Diogo Philippe Ribeiro Fernandes, 12 years old

Francisco José Mendes Pinheiro, 12 years old

Inês Oliveira Valente Teixeira Carvalho, 12 years old

Jorge Gabriel da Silva Guimarães, 14 years old

Lara Margarida Martins Carvalho, 13 years old

Laura Beatriz Pinto Faria, 13 years old

Leonor Isabel Martins Ferreira, 12 years old

Luana Madalena Carvalho da Cunha, 12 years old

Marcelo Filipe de Sousa Cunha, 12 years old

Mateus Daniel Santos Lacerda, 13 years old

Matilde Isabel Bragança da Cunha, 12 years old

Patrick Pereira Ribeiro, 13 years old

Pedro Miguel Matos Maia, 13 years old

Tomás Carvalho Teixeira, 13 years old

## 7<sup>th</sup> C

Afonso Frederico Rebelo Fernandes, 13 years old

Afonso Ribeiro Barbosa, 12 years old

Alexandre Rafael Cunha Faria, 14 years old

Ana Sofia Melo Teixeira Guimarães, 12 years old

Carina Isabel Gomes da Silva, 13 years old

Carlos David Teixeira Guimarães, 13 years old

Cassandra Jénifer de Oliveira, 13 years old

Daniela Filipa Magalhães Santos, 12 years old

Érica Joana da Costa, 13 years old

Fernando Henrique Costa Teles, 13 years old

Francisco Gonçalo Teles Sampaio, 13 years old

Hélder Micael Miranda Faria, 12 years old

João Francisco Carvalho Teixeira, 13 years old

Lara Beatriz Soares Pinto, 12 years old

Lara Margarida Carvalho Pereira, 13 years old

Letícia Maria Teixeira Ribeiro, 13 years old

Miguel Albino Macedo, 12 years old

Saulo Ezequiel Monteiro, 12 years old

(\*) Students age corresponds to June 23<sup>rd</sup>, 2021 (end date of school year 2020-2021).



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# SCHOOL & JOB MATCHING

## HANDBOOK



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# Introduction



This handbook is the result of the work done by the strategic partnership UP2B - Boosting Up School Education towards European Citizenship and Labour Market Inclusion, a project promoted under the European Erasmus+ Programme, by a group of 9 public and private institutions from 6 European countries: Portugal, Bulgaria, Denmark, Latvia, Spain and Turkey.

The partnership started from a needs assessment carried out with school actors, which indicated the absence of an element in the set of school subjects: the relationship between the content provided to students and its applicability to work contexts and the changing demands of the "labour market". This is not, and in our opinion need not be, a central issue for "the school". Therefore, we do not seek with this paper, at any point, to question the importance of knowledge for knowledge's sake and the relevance of knowing more as a substantial goal of "being". However, we recognize the interest and the essential character that all learning involves for the integral development of the person and, consequently, also its centrality in the professional life that will necessarily come. This is the main point of our concern, and this Handbook is designed to support such an approach.

This is a handbook for use by teachers of students between the ages of 12 and 16 (parents and other guardians can also use it). It aims to combine as many school subjects as possible with possible occupations in which the content taught in school might make sense, either directly or indirectly. The design of the Handbook was intended to be appealing in the eyes of

the students, since this tool is ultimately addressed to them, whenever they require an answer to an endlessly asked question: "why do I need to know this and what for...?!" It seeks to demonstrate how important or simply interesting or fun, but well-founded, it can be to learn so many different subjects such as History, Mathematics, Geography or any other subject, because in the future, and once outside the school context, such subjects provide necessary knowledge.

Knowledge is approached as an important instrument for personal fulfilment and at the same time for decision making for everyday life, in other words, an important element of empowerment for the students. We believe that this approach has several advantages: it will increase the levels of motivation at school, especially for students who normally do not receive answers to the above question; it may act to reverse potential dropout paths, since it presents possible answers; it contributes to inform students about possible career paths.

The methodological proposal is simple, having been designed to allow the teacher to approach in a light, relaxed and integrated way, during a regular class and without the need to use complex mechanisms or unavailable materials, what may be clues to the applicability of knowledge in the professional practice of the various areas on which the class is focused. To do this, it will be sufficient to use the Manual to list the considerations contained in the chapter "Career & Working Life", researching the subject under study, referring to the considerations contained therein, or even asking the students to do a similar exercise on these and other professions that can be addressed in this way.

We have tried to cover a wide range of professions, without impositions regarding the possible social status of these professions (which, by the way, varies according to the cultural context in which one is located), the possible higher or lower levels of qualification and specialization required in certain professions, the possible higher or lower levels of qualification, general literacy and digital literacy, among others. We also seek an approach that is independent of the financial return expectations of professions; just as all school subjects are valid and necessary, so are all professions!

The central idea of the exercise is essentially not to condition any choice on a possible non-applicability of the subject being studied; we believe that all knowledge is valid and infinitely useful, even if its applicability may require additional knowledge.

This approach, more oriented towards professional life, is complemented with some dimensions that reinforce the preparation for adult life, namely and specifically training in citizenship.

Thus, in a second part of this manual, attention is focused on some recommendations regarding the necessary - and transversal - approaches to the defence and fulfilment of human rights, particularly in the dimensions related to human communication and, more specifically, to inclusive language. This dimension is particularly relevant considering the still ongoing path and construction.



"Skills" and "competencies" are concepts typically associated to the Vocational Training context and not so much to the domain of regular school education, particularly in the initial school cycles (up to secondary education). Such approach is justified not only because these initial cycles have a wider and more diversified character (naturally associated to initial learning) but also because as children grow up and become youngsters and young adults, the proximity with the autonomy of life and, necessarily, the beginning of a professional life increases. If this approach is welcomed within the school institution and the political system that shapes it (policy makers, social scientists, school managers and teachers), it is not always straightforward that such initial and general learning is relevant according to the target groups of the school (children and their families). Therefore, the aim of this chapter is to provide clues that, either in a playful or a more serious way, allow to articulate knowledge with its possible practical applications, or at least to establish connections between the two domains. We reiterate the notion that it is not the intention of this tool to reduce any knowledge to its practical applicability. On the contrary, the intention of the following texts is precisely to value any knowledge always given its importance in our lives, from the importance of knowledge for knowledge's sake, up to the discovery of the application of knowledge in unexpected domains!

While it's possible to distinguish between concepts such as "occupation", "job", "work" and "career", they all tend to show a relation between School



and Labour Market or, through a different lens, between knowledge and practice. But is it important to establish such a relationship? While it might be difficult to establish direct links between all knowledge and its specific applicability, it's important to realize that "curiosity" is a basic element of Human characteristics, responsible for bringing "common sense" to the grounds of Philosophy and Science.

Accordingly, the following chapter might be seen as an exercise of unveiling curiosity about what the knowledge conveyed in the various school disciplines may contain regarding numerous practical domains from the most expected, to the most unusual. The aim is that teachers and students can have fun when looking for applications of knowledge within the most expected areas, but also in areas less considered and, above all, less worked - so far - in the classroom context!



# Mother tongue

Having excellent language proficiency in your mother tongue is so important in all dimensions of life that it is difficult, if not impossible, to determine professions where this is not the case. Being able to properly communicate with other people in our common language, whether in writing or orally, means being able to express our ideas in a convenient way and reducing the margins for misinterpretation... Who has never felt angry because of been misinterpreted...?

## *Call Centre Employee*

Getting permanent or temporary employment in a call centre is the solution found by many young people to start their working life. Whether in a telecommunications company, in the sales sector or in any other area, mastery of the language, i.e., the ability to express oneself well and to understand others, is fundamental! Given that our mother tongue surrounds us everywhere, for better or for worse, where can we be sure to properly learn it? At school, of course!



## *Fireman/woman*

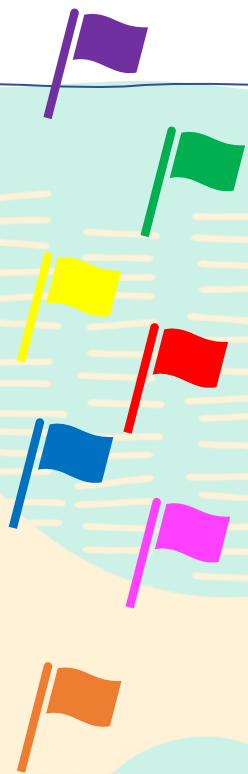
As a Fireman/woman you have a job where severe stress moments will occur. Fast reaction to such moments will be required, but for your actions to be adequate and effective, you will need to clearly understand the stressful situation as much as possible as quick as possible.

Now imagine yourself serving at the table or at a counter... First, you want to make sure you understand exactly what the customers are telling you, so that you can correspond in the best way! Secondly, you want to cause a good impression! The way we express ourselves in our mother tongue is, alongside with other variables (our body language or our appearance), one of the first elements to convey an image about us (regardless of how superficial it may be)! The use of inappropriate language or using a poor grammatical mastery while talking can ruin our professional performance... and the business!

### *Bartender/Waiter*

### *Translator*

Whether as a translator in an International Organisation (European Commission, for example...) or as a literary translator, this profession uses the mother tongue as a sensitive and delicate object, deserving respect and willing for care and attention! A bad translation can lead to a diplomatic conflict or ruin the national version of a book aimed to be so good that it could have changed our lives for ever! In fact, the simple bad translation of the subtitles of a movie or a publicity picture already makes you quite irritated or, at least, you will make fun of the translator, right? Translating well obviously requires an excellent command of our mother tongue (without which we will not be able to learn other languages, remember it...).



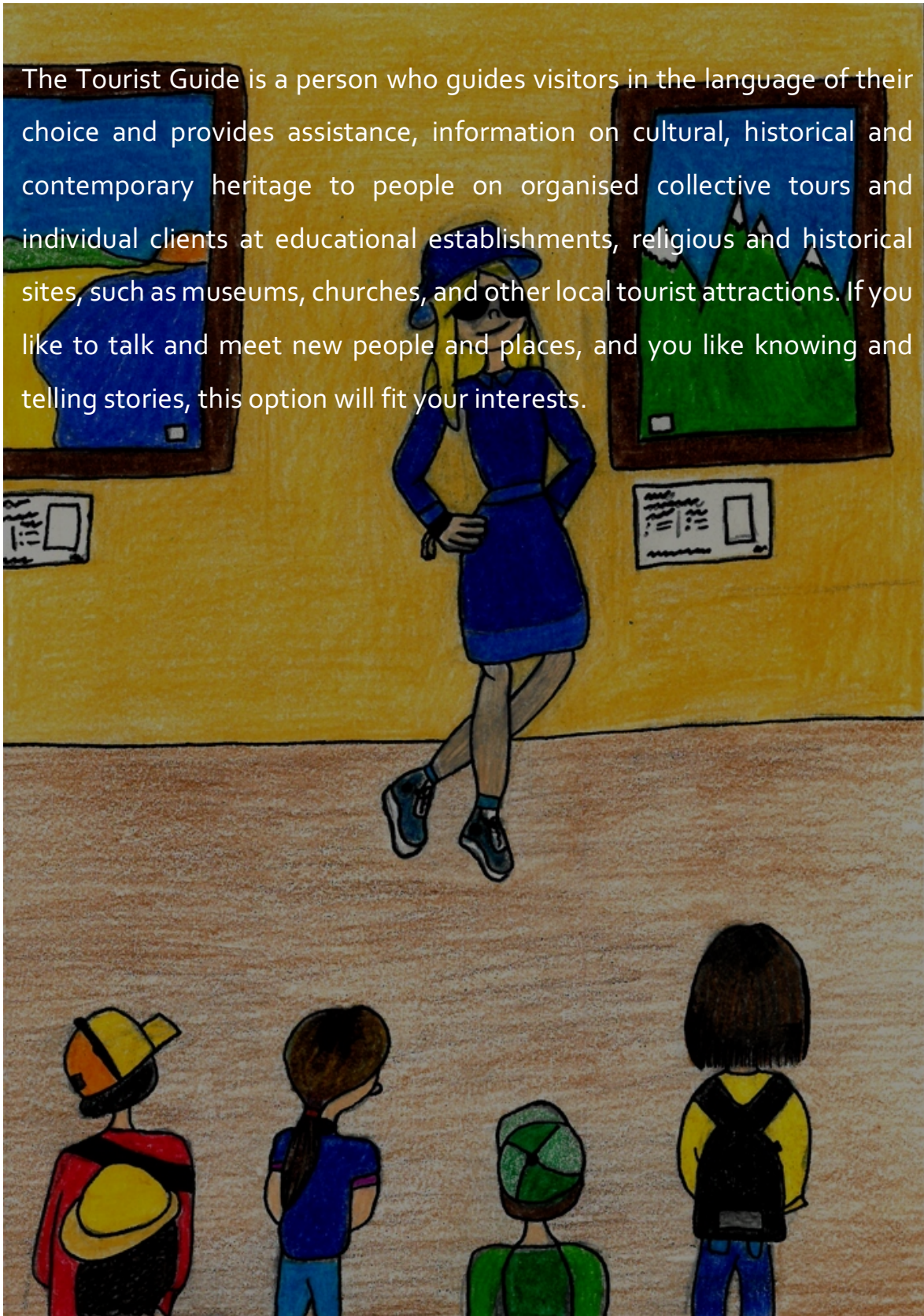
# History

History is the study of the past. Given that we are living in the present, why bother with what has happened in the past? The study of History offers evidence-based information about how people and societies have been living through time. It will give the opportunity to develop knowledge and skills to assess historical evidence, conflicting interpretations, and past examples of change. We know that the past affects the present, and consequently the future. Every time we try to find out the reasons why something happened, we must analyse the factors that happened earlier. It is quite difficult to contemporaneous history to explain current developments and, therefore, we have to look further back to identify and explore the causes and processes of social change. While studying History, you will become a more literate person and a well-informed citizen.



## Tourist Guide

The Tourist Guide is a person who guides visitors in the language of their choice and provides assistance, information on cultural, historical and contemporary heritage to people on organised collective tours and individual clients at educational establishments, religious and historical sites, such as museums, churches, and other local tourist attractions. If you like to talk and meet new people and places, and you like knowing and telling stories, this option will fit your interests.



## *Museologist*

The Museologist is a person who is an expert in museology, which means an expert in designing, organising, and maintaining museums, galleries, or other private or public exhibition places. In these cultural and art contexts, the museologist can play different roles, such as curator, museum educationists, exhibition coordinators, or consultants. Do you like culture and art? The main requirement to become a museologist is to be passionate about the objects and collections

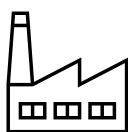


they handle and use them to disseminate knowledge – to which History is a fundamental contribution –, making museums interesting and fun places to visit.



## *History Professor*

The History Teacher develops and implements lesson plans, defines teaching/education and assessment strategies. In addition to their teaching responsibilities, history teachers research historical subjects and may publish scholarly articles and books resulting from their research. If you are interested in becoming a Professor of History, you should know that you need to develop certain skills, such as speaking, writing and critical thinking, among others, to fulfil teaching and/or research responsibilities.



## *Factory Worker*

You'll be working in a factory, producing any kind of material. You will be working for a few hours straight, and enjoying your work, which is great! But do you know your rights and duties at work? Well, some of them you know, some of them you don't... you'll be discussing them with your fellow workers, trying to get better working conditions, maybe better wages...

suddenly you remember studying in your history classes something about labour unions, how and why they were created... you also remember the hard times workers lived through during the Industrial Revolution, and how changing working conditions was something important for our lives today! As you deepen your thinking, you begin to wonder if you would be interested in joining a labour union, which could help make it happen... Well, knowing history, as easy as it is to make some decisions in your life, can help a lot; even if you are a factory worker and have never thought about how history classes could help you in making decisions regarding your career!

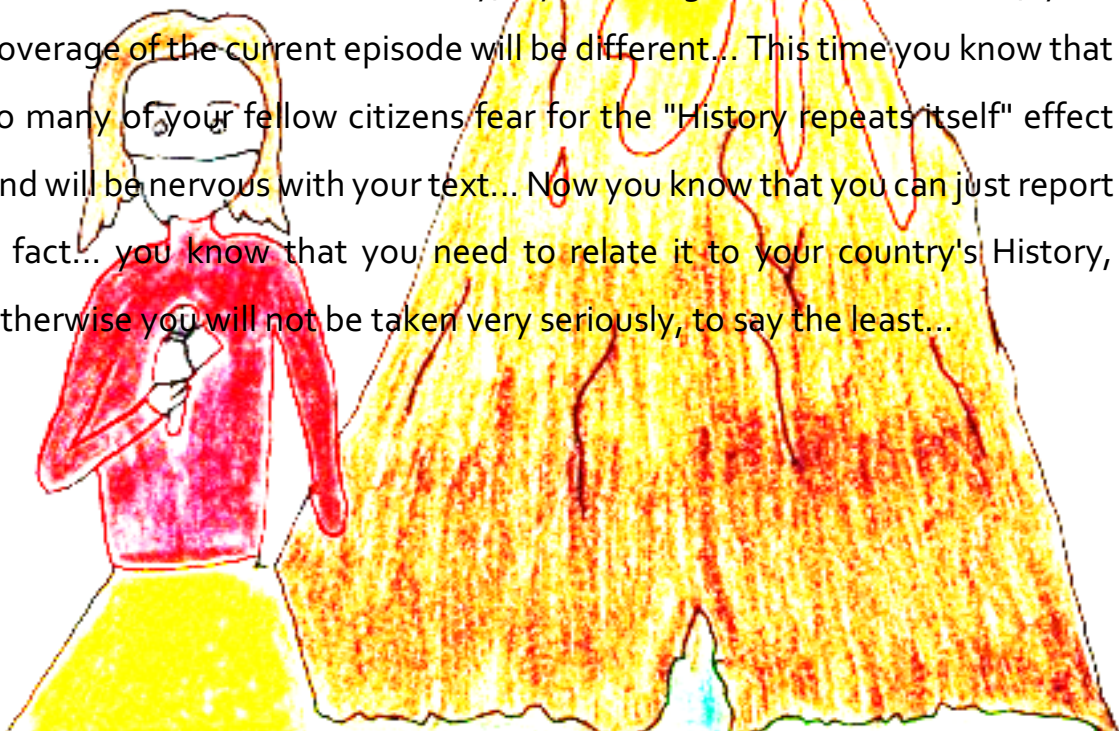
### *Associative leader*

Leading an association will require you to know about History: regardless of the aim of your Association, you will need to know how such themes had been dealt with, in the past, and what results you can expect in the present and, as you wish, in the future! If you lead an environmental activist association, you will need to know about the biggest environmental tragedies, their causes, their immediate consequences and their long-term or permanent impacts - you will need to advocate against similar tendencies! If you lead a human rights association, you will need to know about how, when and why the Human Rights "were created", and why we need to keep on stressing their importance! If you lead a sports association,

you will need to know the History of your Sports, why was it created, why is it still important nowadays, which have been their most relevant victories and what it meant in people's lives; in short, you will need to know how to look at History and to interpret it to the present lens!

## *Journalist*

As a journalist will be covering a whole sort of facts occurring in our daily lives. However, current facts do not happen in an isolated way nor are their effects independent from the past! History is everywhere and it really conditionate our present life! Imagine that you are a journalist of an important newspaper in your country. Think about how you can react if you are called to cover a car crash that injured an important politician, let's say, a Prime Minister or a President... would you write the news the same way if you knew that once upon a time in your countries' history an important politician was forced to resign after suffering a severe injury...? His/her resignation eventually condemned the country to a severe political, social and economic crisis...? Probably, by knowing such historical fact, your coverage of the current episode will be different... This time you know that so many of your fellow citizens fear for the "History repeats itself" effect and will be nervous with your text... Now you know that you can just report a fact... you know that you need to relate it to your country's History, otherwise you will not be taken very seriously, to say the least...



# Sports/Physical Education

Sport teaches you important qualities of discipline which can act as a self-boost in many aspects of life. Sport improves your mental, physical as well as tactical discipline from following rules, practicing restraint or obeying the coach and respecting decisions. This enables you to accomplish your full potential and realize your goals, which are critical factors in attaining success. Sports education not only demand the role of a team player but, a leader at times. Moreover, sports focus on coordination, teamwork and cooperation. These skills will help you when you grow up as tomorrow's individual. In addition to participating in individuals' sports, team sports would improve your role as a team player which would help you a lot when it comes to group projects both in academics and future career.

Physical Education is necessary for the development of our body and mental health. It plays a major role in our socialization and the development of our personality. Lack of physical activity, which has become one of the most important problems of our age, paves the way for diseases such as obesity, diabetes and attention deficit. Children who prefer to wander around the centres become candidates for important chronic diseases in the future. Physical Education helps students to develop their bodies, not only to have a fit body, but also to cooperate with others and recognize their own strengths and weaknesses.



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## *Gym Assistant*

If you are passionate about fitness, this job is a great opportunity to start your sports career, and one to which sports classes at school contribute a lot. Not to disregard the fact that sports activities at school can benefit you, keeping you healthy and avoiding unwanted diseases. Furthermore, sports require interaction between people, such as between players on a team, which positively affects your social skills.

## *Sports Massage*

### *Therapist*

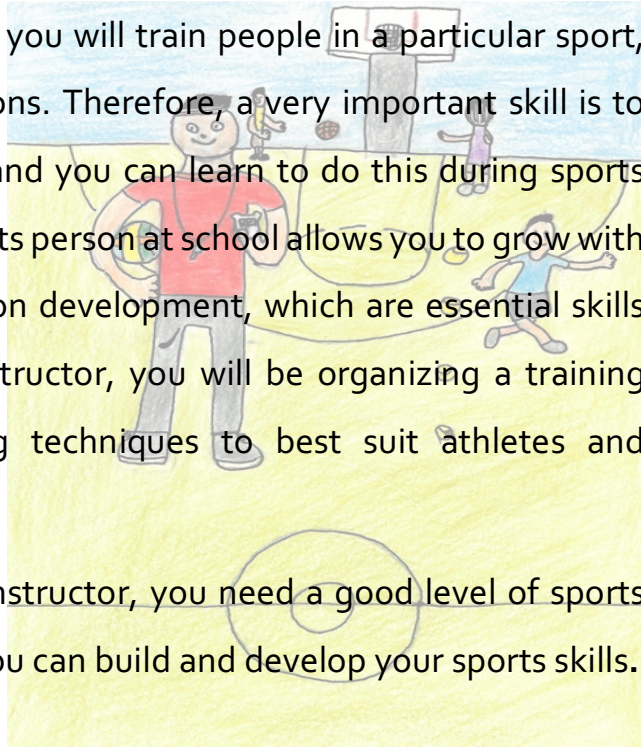
Massages require concentration, good organization, management skills, and cooperation. These skills are developed in sports activities at school and will surely be relevant for a future sports massage therapist. In addition, the potential internal skills developed from sports benefit this career path, in that they enable us to manage and recognize risks and find creative ways to improve our own performance and concentration in sports rehabilitation techniques.



## *Sports coach/sports instructor*

As a coach or sports instructor, you will train people in a particular sport, and/or lead group fitness sessions. Therefore, a very important skill is to manage your time efficiently, and you can learn to do this during sports activities at school. Being a sports person at school allows you to grow with a strong focus and concentration development, which are essential skills when, as a sports coach or instructor, you will be organizing a training session and adjusting training techniques to best suit athletes and students.

To become a sports coach or instructor, you need a good level of sports ability, and it is at school that you can build and develop your sports skills.



## *Amateur athlete*

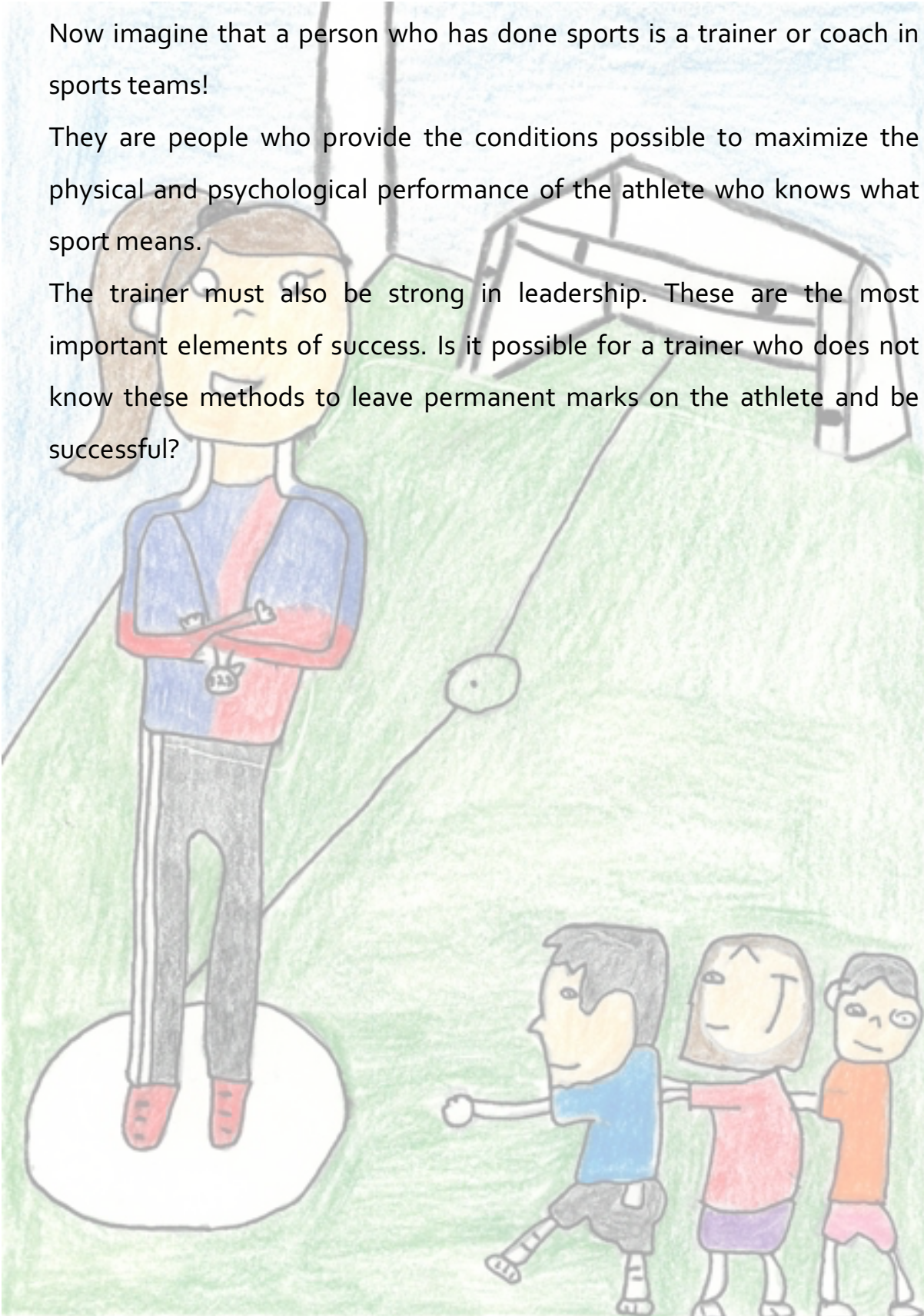
It is the dream of any athlete, who loves and plays sports, to want to be part of a sports team. Showing yourself in the sport you choose according to your abilities and being successful depends on the sports education you have.

## Coach

Now imagine that a person who has done sports is a trainer or coach in sports teams!

They are people who provide the conditions possible to maximize the physical and psychological performance of the athlete who knows what sport means.

The trainer must also be strong in leadership. These are the most important elements of success. Is it possible for a trainer who does not know these methods to leave permanent marks on the athlete and be successful?



# Chemistry

It is impossible for a person to remain indifferent to chemistry, either you love it, or you hate it. If you're one of the latter, here are some facts that might change your mind: first and the most important - we had met chemistry the day we were born and must deal with it practically every day since then. All people are chemists in some way without even realizing it. Chemistry is the vital study that explores the structure of matter and energy and the way both interact with each other. If you think about it, everything around you are made of elements and chemicals. So, chemistry is an essential part of the everyday life. You can find chemistry in everything you touch, drink, eat or smell, it's in the air you breathe, even in your feelings and emotions. Yes, even the emotions that you feel every day are a result of chemical messages, primarily neurotransmitters. Love, joy, sadness, attraction, jealousy, envy, excitement all has a chemical explanation.

Basic knowledge of chemistry is essential for every human being. Chemical reactions occur constantly, so apart from being useful, such knowledge could be also fun. What are the basic elements of human body? Why do we cry when cutting an onion? How and why soap cleans? Why can food and drinks go bad? Why ice floats? Why is iron covered by rust? How we digest food? How the fireworks work? Why do leaves change their colour during the fall?

Chemistry holds the answers to almost all questions you may have regarding what happens around you.





The basic chemical concepts are useful when applied to various areas, medicine, cooking, cosmetics, biology, physics, astronomy, nutrition, food industry, sport activities and many, many more.

In a nutshell, the importance of chemistry simply lies down in the fact that explains the world around you. Chemistry is in the core of everything that surround us, therefore is the study of everything.

Chemistry is very important in day-to-day life, and it could be found in almost everything, in fact, a multitude of chemical processes will accompany you in your daily activities. Consider that some chemical substances are guarantying us heat and electricity, others are present in clothes, perfumes, cleaning products, food, beverages, medicines, insecticides, paints and many others. Many of the changes that you could observe in the natural world around us are actually due to chemical reactions, such as the colour change of tree leaves in the fall season or the growth of a flower.

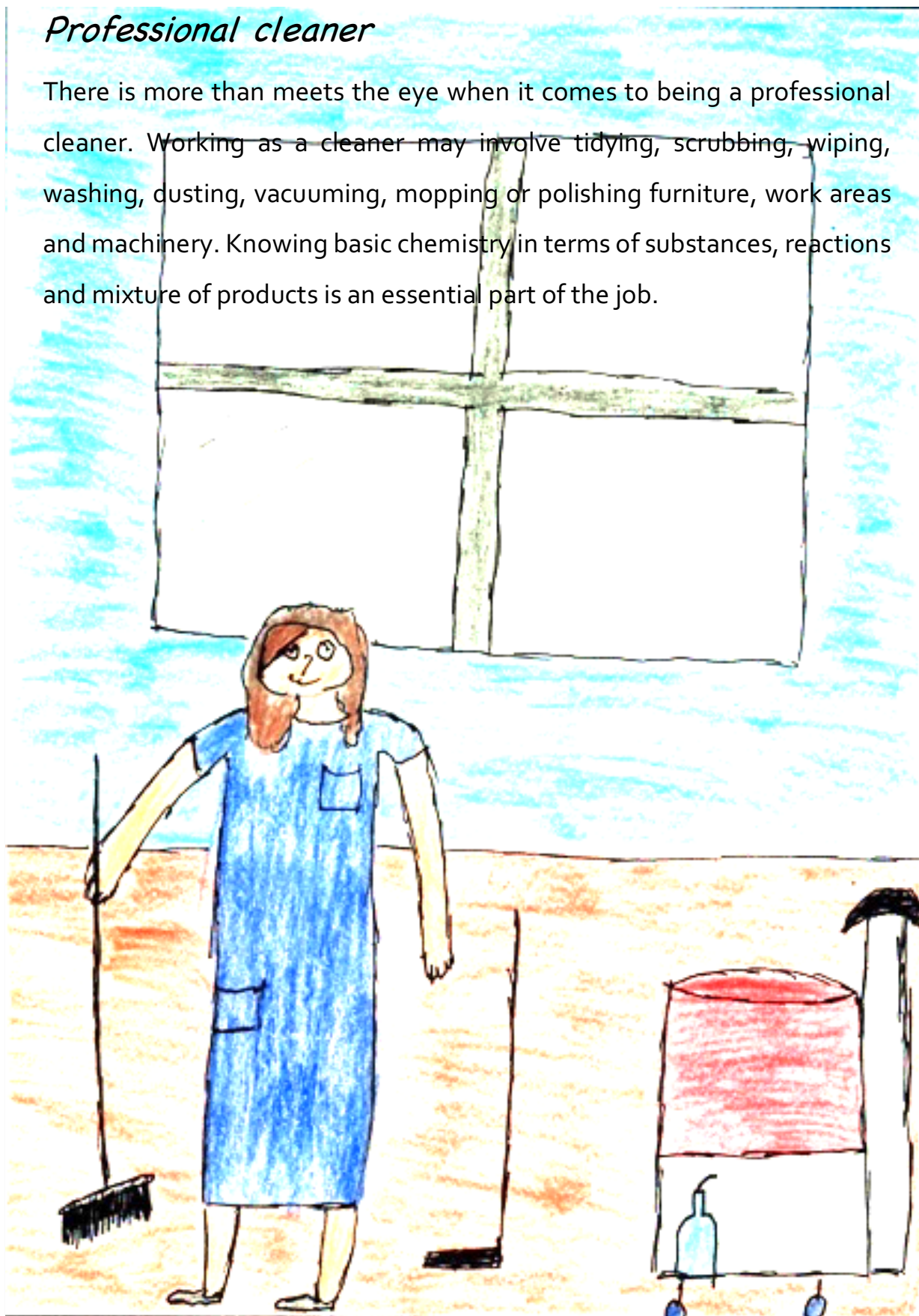
In addition, inside you, in your body, a set of physical and chemical processes are continuously producing, such as respiration, digestion, which are a group of chemical reactions, which allow us to obtain the necessary energy we need to perform our functions and obtain of compounds necessary for blood and cell function.

If you know and understand all of this, you can understand better our world and our organism, moreover, multitude of works are related with Chemistry principles and its knowledge supports other branches of science. Chemistry has brought countless benefits to Humanity!



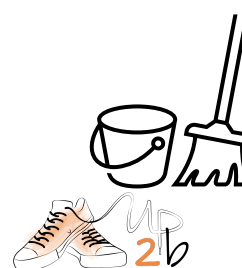
## *Professional cleaner*

There is more than meets the eye when it comes to being a professional cleaner. Working as a cleaner may involve tidying, scrubbing, wiping, washing, dusting, vacuuming, mopping or polishing furniture, work areas and machinery. Knowing basic chemistry in terms of substances, reactions and mixture of products is an essential part of the job.



## *Cleaning staff*

The cleaning industry is quite big as different types of cleaning are required for different objects and different properties. Cleaners specialize in a specific cleaning sector or even a specific task in a cleaning sector. In the most part of their tasks related with cleaning and disinfecting floors and other surfaces, they must use special cleaning chemicals or agents, which can be really dangerous in their use, so it is really recommended that they should have some basic knowledge of them, especially if they have to handle with acids and other products, and obviously they have to follow all the instructions and safety measures related, like the use of some clothes or personal protective equipment (PPE): gloves, glasses... Cleaning methods and products vary widely in their recommended use, effectiveness, risk to users, environmental sustainability, and ecological impact. In other tasks, with some special wastes, they must remove following some protocols, above all to protect themselves and looking for the conservation of the environment. Other example is in the case of cleaning and conservation of swimming pools, they must be able to perform simple tests and know how to use the necessary chemical compounds. In this job, it is important to know why certain cleaning products work the way they do, and it is important the connection with chemistry because chemical properties of different substances make them suitable for cleaning hard surfaces, floors, upholstery, clothing, and other items. It is necessary that they learn chemistry terminology and several basic chemistry principles.



## *Cook/Chef*

All of us like eating good and tasty food, but if in addition to the great passion for quality food you also enjoy the process of food preparing and loved to help your mother with cooking when you were a child, why don't consider a career as a cook/chef. If you have talent and are willing to work hard, being a chef is a rewarding and exciting job and one that will always be in demand, no matter what happens. Being aware of the different chemical processes that happen during food processing and how to properly mix ingredients to prepare an outstanding dish, are things that you learn from chemistry.



*Pharmacist*



Many people choose a career of pharmacists because they would like to work in the health sector, but at the same time want to be as far away as possible from the typical doctoral activities like interacting with blood or human organs, eek! If this is the case for you, the career in pharmacy could allow you to take the best from both areas, because pharmacists play a key role in helping patients feel better and get well as quickly as possible, but without direct interaction with the diseases. Contrary to popular belief, the pharmacists don't just jump behind the counter to get the medicine put on the prescription. Their job is much more complicated and responsible. Pharmacists are responsible for ensuring the quality of medicines supplied to patients; ensuring that the medicines prescribed to patients are suitable; advising patients about medicines, including how to take them, what reactions may occur and answering patients' questions. Pharmacy is a very diverse and rewarding career, with many career opportunities in the sphere of patient care, scientific research and innovation. It requires excellent knowledge in chemistry, mathematics and other sciences, as well as a university master's degree in pharmacy, followed by training courses and further qualifications.

## *Pharmacologist*

Pharmacologists are high-qualified professionals who study the way drugs and medicaments interact with organisms, living systems, and their parts (i.e., cells, tissues, or organs). Part of their responsibilities is to research and define what kind of substances could be used by humans to provoke adequate biochemical functions for curing illnesses. The main purpose of a pharmacologist is to create, develop, and test new medications. This



profession is even more interesting than it sounds, but it also requires a very profound knowledge in chemistry, biology and other scientific areas.

### *Pharmaceutical/chemical/cosmetics sales specialist*

If you enjoy chemistry, but you don't think that you will like working in a laboratory or specialising in a medical sphere, then sales may be the right field for you. There are thousands of medicines, substances, chemicals and cosmetic products currently on the market and big pharmaceutical and cosmetic companies continue to create new ones every day. So, someone should take care of managing the supply-demand process in this sphere and that someone is the pharmaceutical sales specialist. They are the persons who are in charge to market the final product and to explain the buyers the various processes undergone in the product in chemical terms, their applicability, dosage, side effects and impact. You will also be able to travel a lot and meet new people which is also a very cool side of the profession.

### *Cosmetic chemist*

There are millions of cosmetic products and brands worldwide, used by both men and women. Every cosmetic product you have, from your lip balm or shaving cream to your perfume has taken a long path before ending on your cosmetic shelf. Before entering the commercial network, each cosmetic product must be thoroughly developed, tested and improved. This is the main responsibility of the cosmetic chemist. A cosmetic chemist is the specialist who formulates a cosmetic product as

well as they ensure it meets the needed chemical and governmental regulations and requirements.

Becoming a cosmetic chemist could be an interesting choice for people who have good knowledge in chemistry and would love to work in the cosmetic industry.



### *Toxicologist*

Like the pharmacologists, toxicologists study the effects of drugs on the living

organisms, but they also look at the effects of other substances, both natural and man-made.

The toxicologists examine chemicals in terms of their toxicity, i.e., the possibility of causing harmful effects to humans or other living organisms



(ingestion, inhalation, skin, blood), including methods of cure from this poisoning. They are being hired in various fields like the pharmaceutical industry, environmental science, biotechnology, criminology, etc.

## *Brewer*

Brewers are the professionals who are responsible for making beer. They produce malt by processing barley by dipping, germination, roasting, decimation, sorting and other treatments serving the processes of its own beer production, which is basic cleaning, scraping, brewing, cooling, fermentation, filtration and bottling. In order to become proficient in the profession of brewing, one needs to have a degree in organic chemistry, food science and biotechnology, chemical or process engineering, or microbiology.

## *Wine technician - oenologist*

If you are a wine technician, you will be capable, with the supervision of the oenologist or winemaker, of doing the necessary operations necessary to produce wine, must and other derivatives of the vine, and the pertinent analysis of the products, their appropriate storage, suitable conservation, and subsequent bottling.

For all that tasks, you must have knowledge of chemistry, because it is involved chemical compounds and chemical processes.

In the process of making the wine, there are a lot of steps that this job position is involved in and you have to use your chemical knowledge for



achieving a quality wine and preserve it, for example, you have to choose the ideal date for harvesting on vineyard , taking into account that you need to achieve an ideal balance between natural acid, tannin, and sugar levels in the grapes, even you have to choose the time of day you to begin the process to preserve the acidity, and have the control over the

fermentation process.

If you are working in this job position, you have to conduct an internal analysis laboratory. Depending on the results you might adapt a batch by adding things to the wine or changing the temperatures of tanks during fermentation. For that, it is important to ensure you understand chemical processes and know how much to add to a wine batch depending on the volume of the tank and the chemical reaction it might cause.

Even in the bottling, you have to use your chemical knowledge, because you will conduct chemical processes to test the wine, particularly to check for bacteria or yeast in bottled wines or even adding antioxidant.

Therefore, you must know all the chemical compounds, how they are used reliably and their conservation. Also, the health and safety conditions of the processes according to the legislation of the sector and apply it to the job.

At present, more than 300 essential wine compounds are known, which give it the characteristic flavour and aroma of each designation of origin, and which are produced by organic compounds (of carbon) such as: esters, alcohols, volatile organic acids and aldehydes.

## *Chemical engineer*

Chemical engineers are working in processes for the transformation of different substances for industry. They use their knowledge to produce a multitude of everyday use products: plastics, fibres, paints, medicines, cleaning products, and chemical compounds and metals such as aluminium.

They transform raw materials into products to use, they are responsible of doing safely, efficiently and profitably, for that, they must consider, in every moment, the cost of processes, safety regulations and environmental impact.

If they are working in a chemical plant, they will be part of a big team with other professionals (mechanical engineers, industrial electrician, physicists...) to design chemical reactors, heat exchangers, component separation systems, tanks .....

It is important the protection of the environment in this job position, therefore they must be up to date with all health and safety regulations in the chemical industry. And therefore, they could act in developing technological alternatives to solve problems such as acid rain, metal contamination, recycling of waste to preserve the environment.

And it must be up to date with scientific and technological advances, and they can work in a variety of industries including energy, food and drink, oil and gas, pharmaceuticals, plastics, toiletries, water treatment. If you want to be one of this, you must control the principles of chemistry.

### ***Patent attorney***

Your strong side are humanitarian subjects, but you also have a passion for chemistry? Luckily, there are jobs that are on the crossroad of both spheres and one of them is a patent attorney. In order to become one, you have to pursue a degree in both chemistry and law. Their main job is to guide people whether the patent is legal and help scientists or researchers to know whether the innovation is valid for patent rights. Their role also includes investigation and legal advice on duplication of the product and product infringement. Having in mind the specific nature of their expertise, patent attorneys are extremely well-paid, and their job is quite interesting.

# Physics

The knowledge about physics is important in your daily life, because a multitude of physical phenomena occur around you, which you need to know to understand the world around you. Physics is the answer key to how the universe works because Physics is the most basic and fundamental science. The truth is that it is necessary that you know such important things as movements, sound waves, temperature and their variations, the light, electric current, magnetism, states of matter and their changes, the universe and planets, atoms and subatomic particles, energy... and you can learn this in "Physics" subject. Piece by piece, you will understand the things that they are around you and their rules

Understanding physics opens our eyes to the world and real life around you. Everything becomes clearer and more accessible, and Physics extends and enhances our understanding of other disciplines (Math, chemistry, biology...) and even you will understand better the new advances in technology which are often founded on innovations in physics and inventions based on a new interpretation of existing physics knowledge and how different devices work (cell phones, computers, digital cameras, TVs...).



## *Racing driver*

Racing drivers make their living by competing in motor races against their rivals in different types of motor racing (motor racing, rally, motorcycle). There are very famous racing drivers like Fernando Alonso, Lewis Hamilton, Sebastian Loeb or Valentino Rossi).

Becoming a professional racing driver could be considered more a lifestyle choice than a career but requires a complete dedication. You will need to invest time, effort and, quite often, a lot of money.

This is a sport which demands ultimate concentration, strength, physical fitness, technique and fearlessness. But, also, for being a good racing driver, it is basic to learn how aerodynamics and grip affect a car's performance, weight transfer (balancing a car is controlling weight transfer using throttle, brakes, and steering), tire adhesion related with the balance of the weight, traction, centrifugal force, speed, horsepower and everything which it is related with movement

Understanding the physics of driving will help you to be a better driver, and increases the enjoyment of driving, because you are understanding what is happening and you can, also, try to control it. Moreover, if you know the deep reasons why some certain things are happening, you will remember the things better and you can internalise this knowledge and the skills.

Even if you don't want to be a racing driver on the future, if you want to enjoy more as viewer, basic knowledge of physics will help you.

## *HVAC technician (Heating, Ventilation, Air Conditioning technicians)*

In this job position, you will be responsible for the assembly and maintenance of indoor climate control systems: heating, air conditioning, and ventilation units, even they may also handle refrigeration equipment; in summary they control the temperature and air quality in buildings. It is truth that although trained in all three components, HVAC technicians sometimes choose to work strictly with just one of heating, air conditioning, or refrigeration systems. In some cases, they may specialize in installation, maintenance, or repair. You can work in a variety of settings, from schools to factories to residential buildings. You can play a vital role in the construction of any building to ensure the optimal function of HVAC systems. But, for all of this, you need to know Physics, at least essential knowledge about fluids, concepts in thermodynamics related with heat exchange, temperature, pressure, states of matter and their changes, notions of electricity and electromagnetism, solar energy, refrigeration cycle, humidity...

It is certainly no secret that people will be using refrigerators, heating systems, and air conditioners into the foreseeable future, moreover Heating systems and Air conditioning's popularity began to increase when the equipment became more affordable and this will continue to advance and thrive; for that the job outlook for this profession is excellent, in fact, some experts have predicted that employment in this job position will grow much faster than the average for all occupations through at least

2026 but if you want to work as HVAC technician, it would be convenient for you to build a solid background in physics during your basic studies.

## *Meteorologist*

Meteorologists are scientists who study and work with meteorological phenomena. They study the weather, the atmosphere (the gaseous layer surrounding the earth), the phenomena that occur in it and the physical laws that govern all these atmospheric phenomena. One of their main functions is to predict the weather, and the study of the climate, because many human activities depend on it, such as: agriculture, fishing, air and maritime navigation, military operations, tourism and many aspects of life daily. They make their forecast based on investigation and analysis of various factors such as wind speed and direction, pressure and its variation, temperature, humidity and for that they need to have a clear and good physics background. The person who transmits this information to public, it is the weather broadcaster who usually are meteorologist (or journalist with some weather background) and sometimes he/she becomes famous. Meteorologist to do their job, usually, use precision measuring devices like thermometers, barometers, anemometers, hygrometers, etc., observation in meteorological stations which are on land and at sea, radars, remote sensors and space satellites. With this information, they obtain the results using computer models. One of their most important functions is to warn of the arrival of severe weather conditions, such strong winds and rains, to public bodies and to people in general. With this information, the region could be prepared and even lives can be saved.



Other tasks, that maybe are less known, that some of them oversee analysing the air quality of a city or region, measuring the concentration of pollutants, inducing their effects and proposing solutions to avoid them.

To summarise, meteorologists study the Earth's atmosphere and its interactions with the Earth's surface, the oceans and the biosphere. Their knowledge of applied mathematics and physics allows them to understand the full range of atmospheric phenomena, from snowflake formation to the Earth's general climate.

## *Bricklayer*

Bricklaying is an occupation of utmost importance in our lives, particularly for those who live inside concrete-built houses. While the bricklayer needs to have physical strength and hand ability to carry and correctly place bricks, he/she really need to perform and to understand much more than that! Bricklayers are called to have problem-solving capacities, of course, but also to understand how materials work, how they react in accordance with their technical features and the environmental characteristics. Bricklayers will be called to understand the basics of physics but, if by chance they are called to build or to repair a vaulted ceiling or roof, they will surely be happy to know more about physics than just the basics!

The educational system of each country is different and has its specifics, but probably one of the few similarities between them is that biology is one of the basic subjects that every student has to take in school. The reason is simple – biology is the science that studies life. The term “Biology” has its roots in Ancient Greek words βίος (bíos) meaning “life” and – λογία (logía) meaning “study”.

So, it goes without saying that the benefits biology brings to the humanity and its existence are probably countless. It has wide applicability to numerous spheres and areas of life. Here are few examples further illustrating this affirmation.

Biology provides awareness about the nature and all mechanisms happening in the environment. Knowing more about animals, plants and all living organisms helps us limit the negative impacts we have on them and therefore contributing to nature preservation.

Biology helps us understand the processes and changes in our bodies and minds. Since our birth till our last breath, continuous developments happen in our organism every second of every day. Reproduction, embryo development, giving birth, growth, metabolism, aging, illness, even vital processes like breathing, eating and moving can't be explained without studying biology.

We can't talk of the importance of the biology without mentioning the medicine. All diseases, from simple headache or flu to deadly epidemics are somehow related to biology. In the year 2020, perhaps more than ever before, we could see how extremely important it is to find cures and create effective medicines. Biology makes this possible.

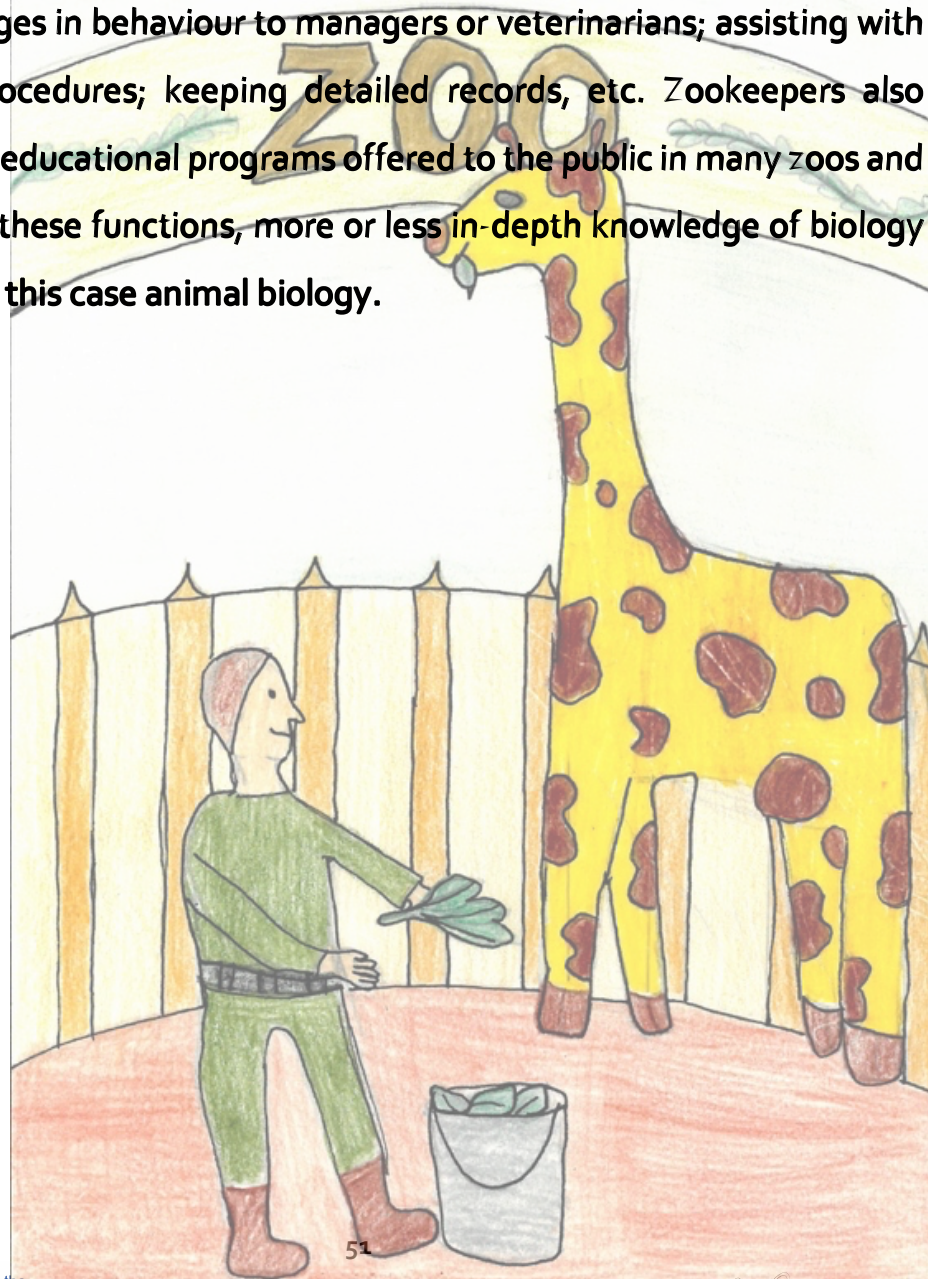
Biology is probably one of the most dynamic sciences in the world. Since ancient times it explains and continues to provide the humanity with vital information about the existence of all living organisms on the planet, their development and interaction. The advancement of biology (and its more than 50 sub-disciplines) as a science and its beneficial influence on many other areas helps the sustainable development, nature protection and improves the quality of human life.

# Biology



## Zookeeper

Who doesn't like to go to the zoo? Surely, during your visits you've noticed that many people take care of the animals, and the most visible members of the zoological park team are the zookeepers. Zookeepers are animal professionals who are responsible for maintaining the health, wellbeing of the animals and ensuring proper maintenance of their habitat. The duties of a zookeeper usually include: feeding the animals; administering medication; cleaning and maintaining the animal's enclosure; reporting unusual changes in behaviour to managers or veterinarians; assisting with veterinary procedures; keeping detailed records, etc. Zookeepers also participate in educational programs offered to the public in many zoos and parks. For all these functions, more or less in-depth knowledge of biology is required, in this case animal biology.



## *Nutritionist*

Almost all people want to live longer, healthier lives, avoid disease and feel happy with the bodies they've been given. And yet, there's still a lot of work to be done in educating people about the simplest of nutritional concepts. Do you want to understand how food works in the human body? Would you like to understand in detail how food and body are interconnected? How mood and stress, toxic nutritional beliefs, weight and body image, disordered eating, digestion, fatigue, and immunity all play a role in personal health? If the answer to those questions is "yes", may be the career path in Nutrition is right for you. And the notions of biology too! Working as a nutritionist can also be incredibly rewarding as you watch patients and clients improve their quality of life and feel better.



## *Veterinarian*

If you are an animal lover and love to take care of others, there are many reasons to pursue a career as a veterinarian. Veterinary medicine is by far the most popular dream job for animal lovers, and one of the most common childhood dream jobs. This job deals with the treatment and



prevention of disease, illness, and disorders in animals. Biology is fundamental to this function. Veterinarians also play an essential role in promoting animal welfare by advising and educating owners on how to take proper care for their pets. If you have the passion, the interest and

good grades in biology and chemistry, and the desire to work with animals, veterinary medicine may be the perfect career for you.

## ***Farmer***

Farming covers the production of almost all kinds of animals, crops, fruits and vegetables typical for the climate for a respective country or region. Farmers are responsible for most of the production of a country's foodstuffs either through crop or stock farming. Another important responsibility of farmers is the conservation of the country's natural resources. The farmer grows and harvests crops, including ploughing and fertilizing land, raising animals, all using agricultural techniques. It is therefore fundamental to have notions of biology relating to both the animal kingdom and the flora. On large farms, the management of these activities, as well as the marketing process, are also areas on which this profession must rely; it is important to know how to deal with suppliers of agricultural raw materials and technicians, as well as the customers of your agricultural products.

## ***Zoologist***

People who have a great love towards animals have many options in turning their passion into a career. One of them is the profession Zoologist. A zoologist studies the origins, genetics, diseases, life progression, and behaviours of animals. The job of the zoologists is interesting and dynamic and requires vast knowledge in biology and chemistry. Some zoologists work at zoos, participating in the direct care of animals. Others work overseeing wildlife reserves, counting animal populations or studying the

behaviour of certain animals. Many work in a lab-based environment, studying certain biological aspects of animals. Others may work as professors at universities and colleges, teaching, researching, and writing reports and scientific papers or journal articles.

## *Biotechnologist*

If you are interested in biology and would like to develop profound knowledge and competences in this area, you can consider continuing your education pursuing a career in the sphere of biotechnology. Biotechnologists study plants, animals and microorganisms. They study the physical, genetic, and chemical characteristics of cells and tissues and explore industrial applications for them. Biotechnologists work in fields like agriculture, medicine, waste treatment, and food production. To become a biotechnologist, you usually have to complete a degree in biotechnology or a degree in science with a major in one of the life sciences. Working in a biotechnology industry can be a very rewarding career because the industry is highly diverse, fast-paced, intellectually stimulating and exciting.

## *Professional gardener*

Professional gardeners work in private and public landscapes to create, design, maintain and manage gardens and green spaces. They are often employed by botanical gardens, parks, landscaping firms, garden centres, estates, and private residences, and some go into private business as a gardener for several clients. Professional gardeners are



responsible for all aspects of plant care for annuals, perennials, trees and shrubs. A career in professional gardening is a good choice for people who love to spend their day in open air, growing plants and doing manual labour.



## *Environmental ecologist*



Simply said, the ecology is the study nature, including fauna, flora and other organisms, with a focus on how these organisms interact with one another and the environment, to preserve and protect species and ecosystems and solve environmental issues. The ecologists also study the impact humans have on the natural world so they

can recommend ways to minimize potentially harmful actions. Most people pursue a career in ecology because they enjoy nature, plants and animals. Reaching high social status and gaining high financial profit are not key aspects of this profession. In order to become an ecologist, you will need to put your efforts in studying biology, chemistry, physics, math, computer sciences, and geography. Ecologists may specialize in variety of fields and may work for environmental consulting companies, government natural resource agencies, private sector and academic sphere.

## *Doctor (M.D.)*

It is safe to say that becoming a doctor is a dream for millions of people. Since ancient times, this is probably one of the most rewarding and at the same time the hardest and responsible professions. One of the many things we've understood during the crazy year 2020 is that the world needs more dedicated doctors, and the humanity counts on young people to choose this noble profession, become a doctor, give healthcare and make the world a better place. Becoming a doctor requires profound knowledge, many skills and attitudes. Depending on the country, you will have to dedicate significant efforts and time to obtain your license: excellent knowledge in biology and chemistry, bachelor's degree, medical school, specialization, etc. Other key soft skills that are needed for the profession are problem solving, leadership, empathy, communication; proficiency with specialized tools and technology; emotional stability and ability to handle stress. However, as a doctor, you have a vast fleet of career opportunities to choose from.



# Mathematics

There is a popular joke on the Internet: "In school, I've studied three foreign languages – English, French and Math". It is true that many students share the same feelings towards this subject, but if you think that math has no real use in everyday life, you are wrong! Indeed, probably the first and final time when you will use quadratic equations and trigonometric functions will be at school, but you should also have in mind that mathematics is much more than a boring abstract subject composed by complicated notions and formulas. Math is extremely important in our lives as we apply basic mathematical knowledge and concepts every day. Our life is mainly composed of situations where we must make a choice or to apply reasoning when facing problems and searching for their solutions. Mathematics makes our minds sharper and helps us find effective approaches when facing complex problems. Math also helps us to perform basic everyday processes from telling the time, cooking and shopping to managing our finances and planning our future.



Mathematics is tightly interconnected with many other sciences, but it could also be found in culture, arts, nature, technologies and many other areas. This science is an essential and key tool intended to provide explanation of how the world is functioning. It helps finding logical and simple answers to many questions and doubts.

The term “mathematics” could be followed many years behind in two ancient languages. In Greek, it means “learning” and in Hebrew, its root is “thinking”. So, it’s no surprise that math is the core of many skills and competences like logical and critical thinking, analytical reasoning, problem solving, time management, practicality and others, which will be extremely useful in the future, no matter what kind of professional and personal development you would like to pursue. In fact, in some way, in all professions, mathematical knowledge and skills are there. So, no matter if you decide to become a chef, a farmer, a mechanic, a shop owner, an engineer, a scientist, a musician or a magician, you will have to use and apply your mathematical competences by some extent.

We can say with examples that mathematics, which has an important place in our daily life, emerged with the first humans. People used basic mathematical rules in the need for exchange, in the desire to trade, in soil measurement problems. Mathematics is in our genes, even the sequence of our DNA is according to the rules that conform to the basic concepts of mathematics. Mathematics benefits us in all professional fields. For example: tailors use dimensions when sewing, architects use angles when creating our house. Mathematics has a great place in the study of technological tools. The commands we give while using many technological tools are mathematical commands.

## *Plumber*

Even if it is not a very high-qualified profession, becoming a plumber has many advantages and offers a possibility of further development. Contrary to the popular belief that they are low-paid, plumbers, alongside electricians, are one of the most demanded and well-paid contractors. The reasons for that are simple, first - they are like doctors: their services will always



be needed and second – very often they work during nights, weekend and holidays, which entitles them to higher remuneration. Another popular misbelief is that the plumbers unclog toilets all day long. This is one very small part of the job. In fact, plumbers could find professional realization in every sphere where water is involved. They could find a job designing plumbing systems for new buildings or sites, planning on how to manage, repair, and expand city/municipal water systems, or participating in the development of new solutions and plumbing technologies. Good mathematical knowledge is an advantage in this profession, since part of the plumber's activities is interpreting blueprints and codes, calculating plumbing measurements, designing and installing piping systems in different settings, etc.

## *Electrician*

Have you ever stopped to think about just how important the electricity is in our everyday life? Alongside with food, water and heat, it is one of the main human necessities without which the modern life as we know it wouldn't be possible at all. Dealing with electricity could be also very dangerous and even life threatening, thus such interventions should be made only by qualified specialists – the electricians.

Although becoming a licensed electrician doesn't necessary require a university or college degree, there are some theoretical and practical training courses, apprenticeships and certification programs one must attend to be able to practice this profession. This profession is always on high demand and offers certain opportunities for professional growth. Becoming an electrician could be a steppingstone for pursuing career as Electrical Engineer, Contract Manager, Electrical Design Engineer, or working in the field of building and construction, green and solar energy, manufacturing, mining, energy or water supply industries within both public and private sectors.

## *Actuary*

Do you know that mathematics could help predict the future? No, we are not talking about fortune tellers, crystal balls and tarot cards. There are certain professionals highly demanded in the business, insurance and financial sphere which job is to analyse and predict the probability of certain events to happen, like death, diseases, accidents and natural disasters. Those professionals are the actuaries. In a nutshell, the main role

of the actuary is to analyse the consequences of a certain risk or event from financial point of view when it comes to development of life or health insurances, car or home insurances, retirement plans and many more. Actuaries are being called “financial architects and social mathematicians” because their job requires a unique combination of skills used to deal with various financial and social challenges. The actuary services are wildly sought by insurance and investment companies, banks, hospitals, government organisations, or any business which stability and prosperity depends on a careful estimation and management of financial risks.

## *Auto mechanic*

Automobiles and every detail related to their functioning and maintenance have their particular glow and provoke career interest. Let’s face it – not everyone is aroused by the idea of working behind a desk from 9 to 5,



writing emails, answering calls and attending business meetings. For many people the idea for a good professional development is pursuing a career requiring some type of hand work. The profession of auto mechanic fits these criteria perfectly. Basically, the auto mechanic performs maintenance, diagnostic testing, repairs, and inspections cars, motorcycles, trucks or any other vehicles. They

must have a profound knowledge on different engines, transmissions, and electronic systems and constructions of a particular vehicle. Knowledge in subjects like math, chemistry, physics and electronics is much needed.

### *Computer graphics engineer*

We've already mentioned that math could be found practically everywhere. But did you know that even our favourite Hollywood movies were created with the help of math? Or the video game you like to play so much? All this is possible thanks to the very cool and awesome profession of the computer graphics engineer. By using a computer software and hardware those specialists create graphics and visual effects programs and solutions used for the development of video games, operating systems, movie special effects and others. They use technology to create and bring to life 3-D and 4-D designs and sketches. Those professionals make the





movement of animated characters, the crashing of objects or destruction of a building seem natural and real. To be successful in this career you must have a perfect symbiosis of creative, artistic, mathematical, analytical and technical skills. Communication skills, teamwork and attention to detail are also very beneficial in this sphere.

## *Accountant*

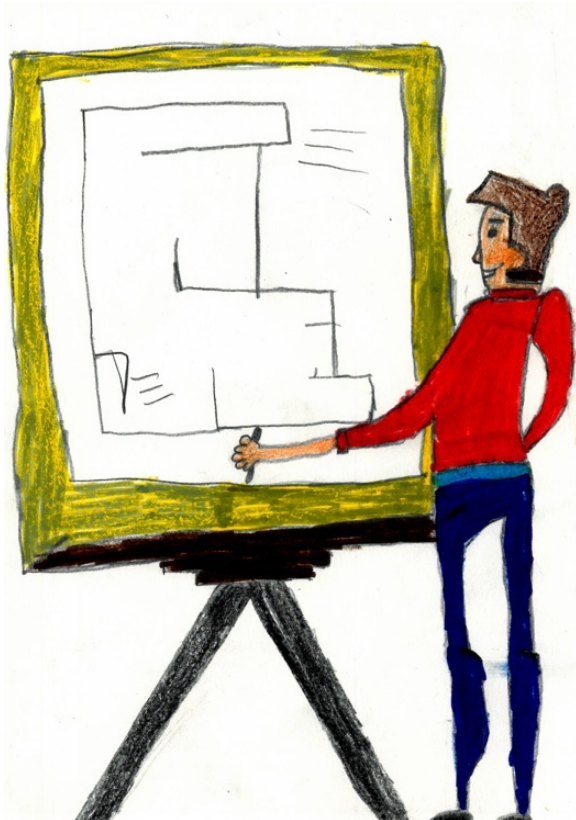
One of the most popular professions that require a good level of mathematical skills is an accountant. While not very dynamic or adrenaline raising, this career path has many benefits, among which financial stability and many opportunities for professional growth. This is also one of the professions that will always be needed, like doctors, policeman or lawyers. The accountants could be employed by certain companies or to be free lancers. Part of their main tasks is reviewing documents and financial statements of a certain client (natural person or a company) to ensure they are accurate; to perform regular monthly or annual reviews and checks of financial operations to guarantee that they are performed according to all laws and regulations; to prepare and submit



taxes; to perform financial and risk analysis to ensure the financial stability of its clients.

## *Architect*

Architecture is a very fascinating area which combines freedom, creativity and abstract thinking with precision, meticulousness and accuracy. Being an architect is an awesome job, but it is also very demanding and



responsible. Those professionals oversee planning and designing buildings and other structures where people could live, work, eat, shop and spend free time. Their tasks are not limited only to projecting and designing. Architects also have to ensure that a certain construction comply with the different building and safety regulations and restrictions, that the future building will be functional and safe. They also plan the

electrical and plumbing systems of the construction. In this profession mathematical knowledge goes hand in hand with artistic, design and creative skills. Mathematics is the tool that helps the architects to present their idea and express the design images in their minds on a paper.

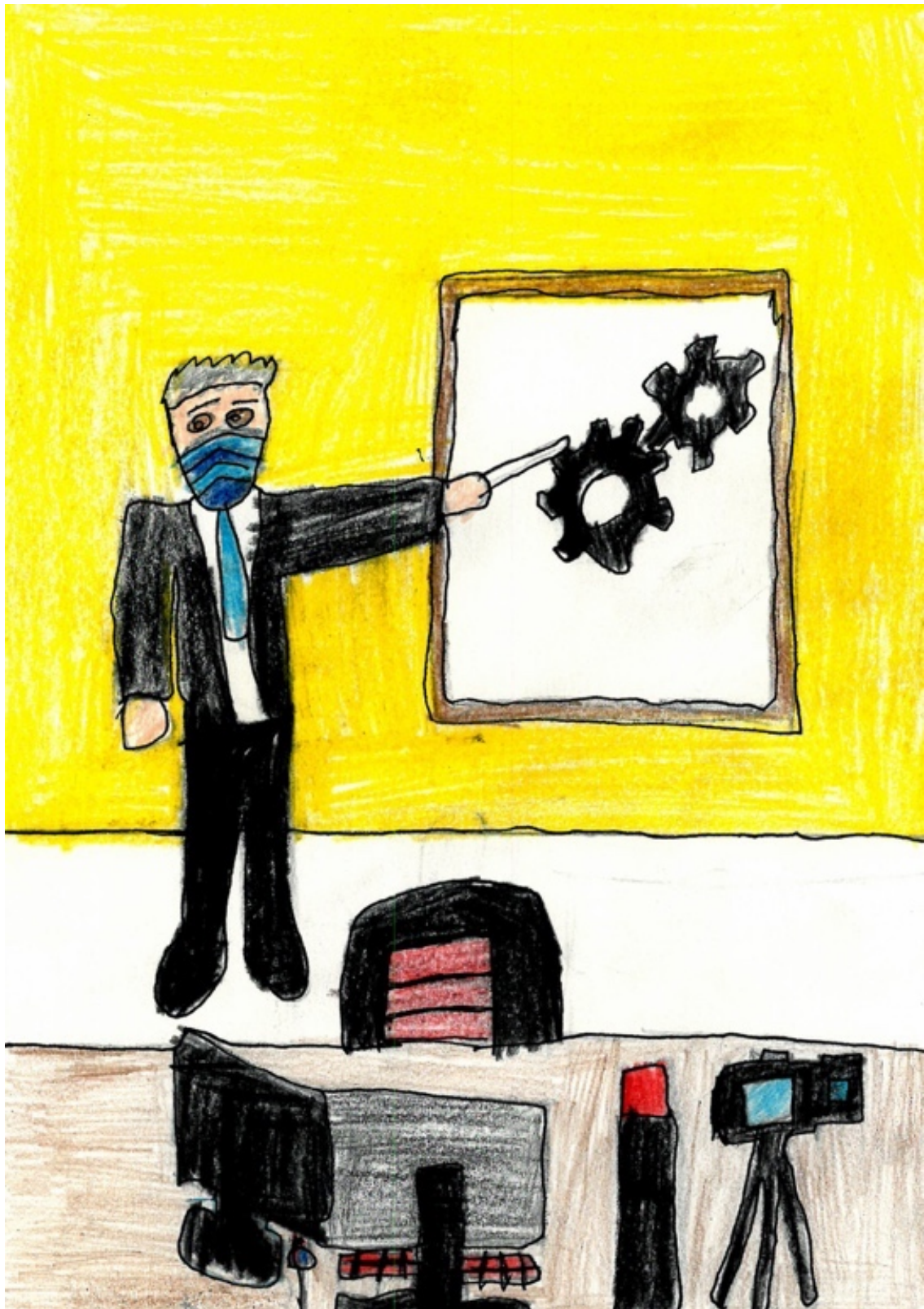
## *Airplane pilot*

If you ask 10 kids what they would like to become when they grow up, there is a huge possibility that you will hear “Pilot” more than once. It turns out that flying across the world is a dream job for many grown-ups as well. However, as with many other dreams, making it true requires significant efforts, time investment, financial commitment and overcoming vast competition. Apart from the specific theoretical knowledge and practical trainings, being a successful pilot also requires a combination of mathematical and technical skills, communication and listening skills, teamwork ability, situation awareness, problem solving, decisiveness and quick analytical thinking, leadership, confidence, self-discipline, ability to work under significant stress, etc. But everything will be totally worth it once you stand behind the control panel in the cockpit, start the engines, take off from the runway and fly the aircraft towards the infinite sky.

## *Mechanical Engineer*

Mechanical engineering is one of the biggest branches of the engineering. It is a suitable career choice for people with excellent knowledge and interest in mathematics, physics, chemistry, with good creative thinking and analytical skills, teamwork abilities, etc. Mechanical engineers are involved in the design, development, manufacturing testing and improving all kinds of engines and machinery. Such kinds of specialists are always on high demand, their job is interesting, challenging and well paid. If you are interested in a career in the sphere of industries like automotive,

aerospace, computers, electronics, robotics, manufacturing or similar, don't give up on math and physics at school.



## *Software developer*

Nowadays, it is very difficult to imagine our life without technology. Most people in every part of the world are spending the better part of their day using a smartphone or a computer either for work, studying or pleasure. All apps installed on your smartphone from your Facebook or Instagram to your email and photo app, all your favourite websites or computer games were designed and created by software developers. Having in mind the rapid progression



of technology and the unlimited number of benefits it has on every aspect of life makes the career of a software developer very attractive and lucrative. It is predicted that by year 2028, the demand of software developers at global level will increase with almost 305! If you are fascinated by the world of technology and innovations; if you have good analytical, mathematical, problem solving and technical skills, this is a great professional path for you.

## *Maths Teacher*

There are no technical fields, fields of science, etc. in which mathematics is not applied. Mathematics benefits us in all professional fields. Mathematics offers practical ways and methods. Medicine, social, political, economy, business, management etc. sciences too must be based on mathematical methods. Therefore, teaching mathematics has a special importance and priority in all countries of the world. Teaching mathematics is very important in science, nature, sports, art, architecture, engineering, software, artificial intelligence, banking, and professions.

# Performing Arts

Art in general contributes decisively to the development of our sensitivity, namely by promoting new ways of seeing the world and the others. These new ways of looking certainly make us human beings more available to difference and to the use of creativity in all spheres of life.

Today it is also commonly accepted that the professional performance inherent to any function does not dissociate a set of skills that go beyond the designated techniques. Social and personal competences are decisive for the proficiency of the development of any profession once they are present in something that structure our lives: social interaction.

The performing arts help us to think differently, to feel and to deal with emotions, enhancing ways to deal with the most diverse interactions and to communicate controlled and effectively, not only verbally but corporeally, that is, our own expressions.



## ***Airport/Airline staff***

Just imagine that a big group of people, let's say, 150 people (babies, children, teenagers, pregnant women, businessmen, elder people) are in line waiting for their already delayed flight... All these people are getting more and more nervous as time goes by and the flight just doesn't depart: they are getting tired, thirsty, hungry and, above all, angry! Finally, after 4 long waiting hours, the flight will depart but... from another and long-distance boarding gate! You, as the airport/airline staff are simply called to get these people together and conduct them in the most shorten time possible to the new (and far) gate! You will use all your performing arts skills to keep the group focused on the good news (their flight will finally depart!), and avoid criticism, particularly on yourself!!

## ***Condominium manager***

Have you ever thought of managing the common interests of a group of people who live in the same building? Yes, it might be very difficult basically because their common interest is to spend as less money as possible, while having the best common areas and facilities in the block! In addition, you need to think that previous conflicts among neighbours might exist when you assume the job, turning your working life harder! Once you get to the regular condominium meetings you will realized how important your performing arts were to create a better environment for everyone: you will be able to envisage a better scenario and to use your



public communication skills to focus the attention on yourself and on your solutions, instead of just letting the fight progress...!



# Visual Arts

If you are a creative person, there are many reasons to study Visual Arts. It is an opportunity to develop your self-exploration and self-expression, broaden your knowledge and perspectives, build mental and physical skills, and increase personal enjoyment. It will allow you to succeed in other educational domains while preparing you for the demands of the current labour market. You can become a professional artist practicing in painting, drawing, photography, video, filmmaking, media and digital art, design, crafts, sculpture, and architecture. Or be an administrator in cultural and art centres (gallery, museum, etc.), or develop activities and programmes for different publics. Or even teaching visual arts at different school levels.

Having awareness about visual arts will be an advantage for you in all areas of life. Because visual intelligence and visual ability will allow you to be one step ahead in every profession. We use our talents and knowledge in visual arts in nature, mathematics and geometry, editing in book designs, aesthetic perception, works that require manual skills, to bring your creativity to the forefront, artistic works and many other fields.

Humanity has long wanted to express itself creatively, to create an aesthetic environment around it. In a professional context, an artist is a person who deals with the realization of various ideas using the means of visual art expression. The profession is suitable for those who are interested in drawing, painting, sculpture, world art culture, history and who want to realize their experience in various innovative art forms.

## *Sociocultural Animator*



The Sociocultural Animator is one who can develop and implement social and cultural activities or programmes in a specific community or institution. If you like to work with different people, from different ages and contexts, this could be a good choice for you. Your mission will be to stimulate the people involvement and

participation in their own development processes, as well, as in global dynamics of socio-political life in which they are integrated.

## *Sculptor*

The Sculptor is a highly creative fine artist who develops ideas for sculptures or statues and builds them in three-dimensional form by

combining or moulding materials together. Sculptors typically work with hard materials like stone, marble, glass, metal, wood, or ice; however, they can also use clay, plaster, gold, wire, plastic, rubber, fabric, or paper. Sculptors can be hired to create a sculpture for a park and other open space, or a lobby of



an office building. A museum may hire a sculptor to create a special piece for a collection or an exhibition. Private collectors can often support their artwork and ask for a particular piece.

## *Architecture Professor*

The Architecture Professor teaches courses in architecture and architectural design, such as architectural environmental design, interior architecture/design, and landscape architecture at the higher education level. Its roles include students advising on their educational processes and career issues and engaging in research activities. The teacher's roles also include administrative responsibilities that deal with institutional or departmental matters and academic issues, as well as provide consulting services to government or industry.

## *Jewellery designer or photography*

Photography artist is a person who has the knowledge and skills to record the images of assets on film in an aesthetic way with a camera and to print their images on the card and make the desired number of copies. Jewellery designer is a qualified person who has the knowledge and skills of making unique designed jewellery in an aesthetic manner using materials such as gold and silver. We can bring our interests and skills in visual arts to the fore in such professions. We can use the



information we learn in painting, handcrafts, painting, etc. that we learned at school in such professions.

## *Graphic Artist- Designer*

Graphic designer designs logos, posters, large-size street posters (billboard), press advertisements, packaging, books, magazines, promotional films, cartoons with written and visual elements within artistic criteria to convey a message visually to a specific target audience.

## *Visual designers*

They can work in computer software companies, advertising agencies, various television channels, film production and animation companies. Since visual design is a new profession based on rapidly developing technologies, the demand for these professionals is increasing. Visual design is a future workplace for creative people.

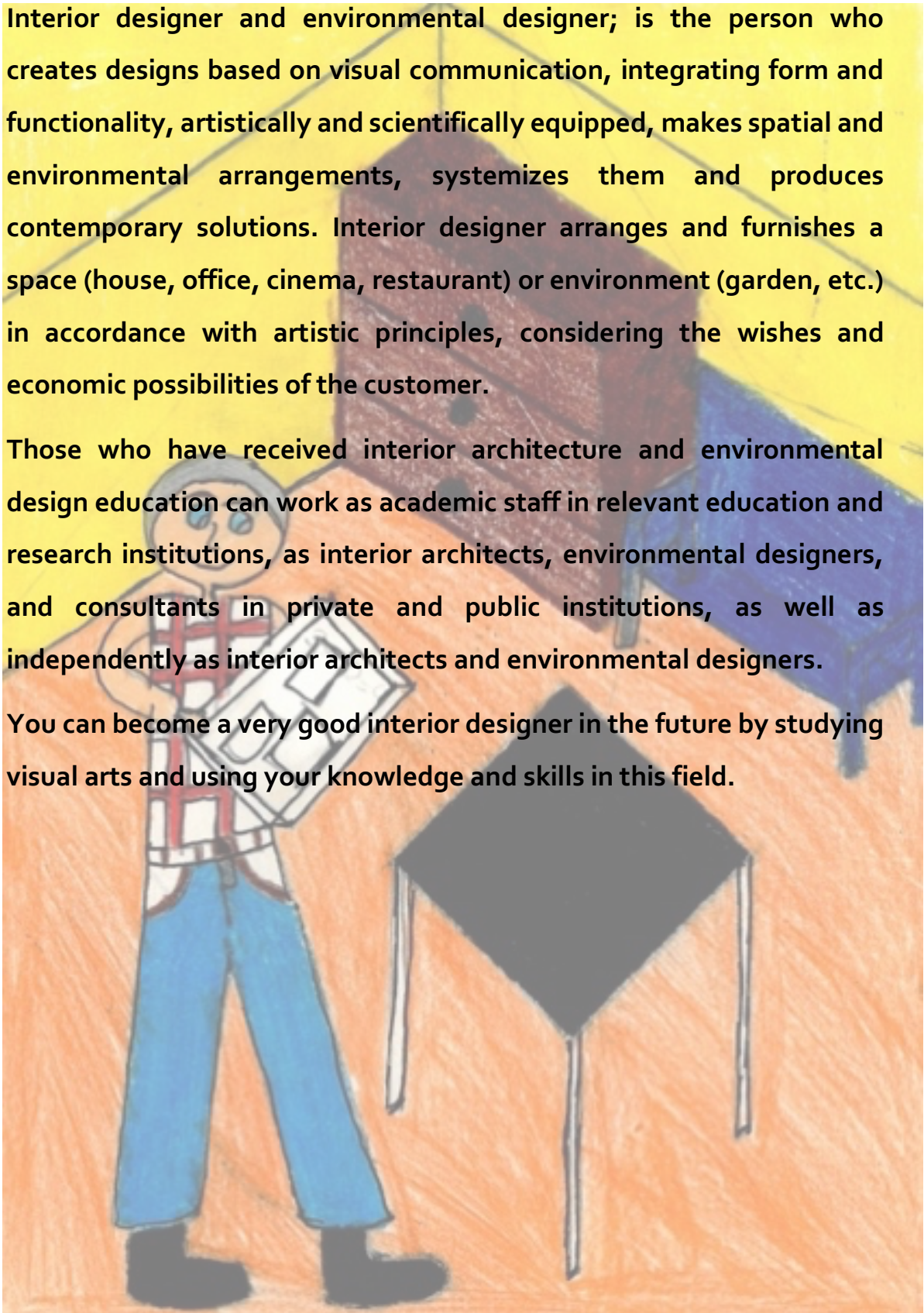
It is very important to use the information we have learned in visual arts and other courses and to develop our creativity to work in this field.

## *Interior Architect and Environmental Designer*

Interior designer and environmental designer; is the person who creates designs based on visual communication, integrating form and functionality, artistically and scientifically equipped, makes spatial and environmental arrangements, systemizes them and produces contemporary solutions. Interior designer arranges and furnishes a space (house, office, cinema, restaurant) or environment (garden, etc.) in accordance with artistic principles, considering the wishes and economic possibilities of the customer.

Those who have received interior architecture and environmental design education can work as academic staff in relevant education and research institutions, as interior architects, environmental designers, and consultants in private and public institutions, as well as independently as interior architects and environmental designers.

You can become a very good interior designer in the future by studying visual arts and using your knowledge and skills in this field.



## *Florist*

A florist is engaged in interior decoration using floral compositions. The florist is familiar with phytodesign - when the room environment and mood are created with the help of houseplants. In addition to knowledge of flowers, a professional florist must learn the general principles of interior design, composition and colours. Along with artistic work, this activity includes the provision of material, basic knowledge of floriculture, material studies and the acquisition of communication ethics.





## *Tailor - modeler*

is engaged in the creation of clothing, is responsible for the visual image of the costume and the precise design of the cuts. Working in the clothing design and sewing industry, designers are well versed in design and fashion issues, able to design them in their clothing models.



A professional seamstress can sew clothes from the beginning to

the end - to design cuts, to advise the client on the sewing process of the product, to create products of any complexity. The seamstress must not only know the technical issues and the client's tastes, but also have knowledge of the composition, colour combinations, silhouette.

## Scenographer

A scenographer is an artist. The task of the set designer is to create theatre,



opera, ballet, etc. in close cooperation with the director for performances, the artistic arrangement of the space, to express the basic idea of the performance in a stage language. The success of the show often depends on the scenography of the show. The set designer must have a deep understanding of world art history,

culture, architecture. Theatre artists read a lot in the work process, create endless sketches, models, use graphic techniques, stage painting, video projection, various lighting techniques in their work, they must know all technical issues - sometimes it is difficult to imagine another artist's profession, where so widely used all art-related industries.

# Ecology & Environment

We are all part of the ecosystem, dependent on it for our survival. On the same time, we are also in the unique situation that we can change the ecosystem in many ways if we understand what all the effects of changing an ecosystem will be and it is important to avoid our actions having unintended consequences.

If you want to conserve and protect nature in general and prevent the extinction of species, you need to know how they all fit together, what their habitat requirements are, how they influence each other, what the minimum population sizes are to ensure their survival, etc. So, both for managing natural areas, as well as the sustainability of agriculture, ecology is important. Without a good knowledge of ecology and environment, all the other fields of study will be useless... an extinct human species will no longer do any science at all.



## *Water Management Specialist*

Water is one of the most important natural resources ever! Water is a basic element for life on Earth and so its quality is of utmost importance on keeping our good health. In order to have a good quality level of water for consumption at our cities and own private homes, it takes a long journey for which a water management specialist is called. Such person performs many different tasks as reviewing or evaluating designs for water detention facilities, storm drains, flood control facilities, or other hydraulic structures until identifying and characterizing specific causes or sources of water pollution, among many, many other! In order to properly perform such tasks, the water management specialist really needs to possess a deep understanding of Ecology & Environment!



## *Recyclable Material Collector*

We all know that being a superhero is exciting and requires specific competence. Developing a career as a recyclable material collector would make you a hero, because you would invest your effort to make the world a better place and to protect the environment. Only a person who has developed an ecological mindset would be able to understand the importance of the required responsibilities and to complete them in the most efficient way- exactly as a hero. Therefore, an essential role is playing the techniques and skills that you can gain during the Ecology & Environment classes at school.



## *Association Leader*

An Association Leader is someone who advocates for causes. He/she possesses a strong capacity of understanding the surrounding problems and is permanently seeking for solutions. Regardless of leading an environmental association or not (associations can have a broad range of scopes, from culture to sports, from consumers' rights to religious beliefs, etc) an association leader will be permanently seeking to implement solutions within the surrounding community, that is, he/she will be acting in each territorial or social context. To be able to integrate the ecological and environmental perspective into advocacy actions is, currently, more than an asset, it is an obligation. The Association Leader will realize our important such perspectives are to conquer supporters to the association's causes because environmental impact and sustainability have entered in all our current Agendas!

## *Dancer*

As a performer you will be an influencer. While it is important that you know about environment and ecology to better prepare your body for your profession, you can also think about performing in line with your concerns, and certainly, a friendly ecosystem to live in and a healthy environment to live in will be important for you! Being a dancer will allow you to better interact within environment but also to show other people how to do it! You will be able to perform a raging ocean hit by the tragic overexploitation of resources, you will be able to perform a forest hit by a fire, you will be able to perform a city having no breathable air! But you will also be able to

perform all its opposites and show your audience how wonderful it could be to live in a healthy world: a calm and deep blue ocean buzzing with life, a calm and deep green forest with all sorts of wildlife, or a smart city, that we all look forward, where people can breathe pure air!

## *Receptionist*



Imagine the phone ringing off the hook, a lobby full of people staring at you, your Outlook inbox overflowing with emails, and you're supposed to keep a smile on your face and in your voice. Sounds impossible, right? It is not easy to control your emotions and to keep the professional atmosphere. Even though, the competences you have developed during your

Ecology & Environment classes would provide you with better understandings of different points of views and different cultures and you would be able to come up with creative ideas for solving the problem and to provide great experience for the customers.



## *Tour Guide*

Now imagine that your job is to visit exciting destinations and to introduce the visitors to the wonders of the area. The strong presentation skills and the knowledgeable about the natural history, environment and ecology of the area that you gained at school, would make your job very easy and enjoyable. Sound fun, but what if, some of the visitors are unhappy with the weather today and their negativism affects to the rest of the group. Well, a lot of problematic situations may appear when you are working with people and to provide excellent service and best experience to the visitors, you need to have well-developed problem-solving competences. Your knowledge from your classes at Ecology and Environment and the problem-solving mindset that you have developed would make you a better tour guide.





# Handicraft



Craft artists work with many different materials, including ceramics, glass, textiles, wood, metal, and paper. They use these materials to create unique pieces of art, such as pottery, quilts, stained glass, furniture, jewellery, and clothing. Many craft artists also use fine-art techniques—for example, painting, sketching, and printing—to add finishing touches to their products.

Fine artists typically display their work in museums, in commercial or non-profit art galleries, at craft fairs, in corporate collections, on the Internet, and in private homes. Some of their artwork may be commissioned (requested by a client), but most is sold by the artist or through private art galleries or dealers. The artist, gallery, and dealer together decide in advance how much of the proceeds from the sale each will keep.



## *Ceramist*

Ceramic artists shape, form, and mould artworks out of clay, often using a potter's wheel and other tools. They glaze and fire pieces in kilns, which are large, special furnaces that dry and harden the clay.

*Fibre artists* use fabric, yarn, or other natural and synthetic materials to weave, knit, crochet, or sew textile art. They may use a loom to weave fabric, needles to knit or crochet yarn, or a sewing machine to join pieces of fabric for quilts or other handicrafts.

*Furniture makers* cut, sand, join, and finish wood and other materials to make handcrafted furnishings. For information about other workers who assemble wood furniture, see the profile on woodworkers.

*Glass artists* process glass in a variety of ways—such as by blowing, shaping, staining, or joining it—to create artistic pieces. Some processes require the use of kilns, ovens, and other equipment and tools that bend glass at high temperatures. These workers also decorate glass objects, such as by etching or painting.

Most craft artists spend their time and effort selling their artwork to potential customers and building a reputation. In addition to selling their artwork, many artists have at least one other job to support their craft or art careers.

## *Pastry chef*



A pastry chef is a person who turns products into sweet dishes with his own hands. You need to undergo special training. To be able to determine the quality of products, their chemical composition, biological value and calorie content; cook fast and get along with professional kitchen appliances. You must be prepared for physical activity.

## *Designer*

A designer is a profession that requires skills, knowledge and creativity.

Possession of graphic and drawing techniques. Knowledge of the basics of computer design. Understanding of the basic principles of marketing. Ability to analyse demand, statistics. Personal qualities - logical thinking, individual style, attentiveness, perseverance. A designer can work in different directions - clothing, jewellery, image, interior, landscape, computer graphics, architecture and much more.

# Foreign Languages

Having a good level in foreign language brings us benefits in several aspects of our lives. We have a saying “one language one person, two languages two people”. So, our perspective on life changes. Foreign language proficiency has been one of the indispensable features in the digital age. It helps guide us in choosing a profession.

Learning other languages is currently essential for many things, for example for having a future job in which you have to interact with people from other countries; your academic development as you may have to consult certain professional topics in other languages or if you want to spend a year studying in another country; or even in your entertainment moments, if you want to travel for tourism or watch your favourite series or movies in its original language, which totally will change your experience, for sure.

The fact of being capable to understand and speak another language allows you to interact with people from other countries, make friends from other cultures and understand the information you receive much better, enriching you on a deep personal level. You can get what your idols want to say with **their own voice.**



In addition, as it was said, it is increasingly essential to know another language to study in the future or to obtain a job, it will be a key point that will make differences. Do not be left behind! This is the best time for you to learn a language, because it will be much easier now than when you are older.

You are probably aware of the fact that there are 195+ countries in the world today. But have you ever wondered how many languages in total are spoken across these countries as of 2020? The number most probably will surprise you... There are currently 7,111 known languages spoken by people around the globe! Sadly, this number gets smaller every month. 90% of these languages are spoken by less than 100,000 people. Meanwhile, only 23 languages account for more than half the world's population. As you can easily guess English is the most spoken language in the world (if you count both native and non-native speakers) widely used in more than 146 countries and official for more than 50 of them.

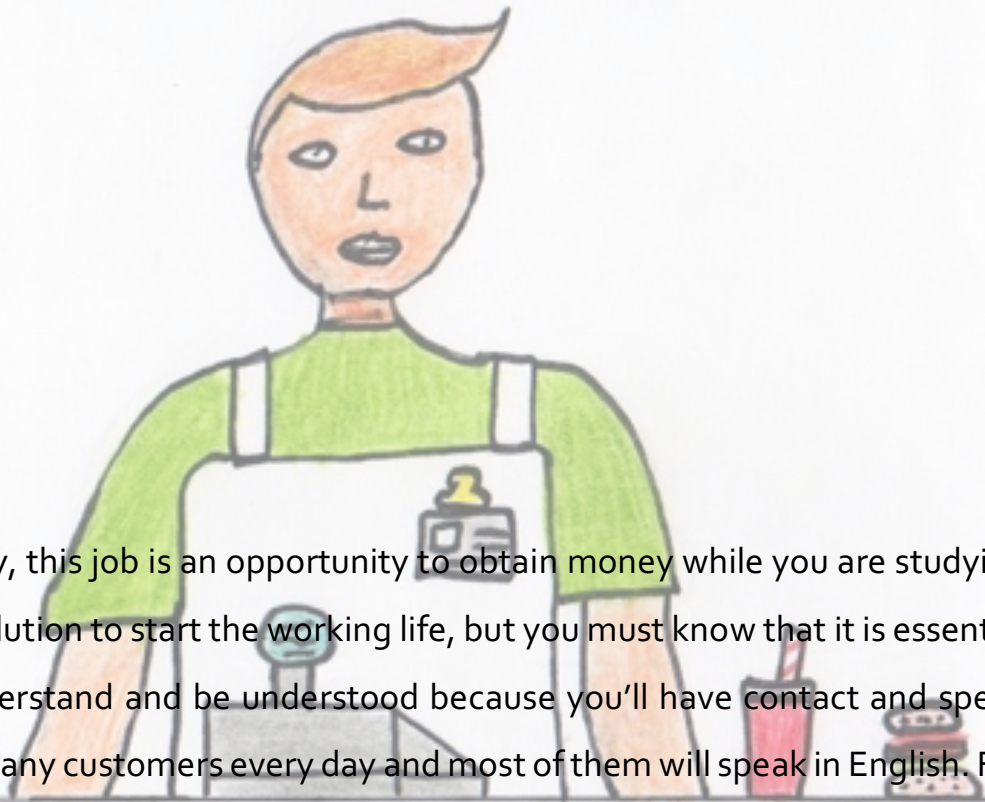
In today's rapidly globalizing society and increasingly interconnected and interdependent world, proficiency in other languages is a vital skill that gives you the opportunity to connect with the world in a more efficient and satisfactory way, whether it is in the personal or professional sphere. Having a working level of at least one language besides your mother tongue is a huge

factor for successful professional realisation in almost every field. Nowadays it is very hard to open a job offer website or platform and find a position that doesn't require at least basic level of English (or other foreign language) knowledge. This applies equally as to the well-paid and qualified jobs, as to the ones with lower remuneration and qualification requirements.

But let's leave professional realisation aside for a moment. Imagine you would like to watch the latest episode of your favourite show and the subtitles are not available yet, or you want to know what your favourite band is singing about in their last song. You want to read the user manual for your new smartphone, but the instructions are not translated in your language or order dinner during your holiday abroad... There are numerous everyday situations in which knowing another language can come in handy.

## *Working member in a fast-food chain*

Commonly, to work in an entry-level position in a fast food chain is not compulsory any sort of diploma or studies but, the truth is that they receive a lot of applies for that kind of jobs and they need some criteria to select their staff, one of the most important criteria is practical knowledge of foreign language (especially English) because it is usual that they receive people from other countries in everyday work, for that knowing English (or other language) Is a huge advantage if you want to work in this job position.



Usually, this job is an opportunity to obtain money while you are studying or a solution to start the working life, but you must know that it is essential to understand and be understood because you'll have contact and speak with many customers every day and most of them will speak in English. For

that Good English skills really matters! It is truth that the English used in this area could be repetitive with reiterative phrases and words, but an Advance level will make you the things easier and you will feel more comfortable.

## *Tourist guide*

In this job position you are giving assistance, information on cultural, historical and contemporary heritage to people on organized sightseeing to certain interesting places.

Apart from intruders without any kind of training, in this position, they are professional guides with a qualification and license that has been given by the administrative authorities where they have their professional activities.

In order to be a truly excellent tourist guide, you need to know the place, which means studying up on architectural styles, historical fun facts and the best places to eat, drink and party. Depending on the tourist, they will be more interested in one thing or another.

Becoming a tour guide isn't easy, it is highly likely that your clients are from different countries and to communicate with them you have to use other language, mostly English; good tourist guides have to know how to communicate efficiently and effectively, in many cases, they have to solve problems of the tourist with the "environment", and in this job position you are seen as a representative of your region and for that it is important that you understand the needs of the tourists. If you study hard foreign language in school, it is possible that you will be fluently in the future and you can be excellent as a tour guide.



## *Interpreter*

Interpreter is someone whose job is to change what someone else is saying into another language. Interpreters facilitate communication between parties who speak two different languages. They do this by interpreting, translating and re-communicating both verbal and written messages from one language into another. This includes both spoken languages and sign languages.

As interpreter you must deal, in real time, with translating an oral speech from one language to another,

simultaneously or consecutive (when a person speaks, and the interpreter translates in the pause).

In these job positions, it is possible to work for companies, institutions, etc. and normally, it is required to have studied translation and interpretation. Working as a translator is one of the main jobs for people with good skills in foreign languages,



In order to be good in both job positions, it is recommended to start learning foreign language from a young age with the aim to acquire fluency in the future, but it is a beautiful profession if you like to move in international environments.

## *Law Enforcement - Police, Gendarmerie*



The foreign language we meet in schools is also effective in professional development.

A law enforcement officer who develops himself in this regard may have the opportunity to rise within the profession. In this way, the foreign language we meet in school contributes to us both in the choice of profession and in the development of the profession.

## *International Company Manager*

In order to work for an international company or become a manager, you must use a valid foreign language at a good level. In order to reach this level, the foreign language adventure that we started at school is a developing process that continues with us. A company manager whose foreign language level is adequate will have to have a permanent



translator with him. In addition, he will not be able to fully master the subject in his work and transactions. Using a foreign language at an adequate level is a factor that will make our work easier in all areas in today's digital age.

## *Hotel receptionist*

The receptionists are the “face” of every hotel. They are the first and last



thing the guests see from the hotel so to make the best impression they have to apply and master various skills like communication, listening, problem solving, flexibility, open-mindedness, conflict resolution, etc. Their job is dynamic, demanding and attentive. Experience as a receptionist can kick start a career in a variety of roles within the hospitality industry, all of which

require good level of language skills considering that most hotels welcome guests from other countries.

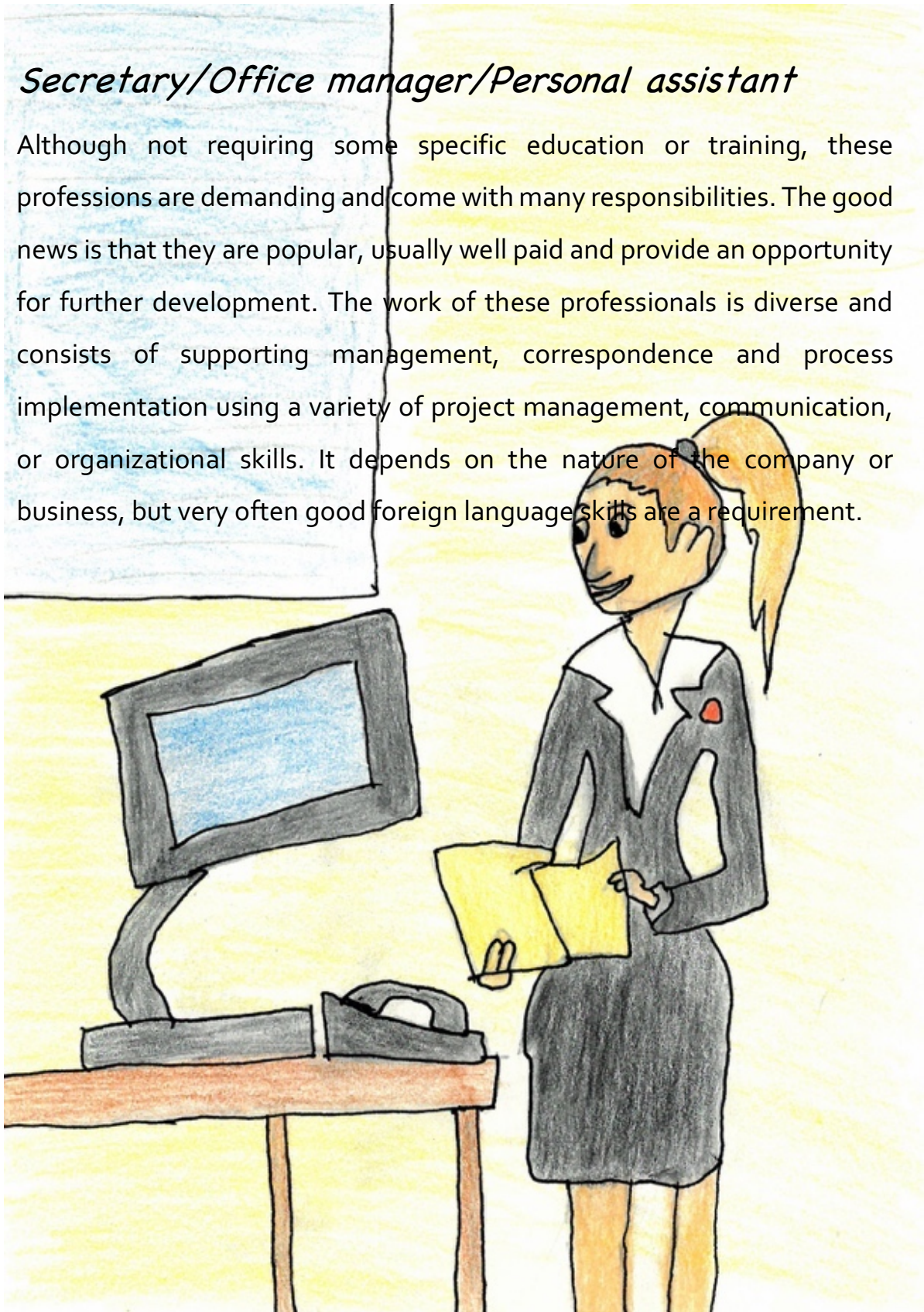
## *Journalist/Foreign correspondent*

If you love to write, enjoy being informed about current events at national and international level and love to travel and meet new people, may be journalism is a good professional path for you. International journalists and foreign correspondents are constantly travelling all around the world to reflect natural disasters, conflicts, political events, economic news, social life, etc. If you want to get all details of the story and present it to your audience in the best possible way, you’re going to need to know how to

communicate freely, especially if you want to speak with the locals and share the correct message.

### *Secretary/Office manager/Personal assistant*

Although not requiring some specific education or training, these professions are demanding and come with many responsibilities. The good news is that they are popular, usually well paid and provide an opportunity for further development. The work of these professionals is diverse and consists of supporting management, correspondence and process implementation using a variety of project management, communication, or organizational skills. It depends on the nature of the company or business, but very often good foreign language skills are a requirement.



## *Flight attendant*



If you love to travel and visit new countries and cities and even being paid to do it, you can consider a career of a flight attendant. Almost every airline looks for flight attendants that can speak fluently foreign languages. Knowing a second language is pretty much an essential and will boost your chances to get a job for specific flights. If, for example, you are fluent in Spanish, you can work for an airline that frequently flies from your country to Spain.

## *Diplomat/Ambassador*

There are many different variations of the diplomatic ranking and professions, but they also share few similarities. Basically, the role of the diplomats, and ambassadors in specific, is to represent their government, or their country of origin, in foreign country in place of the president or nation leader. From this foreign country or “host nation”, they promote international relations on certain areas of government, such as trade, military involvement, and cultural relationships. It goes without saying that the specific nature of this profession requires various skills and qualifications, but foreign language proficiency is a total must.

## *Online content creator*



This is relatively new, but rapidly spreading profession which attracts mainly young people. Basically, the main job of the content creator (given by the name) is to develop digital media content in the form of text, video, or audio targeted to a specific audience. Many companies use the services of such professionals when they want to generate brand awareness and kick off a

relationship with their customers. Many content creators have a degree, but also numerous writers, YouTube creators, and podcasters thrive in their careers without even going to a university. However, various competences are required for doing this job, among which good foreign language skills.

## *Photographer*

Photography is an art that goes beyond languages, but if you want to shoot

around the world, you should certainly learn a foreign language. For travel photographers, you can decide to learn the language of the country that you would most like to travel to. Even when you work on national level, you should constantly improve your skills by following the latest developments in the field, reading articles, manuals, communicating with

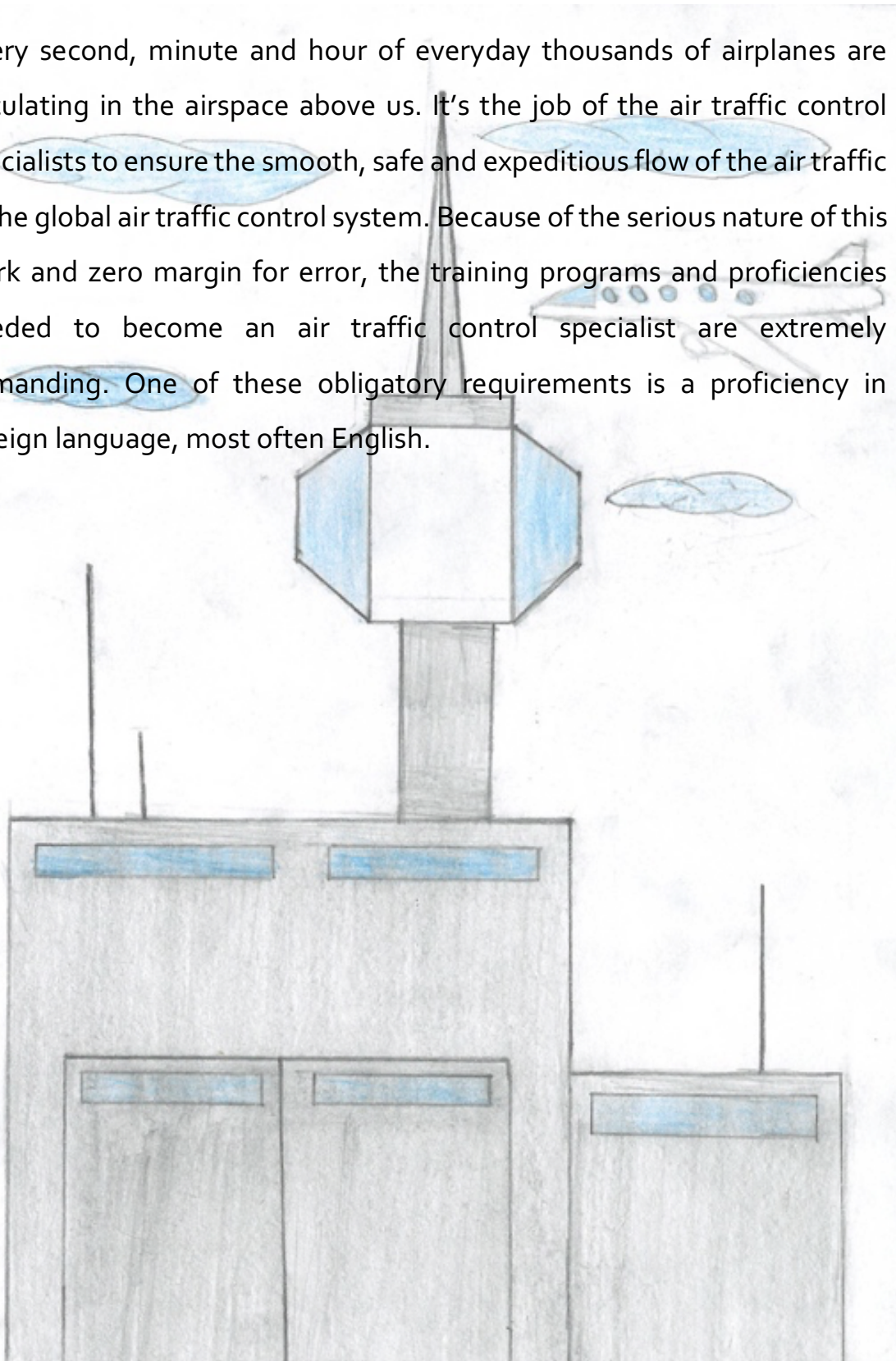


fellow photographers. Good level of English or other foreign language will certainly broaden your perspective and options.



## *Air traffic controller*

Every second, minute and hour of everyday thousands of airplanes are circulating in the airspace above us. It's the job of the air traffic control specialists to ensure the smooth, safe and expeditious flow of the air traffic in the global air traffic control system. Because of the serious nature of this work and zero margin for error, the training programs and proficiencies needed to become an air traffic control specialist are extremely demanding. One of these obligatory requirements is a proficiency in foreign language, most often English.



## *Customer service agent/representative*

Nowadays the profession of a customer service agent/representative is very popular. If you like to interact with different people and have excellent communication and listening skills, this might be a good career for you. The basic function of a customer service agent is to process orders, complaints; to provide information about goods and services to domestic and very often to international customers. Therefore, apart from communication, problem solving and teamwork skills, foreign language proficiency is also required to exercise this profession.

## *Recruiter/HR specialist*

Businesses, especially the big companies are becoming more globalised every day. Many companies open new offices in different corners of the globe, and they are looking for new employees all around the world. Thousands of people every day leave their home cities and countries to search for better job opportunities abroad. Many business teams are multicultural and multilingual. The recruiter's role is to be able to communicate with all prospective employees, no matter their mother tongue and recruit the best person for the job, so good foreign language skills are a must in this sphere.



## *Business liaison officer*

When working on a common project or negotiate a new deal, many companies and organisations use the assistance of a business liaison officer. Practically, the liaison officer helps two parties negotiate and discuss the details of the initiative they would like to implement. Having in mind that business is very globalised and international, and many companies are working beyond national borders, usually the liaison officer is required to speak foreign languages in order to be able to coordinate the activities in the best possible way.

# Geography

The knowledge of geography is useful not only in a particular profession, but in the whole human life. Geography is about Earth, so it teaches us to live on Earth. It examines both the human (Human Geography) as well as the objects surrounding human and that affect human life - climate, soil, waters, environment (Physical Geography). Geography science enters all spheres of human activity. Geography orientation is one of the important indicators of human overall cultural level. But who doesn't want him to be treated as an educated person?



## *Insurance consultant*

The profession of insurance advisor is suitable for people who have sufficient time and do not have an independent job or want additional revenue (students, housewives, young mothers). In times of climate change, natural risk insurance is becoming more popular. To get more customers, increase insurance company revenues and ensure customer satisfaction, you will have to know what natural risks could threaten the client's property - flooding, lightning kicks, hail, storms, earthquakes, landslides, etc. This will require the knowledge of geography acquired at school.

## *Tour operator*

In the modern era of globalization, travel has become an integral part of life for many people. Demand for skilled organizers of these trips is also rising. In order to be interested in giving people to different places in the world, a qualified tourism operator must be able to focus on the world map, know about the natural circumstances of these places, their economic and political characteristics, cultural habits. To be successful with a customer you are selling a trip to, you need to be familiar with the geography.

## *Cartographer*

Without maps, people's lives are impossible. Both paper-size maps and increasingly popular digital maps are increasingly being used to address a variety of practical issues. Hundreds of thousands of organisations in any sector use geographic information systems (GIS) to create maps that help to communicate, analyse data, share information and solve complex problems worldwide. For example, scientists use GIS to compare population statistics with resources such as drinking water. Engineers use GIS technology to support the design of phone communications networks we use. In the cartograph profession, the knowledge of geography must be at the highest level.

# Economy

Economics is a social science that studies how individuals, governments, firms and nations make choices on allocating scarce resources to satisfy their needs.

Economics is related with human behaviour, and it is a clue to know how people earn money and make a choice between alternatives to satisfy their wants.

Economic education could give you the building blocks for your successful financial future. It could give you tools and knowledge to improve your future well-being.

Moreover, today, economic issues are drawing the attention of every citizen directly or indirectly, with terms like privatization, liberalization, globalization; and you as member of society may understand these new concepts and issues related with economy to participate effectively in economic and social affairs and to take intelligent decisions in your day-to-day life.

Moreover, it is possible that certain job opportunities could be related with knowledge in economics. For that, learn basic terms about economics in school is a good opportunity for you, to build a good economic prospect.

Economics is a discipline which combines politics, sociology, psychology and history.

When you study economics you gain a toolkit of skills, approaches and ways of thinking that you can apply to a wide range of problems. Economics is one of the central disciplines of business and management.

Economics is a very useful tool, and it will prepare you for careers that require numerical, analytical and problem-solving skills – for example in business planning, marketing, research and management.

Economics helps you to think strategically and make decisions to optimise the outcome. Especially in demand are people who have studied Economics and Finance as they are particularly well-prepared for jobs in banking and the financial sector, such as in accountancy firms.



## *Supermarket cashier*

A supermarket cashier is someone with whom we are all familiar. Getting a job as a supermarket cashier does not require formal education or any type of certification (it is truth that some companies could appreciate it). It is a job in which on-the-job training will prepare you sufficiently for the position, usually it is possible that they have started with another role in the supermarket like stocker.

Supermarket Cashiers have several duties and responsibilities during an average shift, for example, they are present in the checkout area and oversee handling transactions. These employees perform duties such as scanning products, collecting payments, counting the money from the cash drawer, comparing receipts with revenues, make sure checkout areas are clean and tidy and solving any customer inquiries, even in some cases mark prices on



store items and makes sure shelves are well-stocked. A cashier may be required to know value and features of items for which money is received; may cash checks; may give cash refunds or issue credit memorandums to customers for returned merchandise; and may operate ticket-dispensing machines and the like. For all this tasks, it is recommended that they have basic notions of economics which could be acquired during school.

## *Enterprise administrative department staff*

Usually, for working in an administrative department in an enterprise is enough with a VET certificate but, despite this, you must deal with a lot of economic concepts, among other things.

If you are working on this job position, you will be involved in different internal tasks like telephone attention, contact with providers, factory inventories, carrying payrolls of employees, documentation archive, bills, human resources, checking expenses in addition to controlling company accounts, check the available cash and all other administrative tasks that may exist like controlling VAT and other pay taxes.

Even in some cases, you are given extremely valuable information to managers to make key strategic decisions.

In the school, you could learn about different legal forms of the companies and how they are working, in fact there are a lot of economical concepts that it will be useful for you if you want to work in an administrative department in an enterprise.

## *Bank employee*

Inside a bank, there are a lot of different tasks and job positions involved who are working as a team: tellers, customer service representatives, bookkeepers, accounting clerks, loan officers, managers... obviously it depends on the size of the bank and moreover, there are appearing new job positions according to new tasks and technology.

Tasks inside a bank, from the simplest such as accept deposit from customers, cashing checks, exchange currency or opening a new bank account, to the most complicated as evaluate applicants to receive a loan, making decisions about economic risks or produce balance sheet about the financial data of the bank, require a knowledge of economics to a greater or lesser extent.

If you want to work on one of those positions or want to deal with them (for sure, it would be necessary during your life), economical concepts that you acquire during this period will be extremely valuable and you will be capable to take better decisions about your money, your incomes and other concepts related.

### *Sales assistant/ sales manager*

A sales assistant is expected to help customers choose between the company's range of goods and services, process payments and maintain a high level of customer service.

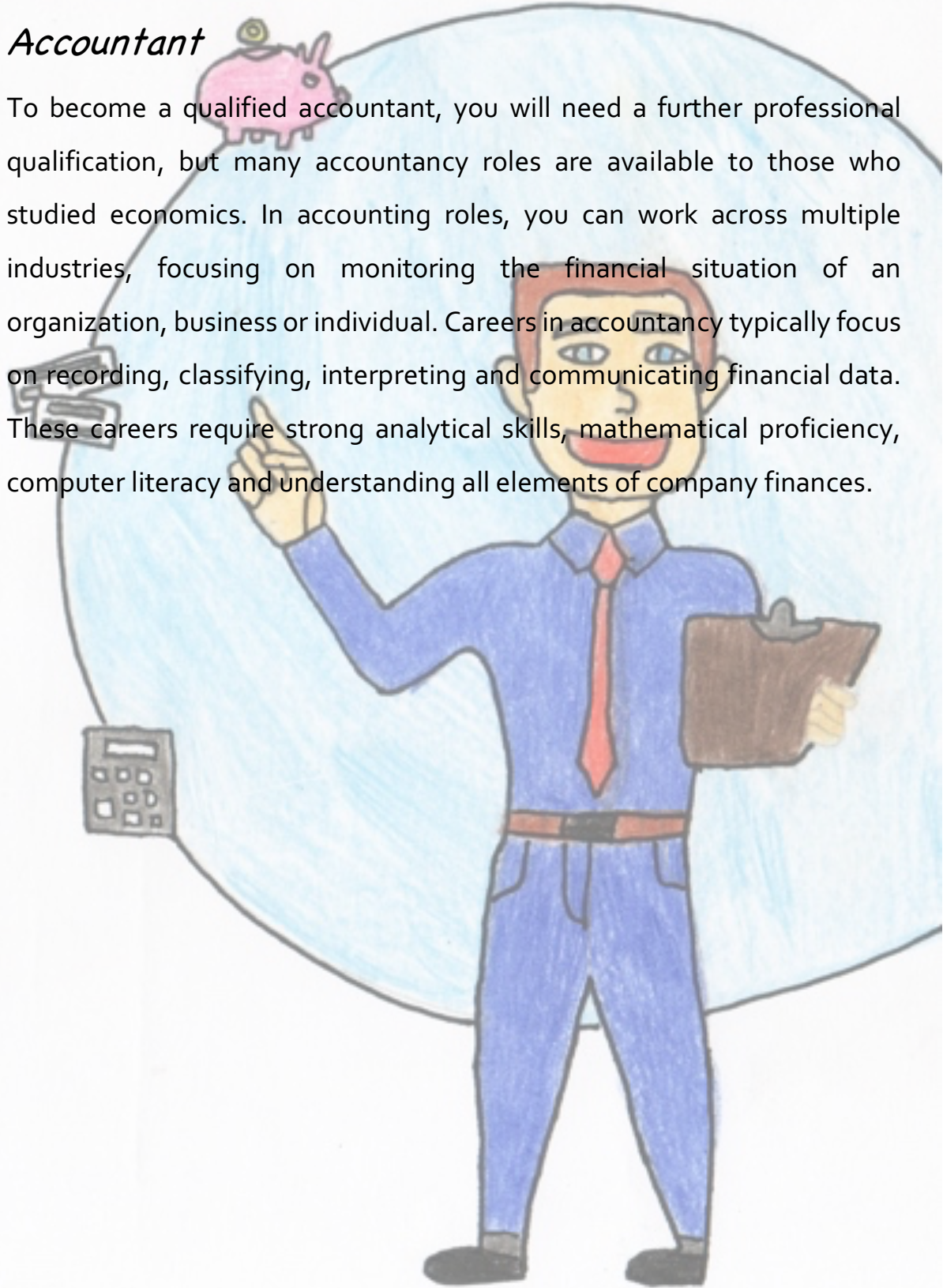
Sales assistants should have knowledge in marketing in order provide a better service and make



good profit. Sales assistants work in an extremely fast-paced sector, and you can expect every single working day to be completely different.

## *Accountant*

To become a qualified accountant, you will need a further professional qualification, but many accountancy roles are available to those who studied economics. In accounting roles, you can work across multiple industries, focusing on monitoring the financial situation of an organization, business or individual. Careers in accountancy typically focus on recording, classifying, interpreting and communicating financial data. These careers require strong analytical skills, mathematical proficiency, computer literacy and understanding all elements of company finances.



## *Financial consultant*

Financial consultants are at the heart of the business world and financial consulting. Economics graduates may find positions in large and medium-sized organizations where economic research is required. The role of financial consultant requires high knowledge of economic theories, analytical and problem-solving skills and



mathematical skills. Financial consultants make the reports and advise on business strategy. It is important to know up-to-date industry knowledge and awareness of corporate finance.



# Music

Music is a set of activities that are important in all areas of our lives, increase and improve rhythmic abilities. Individuals with musical skills can make some professions even more beautiful. "School" is where we discover our musical abilities.

## *Real estate consultant*

Real estate consultants help people in the process of buying a house. Musical skills can help in adjusting the tone of one's voice or to speak the native language one uses correctly.



## *Teacher*



Imagine a/an instructor teaching with a single tone.... Isn't it so boring? But teachers who can adjust their tone of voice, benefiting from the musical skills they possess, have always been more successful.

## *Musician*

From the lullaby music we heard as babies to the rhythms we used to play with, we are entwined with music at every moment. Music is the life of some people. School is an important place to acquire and develop this skill.





# Information & Communication Technologies

We live in the Information Society, where digital technologies are used to access, store, transmit, and manipulate information. To live together, work, and exercise the basic rights of citizenship you need to have Digital and technology-based competences. Therefore ICT domain is considered a key competence for lifelong learning.

## *Office Boy*



This is an entry level position on an office. It is essential that you have computer skills to be able to accomplish tasks, communicate with clients and co-workers, express yourself and deal with the company's technological equipment. At schools, besides the ICT courses, you will learn and apply ICT knowledge and skills cross-cuttingly.

## *Administrative Assistant*

All professional areas need an administrative assistant. This job requires a variety of tasks, including organizing and keeping files and handling projects, sending and receiving correspondence, as well as greeting clients and customers. This professional often becomes "The Face" of the company. Nothing better



than learning ICT at school and, in the future, give the best impression about the company and about yourself.

## *Computer Engineer*

If you like to play games and you use your computer to study, access social networks and support day-to-day tasks, you can do this thanks to the computer engineer professionals. This area includes many jobs such as Systems Managers, Analysts, Applications Developers and Programmers. These jobs require the ability to analyze, solve problems, creativity and communication skills. You can start practicing them at schools to become a great professional in the future.

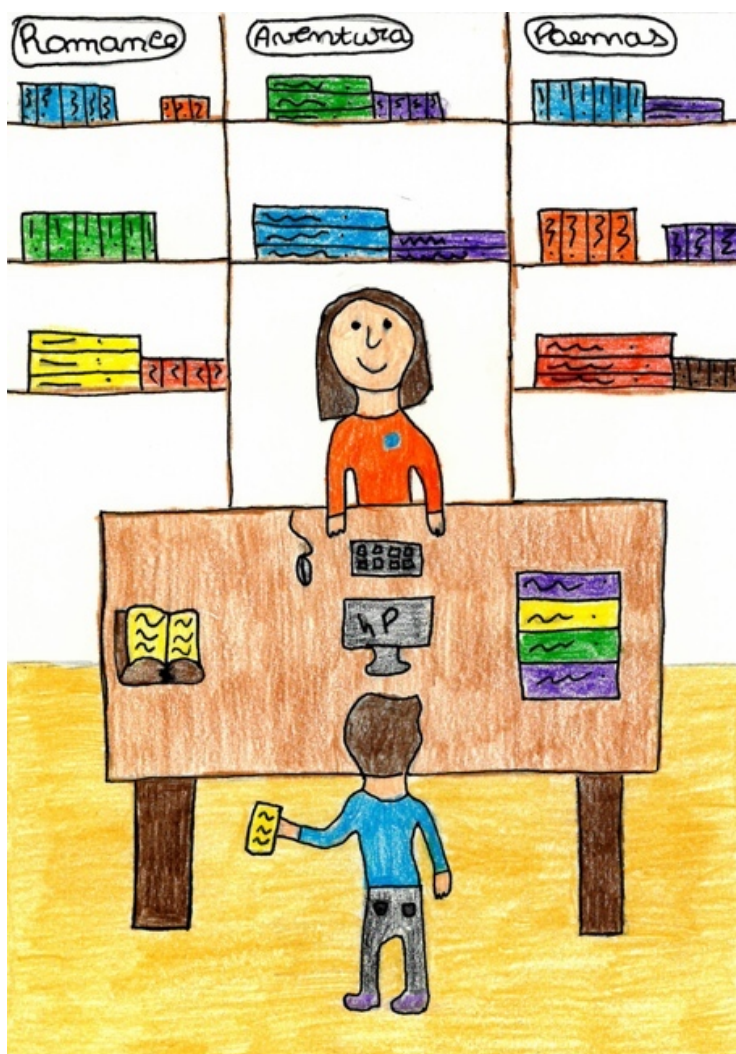


# Philosophy

Without critical thinking, how can we really live a meaningful life? You need this skill to self-reflect and justify your ways of life and opinions. As for the importance for education, philosophy enables you to think better and more critically. Philosophy would teach you how to use logic and reasoning to find out things like: "how do we know what we know?" In addition to the critical thinking ability, you can benefit from having good problem-solving skills as we all encounter problems daily. It would be very beneficial for your future career to have the ability to solve your personal and professional problems efficiently and on time. The study of philosophy will extend your understandings of philosophical techniques for general problem solving over the years.

## *Library assistant*

As a library assistant you may have a challenging situation, where you will deal with booked materials that haven't been returned on time or issues with borrower identification cards and other situations which require well developed critical thinking and problem-solving competences. In order to solve the problems at work easily, you can use the creative minds you have developed during the philosophy classes at school, or some of the philosophy techniques and methods to approach the problem from a different perspective and to find the right solution for it.



## *Sales assistant*

Can you picture the situation, when a customer comes into a store and asks you a question, they have a problem, and they expect you to solve it? Customer problems might include wanting to know where a product is in the store if it is in stock, or they may be requesting a refund. Buying and selling is all about forming a connection with the customer. If you are on the shop floor as a sales assistant, you are working face to face with customers, so you need good communication skills! Studying philosophy at school, would help you to develop your ability to clarify, simplify, and convey arguments and information to others, to listen carefully and understand different points of view.

## *Writer/ Editor*

How many times, have you found an article with a very attractive title but with not very clear content, because the writer doesn't know much about the topic. As a writer you won't be writing always about topics you love, and you are familiar with. Providing a good content, requires detailed research about the interests of the readers and gaining valuable knowledge for



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the topic you are writing about. Exactly by studying philosophy at school, you will learn different research methods and techniques for improving your writing competences and delivering efficient results.

### *3D-Printer Operator*

Operating a 3D-Printer requires specific knowledge about the printer, the printing materials, the products' engineering, etc... 3D-Printer Operators have specific skills to do it, even if the training required is not very long or hard. However, they do need to deal with the 3D-Printing clients who are, in most cases, people totally unaware about the features, possibilities and obstacles to the process. Therefore, the 3D-Printer Operator needs specific ability on dealing with the client and a very proficient problem-solving reasoning! Where can you look for to gain such, so called, "soft skills"? While Philosophy classes will not teach you how to operate the 3D-Printer, they will for sure expand your thinking horizon, they will support your reasoning about different people, different mindsets and different approaches to problems. For sure, a good Philosophy student will be someone who will better deal with daily life problems, including daily life work as a 3D-Printer Operator!

## *Marketing Professional*

Marketing Professionals are required to be very astute, to think very broadly, able to catch the attention of people who are very different from



each other. Such ability is very much developed and worked on in Philosophy subjects, where thinking is explored from varied angles of approach. As a marketing professional you will be called upon to develop campaigns capable of attracting the attention of people who are not normally interested in a product, to reach new markets and record sales. So, it will be very useful for you to

know how the human mind works and what is the best perspective to approach the thoughts of so many different people! You will see that knowing about Philosophy will be very useful!



## *Actor/Actress*

Being an actor/actress, being it either on stage (theatre) or on screen (television, cinema), is a profession under the domain of arts. Arts is, at its turn, a very wide-open domain of human life but basically it relates to creativity and to the capacity to think from diverse perspectives; it allows us either to express ourselves in particular ways, either to communicate new ideas, either and most significantly to generate new feelings. Philosophy, as a matter of searching for additional knowledge and equate new possible realities by using our thinking capacity, seems quite important to an actor/actress, who will search permanently to be in someone else's head. To understand human thinking and to practice thinking from very different and wide-open perspectives, will help you in your actor/actress career!



# Health

Nowadays, the world faces serious health challenges as the pandemic crisis. The health problems draw attention to everyone's responsibility to take care of themselves, others, and the environment to enable a state of complete physical, mental and social well-being. Being a health professional also means being able to provide healthcare and actively participate in disseminating healthy habits to prevent disease.



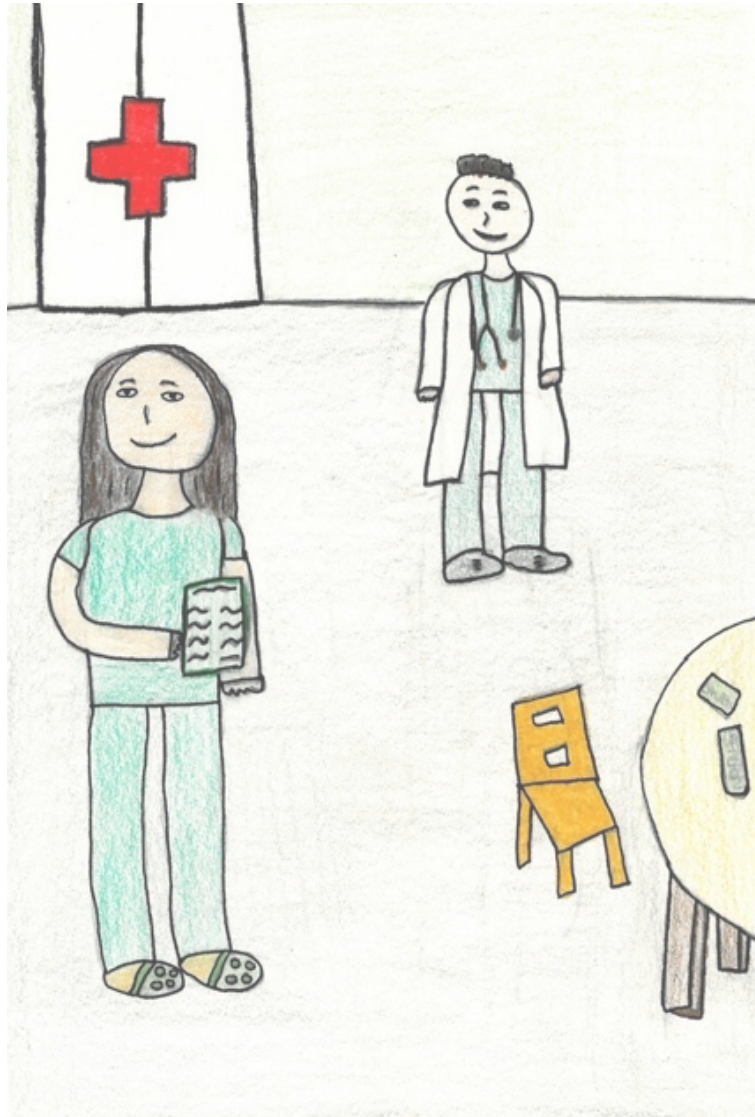
## *Professional caregiver*

Some people, young or elder, at some periods of life may need assistance with activities of daily living and to ensure that nutrition and medical prescriptions comply within a safe environment. To provide health care, you can begin to acquire the basis of this knowledge at school, of course!



## *Medical assistants*

Various medical specialties need an assistant who keeps patient medical records, assists doctors with exams, and performs different tasks. To be able to communicate with doctors, co-workers, patients, and families, to understand the procedures and the prescriptions, you need to have different knowledge and skills.



Some of them you can learn at schools' health-related curricular subjects.

## Physicians



This profession uses health knowledge to support different tasks, as diagnosing diseases, administer treatment, and advise patients on their health and well-being. Doctors can be specialized in specific areas, such as dermatology, neurology, gastroenterology, gynaecology, etc.

If you want to be a doctor, before attending medical school, you must have the knowledge base of various curricular subjects, with a special focus on the health-related ones.



# Citizenship Complementarities



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Education in general, and school education in particular, results in preparation for adult life and the formation of citizens. If until now we have seen the extent to which the formal contents of the different subjects of the school curriculum contribute to the technical preparation and exercise of various professions, now we focus, albeit briefly, on the contributions that schools can provide about conscious and active citizenship.

In the relationship between school and the labour market, in addition to knowing the numerous subjects and disciplines, as well as the different professions, in a logic and context already described in part 1 of this handbook, it is equally important to know one's role as a citizen of a country, of the European Union, and even of the world in the current context of globality in which we live. To know one's rights and duties, to give meaning to learning, formal and informal, contextualizing it in what is our real life daily.

If we realize the potential of our interactions with others and with the different community levels in which we live, it will be easier to understand the importance of knowledge, at whatever level, and to transform it into a very useful tool for personal, social, school, and professional fulfilment.

In this context, it is necessary to understand in a more general way that being a citizen means having the right to life, to liberty, to property, and to equality before the law. It means having rights, but also duties. It means participating in the destiny of society, voting, being voted for, and having political rights.



As members of a European Union, besides being national citizens, of our country, we are also European citizens, and at this level the rights and duties converge to promote equality among all citizens of the EU member states.

And what are these rights and duties in a more concrete way?

In the range of rights, we have

- Right to life.
- Right to reputation and privacy.
- Freedom of press, speech and of demonstration in accordance with the law.
- Right to liberty and security.
- Right to establish residence anywhere in the national territory and the EU.
- Legal assistance.
- Right to property.
- Right to work and to strike.
- The right to exercise political power through universal suffrage.
- Right to education.
- Right to health.
- Freedom of cultural creation (scientific, technical, literary and artistic).
- Right to assistance in disability and old age.
- Right to visit, move and work in any EU country without a visa.

In the range of duties, we have:

- Comply with the laws.

- Respect the rights of other individuals.
- Provide for your own livelihood through your work.
- Feed close relatives who are unable to provide for themselves.
- Educate and protect your fellow man.
- Protect nature as well as community and public property.
- Cooperate with the authorities.

These rights and duties, in essence, configure basic rules for living together fully, both at the most micro level, as a citizen in a local community, and at the most macro level, as a national citizen, a citizen of the European Union, and even a citizen of the world.

As you can see, access to education and to educate and protect your neighbour is both a right and a duty that should be enjoyed and respected in a logic of acquisition and transmission of knowledge and skills for life.

It is important that young people understand that learning at school is not a social "punishment" or a mere obligation to be fulfilled, but something fundamental for their lives and their relationship with others and with the world around them. Deep down they must be seen as a right. The more one learns, the more tools one must deal with the complexity of the world in which we live. Managing "complexity" in a collaborative process is therefore fundamental and is only possible if we are willing to listen and learn, and to transmit knowledge.

In fact, we focus on a specific large domain that permeate the school curriculum that contributes decisively to the preparation of young people

not only for the job market but, above all, also for a responsible citizenship. Although this domain - once transversal - is developed and operated in the most varied socializing instances, it is important to recognize the importance of the school in these instances. We are referring to Communication.

Though this transversal domain is activated daily, within the classroom and within the scope of specific formal contents, we believe that is proficient to sediment it.

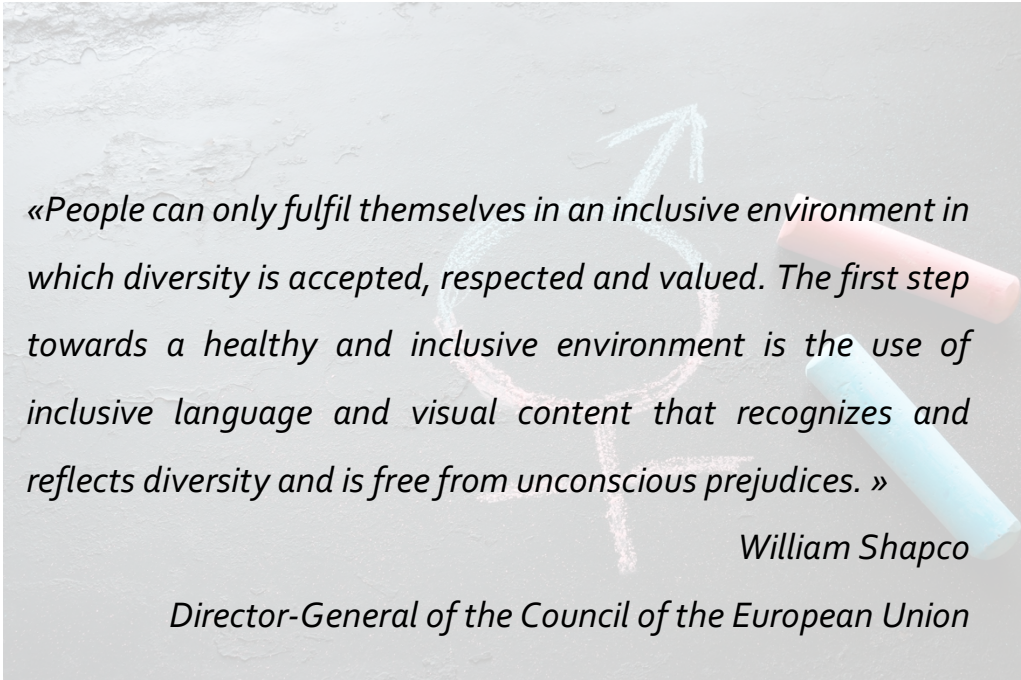
In fact, we argue that the approach to this specific domain and competence is/should be present in the mobilization of learning in general.

# Communication

Communication is a fundamental tool in our daily lives. On the one hand, it reflects our way of being in life and in the world and, on the other hand, it is an extremely powerful and influencing means of attitudes, behaviours, perceptions and relational dynamics.

We must choose with a sense of responsibility, the linguistic and visual formats and contents that we use in our way of communicating, as these always have an impact on everything around us, be it positive or negative. In a world that wants to become more and more global, more equal, more integrative and more inclusive, with full respect for human rights, it is important to use non-discriminatory communication, sensitive to gender issues, free from prejudice and promoting equal opportunities.

In this way language can be an inclusive tool, promoting gender equality and fighting against all forms of discrimination. Besides integrating a component of awareness-raising on the importance of language as a factor of freedom in the context of gender identity. In other words, language can condition a person from birth and even before that, according to gender. The use of an inclusive and neutral language will contribute to the freedom of thought, behaviour, attitudes as a person and not as a gender.



*«People can only fulfil themselves in an inclusive environment in which diversity is accepted, respected and valued. The first step towards a healthy and inclusive environment is the use of inclusive language and visual content that recognizes and reflects diversity and is free from unconscious prejudices. »*

*William Shapco*

*Director-General of the Council of the European Union*

UP2B is a project centred on intervention with school communities and their stakeholders, with commitments in teaching and, responsible for creating motivational resources and products for educational processes. It is a concern of this project to use in this intervention and these resources, methodologies and guidelines that respect all the above. We would like the UP2B to be a good example of a positive attitude towards respect for human rights and equal opportunities.

We intend, in a very simple way, to present some recommendations. It will be a kind of guide with suggestions, language techniques and procedures.

## ***Gender-neutral and gender-sensitive language***

For a gender-neutral and gender-sensitive language (in the applicable cases), it is recommended to use neutral terms and double forms (where linguistically there is such a distinction), which is one of the most adequate resources for neutral language. The neutralization or abstraction of the reference to sex/gender consists in using of:

- double forms
- paraphrase
- deleting the gender article
- invariable pronouns

## ***On Gender Equality***

▶ Consider the use of slash when addressing someone without knowing the person's gender:

Ex: "He/She"; "Mr./Mrs."

▶ Do not use parentheses as they indicate a secondary and non-equitable element

Ex: "He(She)"; "Mr.(Mrs)"

▶ In gender sensitive languages and terms, use neutral terms when aiming to generalize

Ex: Replacing "the politicians" with "the political class"

Replace "interested parties" with "interested persons"

Replace "man" with "human being"  
Replace "Man Rights" with "Human Rights"  
Replace "young people" with "youth".

- ▶ Avoid the use of stereotypical expressions  
Ex: "Blue is the colour for boys and pink is the colour for girls"  
"Football is for boys and dolls are for the girls"  
"Men don't cry"

### *In Disability*

- ▶ Do not use expressions that victimize the person  
Ex: "That poor blind man".
- ▶ Do not use expressions or words that show disability as a limitation  
Ex: "He / she is disabled so he / she is not able to do it"
- ▶ Do not use collective expressions because not all degrees of disability are the same  
Ex: Replace "The blind" by "People with visual impairment"  
Replace "Deaf people" by "People with hearing impairment"
- ▶ Emphasize the person's abilities, and not their difficulties  
Ex: "He / She has a very developed hearing sense" (in the case of a blind person)

### *In stereotypes with age*

- ▶ Do not use age-discriminating expressions  
Examples to avoid: "This job is very well done, despite your young age"  
"He is in good physical condition, given his age".

### ***Use of non-sexist images***

It is recommended that there is no use of images in communication which contribute to the reinforcement of continuing negative roles and stereotypes. It is usual in communication, with some focus on advertising, to use images of women in which they are portrayed according to stereotypes which have been perpetuated throughout time. Sometimes these images are used without awareness of their visual power and that corroborate a negative cultural and social role associated to women. Care should be taken when selecting images that contribute to gender equality and non-discrimination. For example, it is common in public places for images of childcare to be exclusively associated with women.

### ***Ethnic and culturally sensitive communication***

Communication should be fluid and free to contribute to diversity and plurality, without being bound by people's ethnic and cultural characteristics. Expressions such as "race" should be avoided and replaced, as applicable, by "ethnicity" or, simply, "people". Instead of "immigrant person", "migrant person" might be used, which is not linked to a permanent process.



## ***Some recommendations for inclusive sites***

(There are automatic tools for this)

- ▶ Put minimal contrast between background colours and text colours
- ▶ The information on a website should not depend mainly on colours, so that colour-blind people do not have problems viewing it
- ▶ Presenting simple, objective content organized by titles and sub-titles, preferably with different sizes, is a great help for people with dyslexia
- ▶ There should be the possibility to change the font size to make it easier for people with visual problems to read
- ▶ Avoid italic text because it makes reading difficult
- ▶ Do not use texts with justified alignment
- ▶ Video and audio content must be subtitled

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### **Some used references**

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# Conclusion



Centred in Schools, UP2B is fed by a matrix of relevant subjects for the creation of a better School, consequently, better citizens and a brighter future. Some fundamental objectives of the project are: to facilitate the relationship and the transition between School and the Labour Market and to increase students' sense of citizenship by generating awareness about the labour market, to increase the sense of European Citizenship and its core values of equity, namely concerning Gender, Minorities and Human Rights.

This handbook is one of the several products of UP2BE project to achieve those objectives. 'School & Job' Matching Handbook – a tool for students and teachers (and other formal and informal educators) – has been built for elucidate students about the question they permanently ask themselves “why do I need to know this for...?!”.

With the various examples presented here, and based on a considerable range of disciplines and professions, we believe that we have built a useful and clarifying tool.



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