Instdiúid na gComhairleoirí Treorach

INSTITUTE OF GUIDANCE COUNSELLORS

The World Of Work

**A Junior Cycle
Career Guidance Module
Teacher Manual**

**The Institute of
Guidance Counsellors**

Contents

1. In order it select a suitable site that will fit into the current city plans, a **_city planner_** is consulted.

2. To ensure the soil and ground is suitable a **_geomatics engineer_** is employed to determine if the ground is suitable.

3. New access roads, and a bridge over a canal, and a train line needs to be extended. To develop these plans a **_civil engineer_** is consulted.

4. To design the outside and inside of the structure an **_architecture_** is employed.

5. To lay the foundations and build the structural walls a **_structural engineer_** is needed.

6. To ensure the cranes and diggers are working, a **_heavy vehicle mechanic_** is used.

7. To install the steel frames a **_metal fabricator_** and **_welder_** are used.

8. The new building will need certain services such as water, electricity, air conditioning, lifts, and escalators and need to be planned before the structure is built.
    So a **_building services engineer_** is consulted before the structure itself is started.

9. To get the electricity from the electricity pylons to the site an **_electrical engineer_** is used.

10. To attach the electric wires to all the appliances and lighting that will use the electricity an **_electronic engineer_** is used.

11. Machines like lifts and escalators are both mechanical and electronic, so a **_mechatronic engineer_** is used.

12. To build the structure itself, including the walls, a **_bricklayer_** is used.

13. To help lay the bricks on very high walls, a **_scaffolder_** is employed to construct the scaffolding.

14. To install the water pipes a **_plumber_** is employed.

15. To cover the walls in plater, a **_plasterer_** is employed.

16. To ensure everybody's tools are working a **_tool maintenance_** specialist is employed.

17. To decorate, a **_painter_** is used.

18. To install the alarms and CCTV in the shops an **_electric security systems_** is used.

19. A **_refrigerator and air conditioning specialist_** is used to install fridges and air conditioning units.

20. To minimise the buildings impact on the environment and **_environmental engineer_** is consulted.

21. The environmental engineer will recommend a wind turbine which will be maintained by a **_wind turbine technician_**.

22. To design the gardens and green spaces and open spaces a **_landscape architecture_** is employed along.

23. To ensure everything being built is kept with the original costs, a **_quantity surveyor_** is used.

Quantity Surveyor	Painter	Electronic Engineer	Wind Turbine Technician	City Planner
Geomatics Engineer	Plasterer	Electric Security Systems	Building Services Engineer	Heavy Vehicle Mechanic
Plumber	Refrigerator & Air Conditioning Specialist	Welder	Landscape Architecture	Civil Engineer
Tool Maintenance	Architecture	Electrical Engineer	Environmental Engineer	Structural Engineer
Mechatronic Engineer	Scaffolder	Bricklayer	Metal Fabricator	Any More

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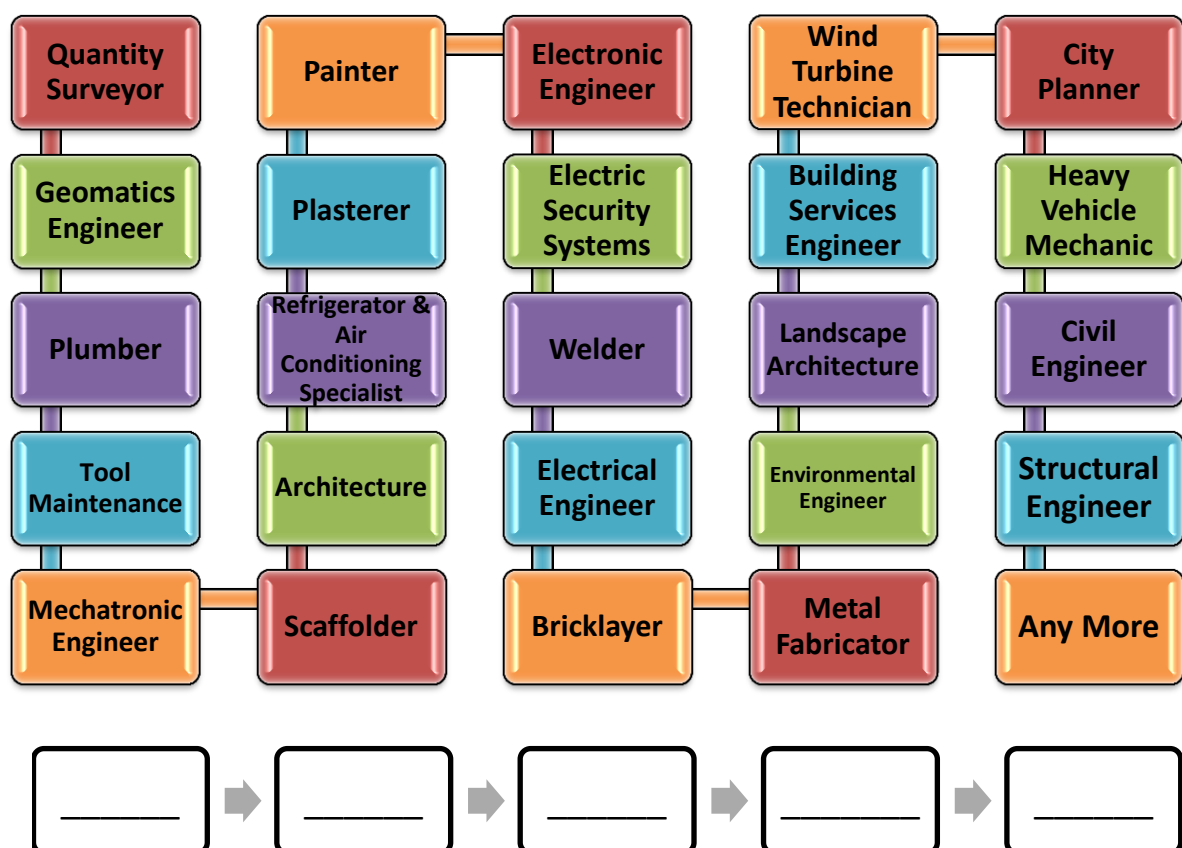
1. The shopping centre will have many different types of retail outlets. The shops will be designed and fitted out in consultation with an ***interior designer***.

2. Somebody qualified in ***retail management*** will be employed to run some of the shops.

3. The restaurants will need to employ different types of people in the kitchens such as ***bakers*** and ***chefs***.

4. A shop selling meet and chicken will need to employ ***butchers***.

5. A shop selling contact lenses and glasses will employ an ***optician***.

6. The shops selling clothes employ someone who is a qualification as a ***fashion designer***.

7. To ensure the cloths and other merchandise are displayed in an attractive way, a person qualified in ***visual merchandise display*** is employed.

8. The hotel will need to employ someone who is qualified in ***hotel and hospitality management***.

9. To help run and organise weddings, music events, and business conferences that are booked into the hotel somebody trained in ***event management*** is employed.

10. The gym in the hotel will need to employ *__fitness instructors__*, and those qualified in *__sport science__* and *__sports management__*.

11. The gym will be overseen by somebody trained in *__leisure management.__*

12. The hotel will get a lot of tourists from oversees staying, and will employ somebody who is qualified in *__tourism management__*.

13. The hotel will also a develop a children's outdoor adventure centre, they will therefore employ an *__outdoor adventure instructor__*.

Butcher	**Event Management**	**Sports Management**	**Retail Management**
Outdoor Adventure Instructor	**Visual Merchandise Display**	**Baker**	**Fitness Instructor**
Fashion Designer	**Interior Designer**	**Chef**	**Sports Science**
Leisure Management	**Hotel & Hospitality Management**	**Optician**	**Tourism Management**

Any More ➡ _____ ➡ _____ ➡ _____

_____ ➡ _____ ➡ _____ ➡ _____
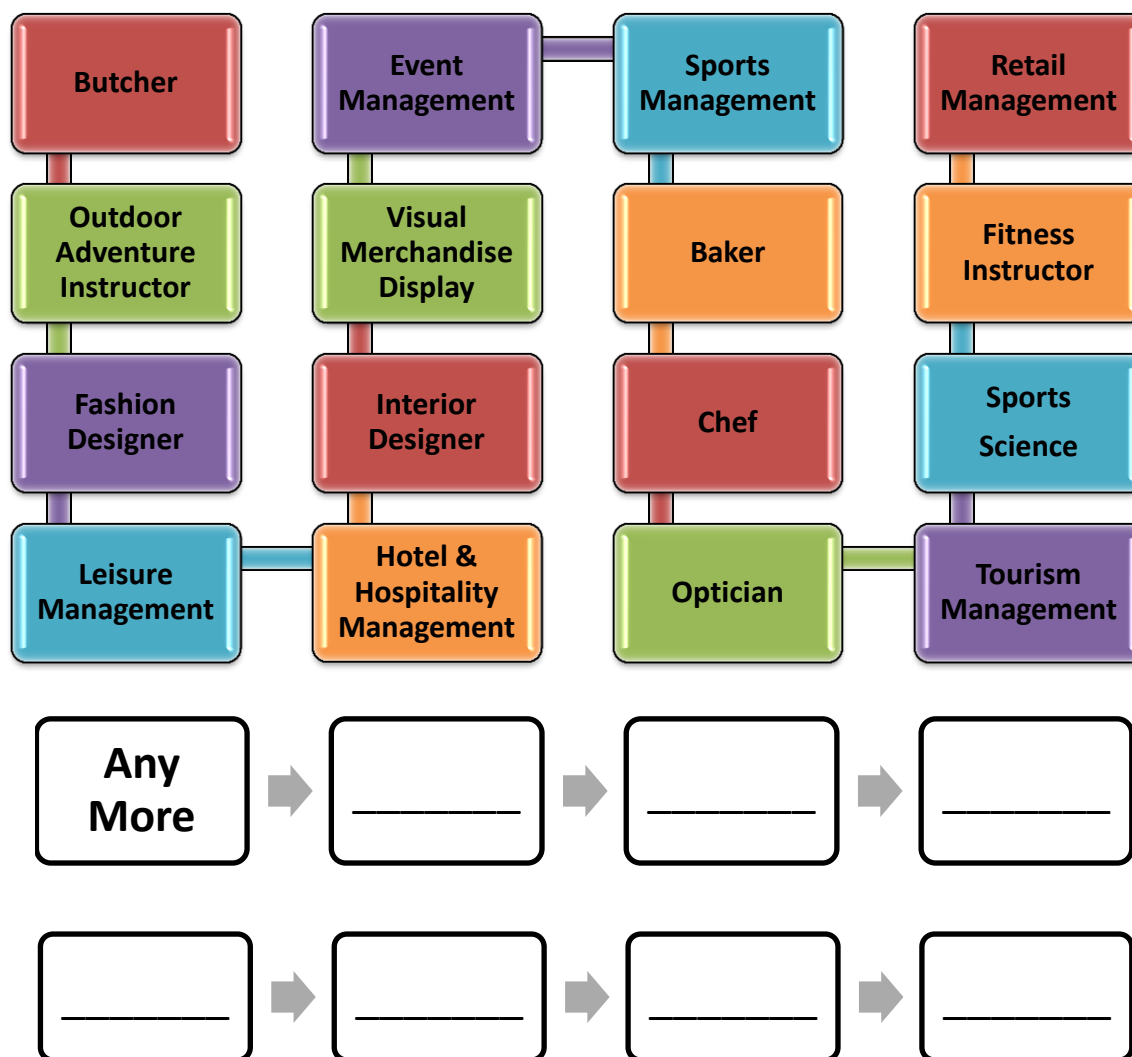
3. An Elderly Lady Falls at Home

An elderly lady suffers a stroke at home and falls and breaks her leg.

1. The ambulance arrives with two ***paramedics*** and they bring her to the hospital.

2. There are several different types of nurses working in the hospital.

   a. A ***mid-wife*** delivers babies.
   b. A ***children nurses*** works with children.
   c. A ***intellectual and disability nurses*** works with those who have an intellectual disability or physical disability.
   d. A ***mental health/psychiatric nurse*** works with those who have difficulty with emotional issues.
   e. When she arrives at the hospital she meets a ***general nurse***.
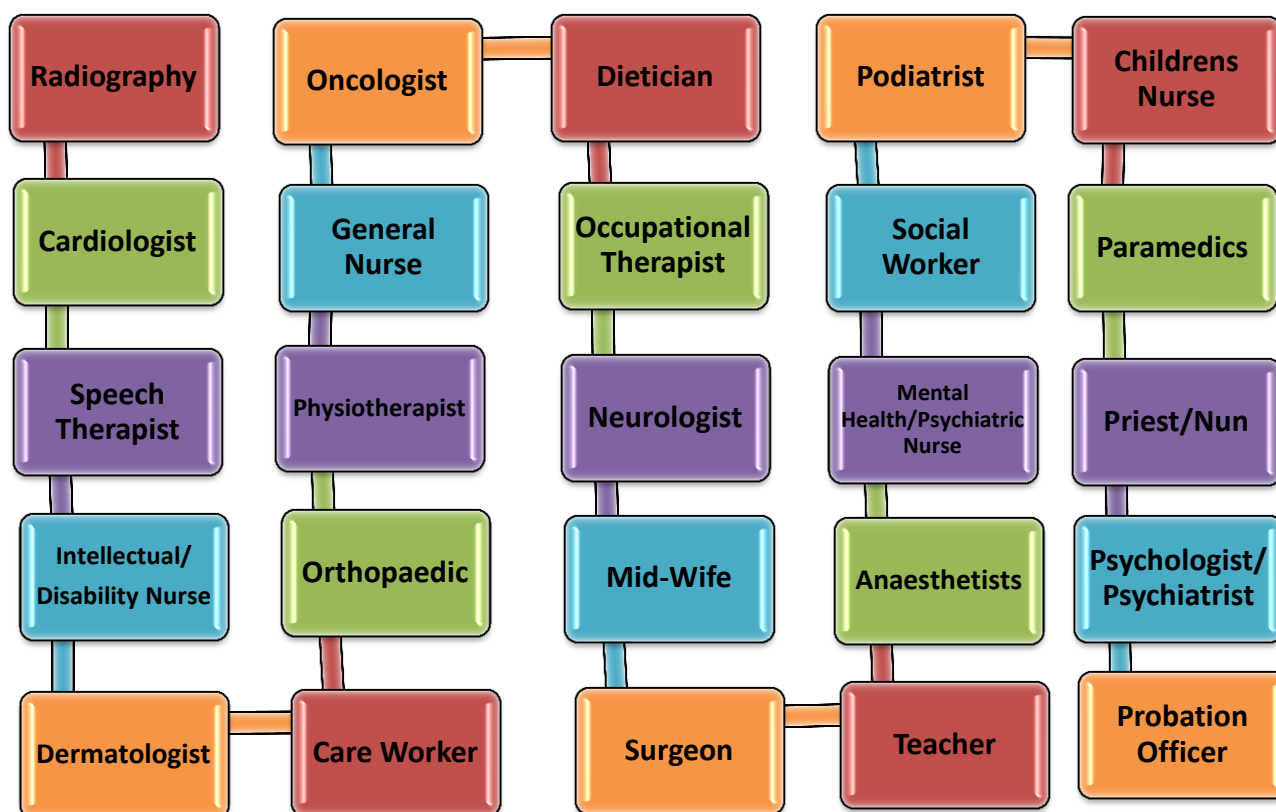
3. The lady will have to have x-rays and scans.
   This will be done by someone who is qualified in ***radiography***.

4. The lady will have to been seen by a doctor. There are several different types of doctors.

   a. The x-ray shows up the broken leg and this will be viewed by a doctor who specialises in bones, this doctor is called an ***orthopaedic*** doctor.

   b. The lady will have to have a bone plate insert by a ***surgeon***.

   c. She will be put to sleep before the operation by an ***anaesthetists***.

   d. Because of her age, her heart will be checked to see if she is able for the operation. This will be done by a ***cardiologist***.

   e. Because she had a stroke, the lady needs to be seen by a ***neurologist*** who will read the scan of her brain.

   f. A small swelling is found on her brain. To check this is not cancerous, it is checked by an ***oncologist***.

5. As a result of the stroke the elderly lady has lost some of her speech, she will be seen by a ***speech therapist***.

6. She also has lost some movement in one leg and will be seen by a ***physiotherapist***.

7. To check if she is suitable to move back home, she returns to her house with a person who can determine if she is capable of living alone.
   This person is called an ***occupational therapist***.

8. Unfortunately she has to go into a nursing home. This is arranged by a ***social worker***.

9. In the nursing home her skin is not the normal colour. It is found that she is allergic to certain foods. This was determined by a specialist doctor called a ***dermatologist***.

10. She is then referred to a ***dietician*** to discover which food she is allergic to.

11. Her feet are also swollen and she is seen by a ***podiatrist***.

12. Throughout her stay in the nursing home her general needs are taken care of by a ***care worker***.

Believe in children Barnardo's

Radiography	Oncologist	Dietician	Podiatrist	Childrens Nurse
Cardiologist	General Nurse	Occupational Therapist	Social Worker	Paramedics
Speech Therapist	Physiotherapist	Neurologist	Mental Health/Psychiatric Nurse	Priest/Nun
Intellectual/ Disability Nurse	Orthopaedic	Mid-Wife	Anaesthetists	Psychologist/ Psychiatrist
Dermatologist	Care Worker	Surgeon	Teacher	Probation Officer

Other social jobs are;

13. Someone who works in education three age groups.
    A ***montessori teacher***, ***primary school teacher***, ***secondary school teacher.***

14. Someone who works in a religious environment, can be male or female. ***Priest, nun.***

15. Someone who works with prisoners after they have been released from prison. A ***probation officer***.

16. Someone who helps people with their emotional issues.
    A ***psychologist, psychiatrist,*** what is the difference?

CONCERN worldwide

17. Individuals who work for ***charities*** and ***non-governmental organisations,*** (N.G.O.'s).
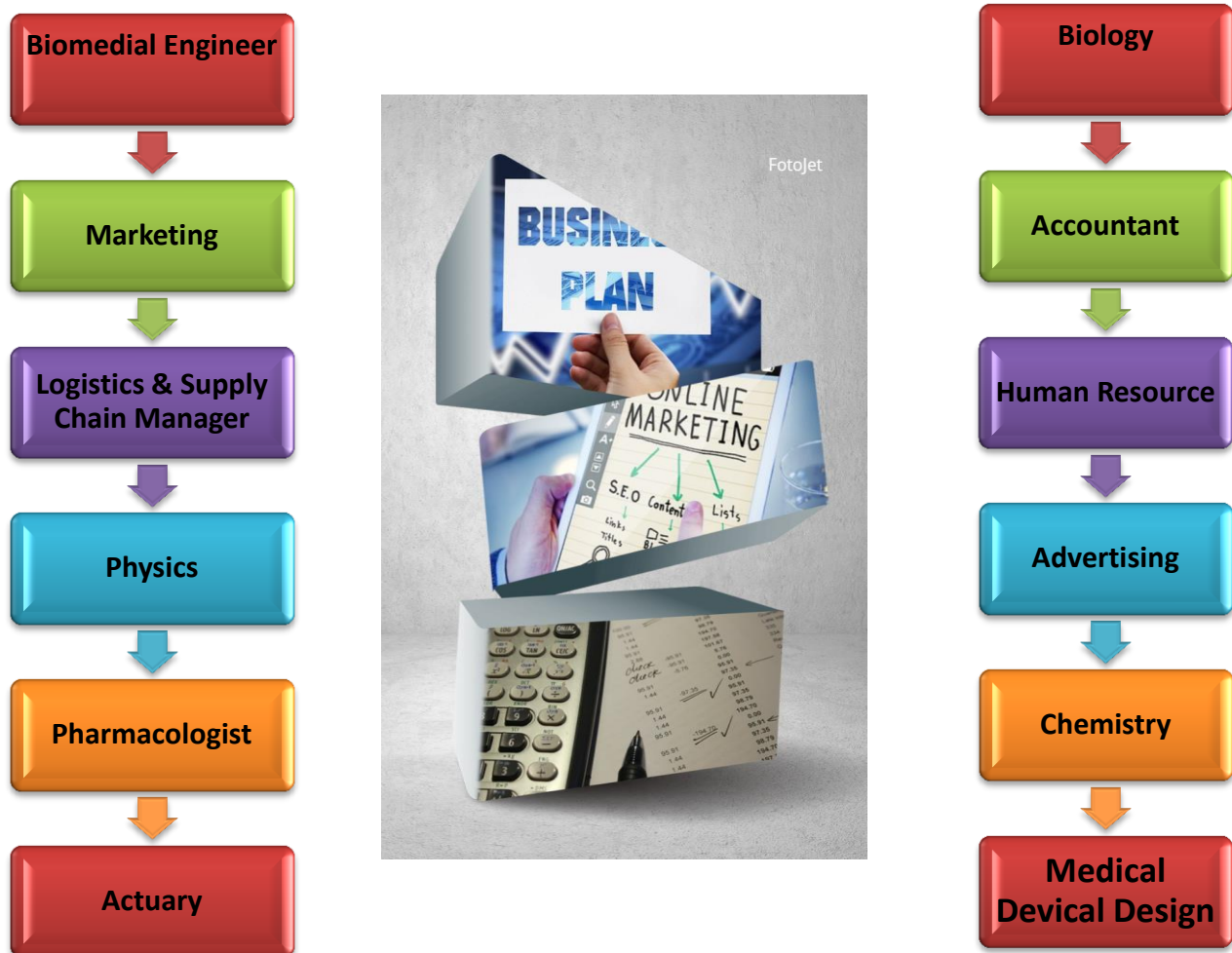
4. A Pharmaceutical & Medical Device Company

A medical company makes medicines and medical devices for patients such has heart values and hip replacements. To carry out their wok they need to employ a variety of people trained in different areas.

1. The medicines will be developed by people with a qualification in the traditional sciences, **_Biology_** , **_Chemistry_**, and **_Physics_**.

2. To ensure the drugs they produce do not interact with other drugs someone might be taking, the company needs to employ a **_pharmacologist_**.

3. To help develop and make artificial hips the company employs someone who is qualified in **_product and medical device design_**.

4. The will also employ somebody with a **_biomedical engineering_** qualification.

5. To help select people to interview for jobs in the company someone who is qualified in **_human resource management_** is employed.

6. To sell the devices to hospitals and doctors and surgeons the company employs somebody qualified in **_marketing_** who helps development strategies for selling the benefits of their devices and medicines and who should be the target customers.

7. The marketing people then give that plan to those qualified in **_advertising_** to develop different types of advertisements for radio, television , newspapers and magazines.

8. To determine the prices they will charge for their products, the company needs to take into account the cost of developing the products, making the products, employing people and paying their wages and paying into their pensions and paying for insurance on the products in case something goes wrong, an ***actuary*** is employed to do this.

9. To ensure the finances of the company are in order the company employs and ***accountant***.

10. To help deliver all the drugs to the pharmacy around the county a ***logistic and supply chain manager*** is employed.

Biomedial Engineer		Biology
↓		↓
Marketing		Accountant
↓		↓
Logistics & Supply Chain Manager		Human Resource
↓		↓
Physics		Advertising
↓		↓
Pharmacologist		Chemistry
↓		↓
Actuary		Medical Devical Design

Any More	→	_____	→	_____	→	_____

_____	→	_____	→	_____	→	_____

5. The Creative & Artistic World

1. Colin Farrell and Saoirse Ronan. **_Actor_**.

2. Someone who works with hair. **_Hairdresser_**.

3. Some who takes photographs. **_Photographer_**.

4. Simpsons and Toy Story. **_Animator_**.

5. Someone you designs the graphics for the T.V.

   programmes. **_Graphic Designer_**.

6. Someone who designs buildings. **_Architect_**.

7. Someone who cooks. **_Chef_**.

8. Someone who makes things from wood or metal. **_Sculpture_**.

9. Someone who plays an instrument. **_Musician_**.

10. Vincent van Gogh and Michelangelo. **_Painter_**.

11. Seamus Heaney and W.B. Yeats. **_Poet_**.

12. Designing the insides and layout of houses and buildings. **_Interior designer_**.

13. Someone who designs gardens and open spaces. **_Landscaper_**.

14. Someone who arranges flower bouquets. **_Florist_**.

15. Someone who designs websites. **_Web Designer_**.

16. Someone who manages the business behind plays, music events. **_Arts Manager_**.

17. Bono & Madonna. **_Singer_**.

18. Someone who designs cloths. **_Cloths Designer_**.

Any More

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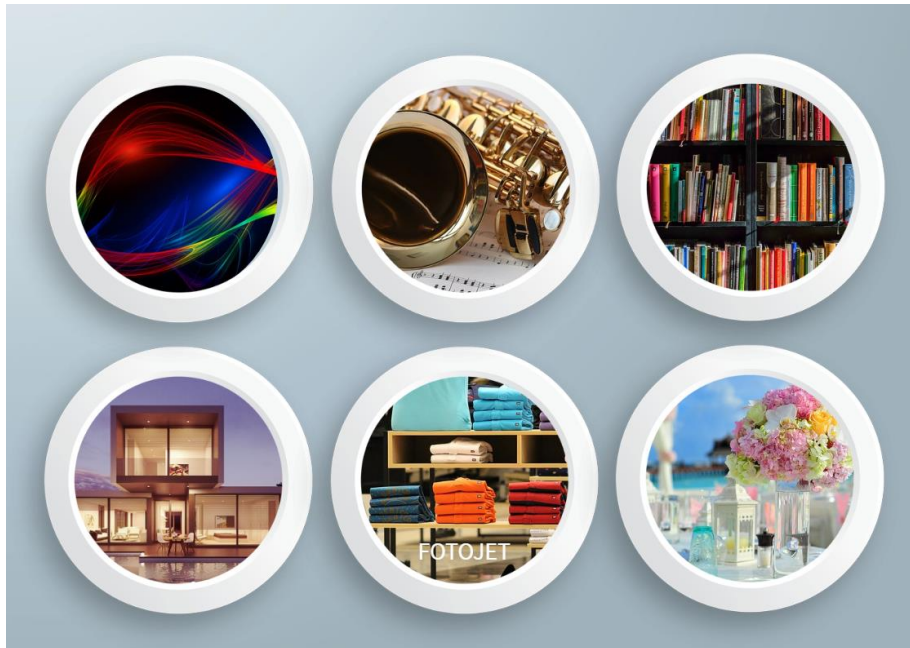
19. Someone who makes objects out of glass. *Glass Maker*.

20. Someone who puts signs on the side of vans. *Sign Writer*.

21. J. K. Rowling and Roddy Doyle. *Writer.*

22. Someone who designs ads for T.V. , Radio, and Magazines. *Advertising*.

23. Makes T.V. and Radio programmes and plays for the theatre. *Producer*.

24. Someone who applies make-up. *Make-up Artists*.

25. Someone who makes products look nice. *Product Designer*.

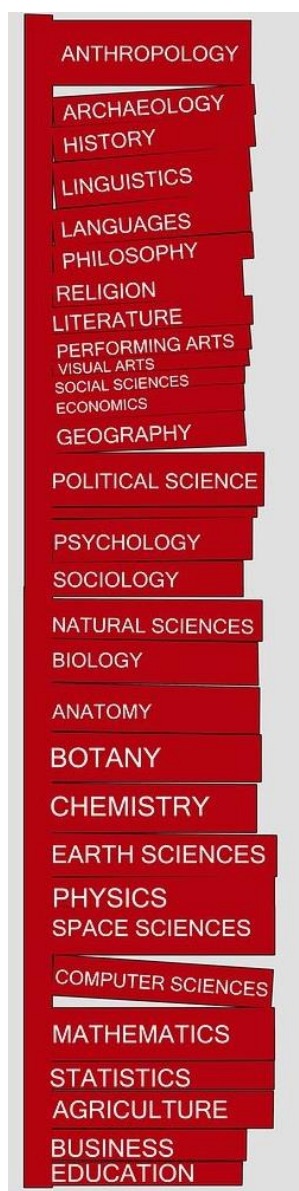| Make-Up Artist	Product Designer	Singer	Florist	Painter
Web Designer	Actor	Sign Writer	Cloths Designer	Architect
Animator	Landscaper	Advertising	Sculpture	Interior Designer
Writer	Producer	Chef	Graphic Designer	Glass Maker
Hairdresser	Musician	Poet	Photographer	Arts Manager
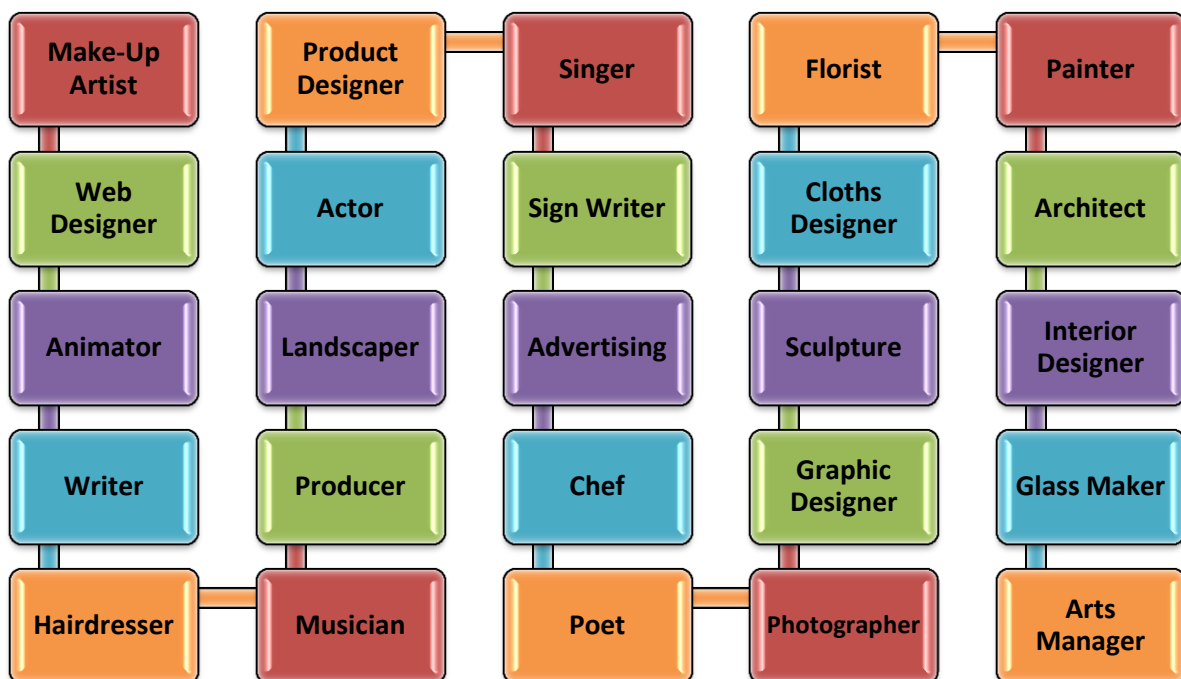
6. Other Subject You Don't Do In School

You are familiar will the subjects you study in secondary school, for example, English, Maths, French, German, History, Geography, Science, Business, and languages. All of these subjects are offered in colleges. However, colleges also offer other subjects that are not available in secondary schools. Match the description of the subjects with their name below.

ANTHROPOLOGY
ARCHAEOLOGY
HISTORY
LINGUISTICS
LANGUAGES
PHILOSOPHY
RELIGION
LITERATURE
PERFORMING ARTS
VISUAL ARTS
SOCIAL SCIENCES
ECONOMICS
GEOGRAPHY
POLITICAL SCIENCE
PSYCHOLOGY
SOCIOLOGY
NATURAL SCIENCES
BIOLOGY
ANATOMY
BOTANY
CHEMISTRY
EARTH SCIENCES
PHYSICS
SPACE SCIENCES
COMPUTER SCIENCES
MATHEMATICS
STATISTICS
AGRICULTURE
BUSINESS
EDUCATION

1. *Sociology* is the study of patterns of social relationships, social interaction and culture of everyday life and issues and problems that go on in society as a whole, homelessness, unemployment and crime.

2. *Philosophy* is the study of general and fundamental questions about existence, knowledge, values, reason, mind, and language. It is a way of thinking about the world, the universe, and society. It asks very basic questions about the nature of human thought, the nature of the universe, and the connections between them.

3. *Linguistics* is the scientific study of language and its structure, including the study of grammar, syntax, and phonetics.

4. *Classical Studies* is the specific branch of History that studies the cultures of Roman and Greek times.

5. *Celtic Studies* is the study of linguistics, literature and art history, archaeology and history of the cultures and people from the following culture: Irish, Scottish Gaelic, Manx (Isle of Man), Welsh, Cornish (in England), and Breton (in France).

6. *Theology* is the study of the nature of God and Religions.

7. *Anthropology* is the study of humans and human behaviour and societies in the past and present.

8. *Archaeology* is the study of human history and prehistory through the excavation of sites and the analysis of artefacts and other physical remains.

9. The *History of Art* is the study of objects of art in their historical development e.g. design, format, and style. The study includes painting, sculpture, architecture, ceramics, furniture, and other decorative objects.

10. **_Law_** is the study of the system of rules which a particular country or community recognizes as regulating the actions of its members and which it may enforce by the imposition of penalties.

11. **_Psychology_** is the scientific study of the human mind and its functions, especially those affecting behaviour in a given context.

12. **_Criminology_** is the study of crime as an exciting inter-disciplinary subject that draws from sociology, psychology and law to focus on issues such as the causes of crime, the meaning of crime and community or societal reactions to crime.

13. **_Human Rights_** is the study of the basic rights and freedoms that belong to every person in the world, from birth until death. They apply regardless of where you are from, what you believe or how you choose to live your life. They can never be taken away, although they can sometimes be restricted – for example if a person breaks the law, or in the interests of national security.

14. **_Politics_** is the study of the activities associated with the governance of a country or area, especially the debate between parties having power.

15. **_Media Studies_** is the study of T.V. Radio, newspapers, magazines, social media and other media sources.

16. **_International Development_** is the study of international challenges and opportunities confronting people and societies living in the Africa, Asia and Latin America, and other undeveloped parts of the world.

Linguistics	History of Art	Philosophy	Theology	**Any More**
Classical Studies	Politics	Sociology	Human Rights	_____
Celtic Studies	Anthropology	Law	Interntional Development	_____
Archaeology	European Studies	Psychology	Media Studies	_____

In secondary school Chemistry, Biology, and Physics have a collective name called sciences. Similarly, in college subjects like English, Languages, Geography, History, are given a collective name called **_Arts_** subjects by some colleges and **_Humanities_** by other colleges.
The subjects above are more examples of Arts or Humanities subjects that can be studied.
Also, subjects like economics, sociology, psychology, politics, are sometimes given another name, **_Social Sciences_** i.e. the sciences associated with society and its issues.

7. What Is STEM?

The term **STEM** represents the following, *S*cience, *T*echnology, *E*ngineering, *M*aths.
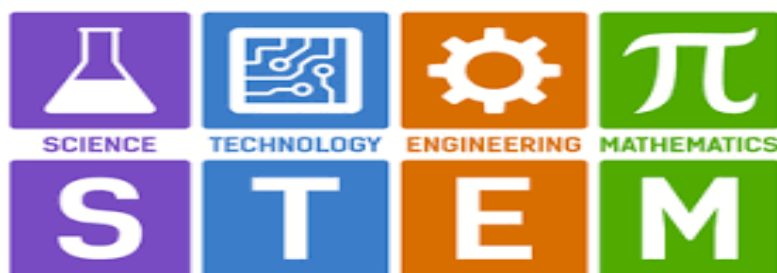
There is more to these four areas than meets the eye. Here are some STEM degrees you can do.

1. Agricultural Science
2. Animal & Crop Science
3. Equine Science
4. Biochemistry/ Molecular Biology/Immunology
5. Botany
6. Chemistry
7. Chemistry & Molecular Modelling
8. Climate & Earth Science
9. Chiropody (Podiatry)
10. Dentistry
11. Earth & Ocean Science
12. Environmental Science
13. Food & Health Science
14. Forestry
15. Freshwater & Marine Biology
16. Forensic Science
17. Genetics
18. Geomatics
19. Health & Performance Science
20. Human Genetics
21. Human Nutrition & Dietetics

22. Industrial & Environmental Physics
23. Marine Science
24. Medicine
25. Meteorologist
26. Neuroscience
27. Optometry
28. Pharmacy
29. Astronomy & Space Science
30. Biomedical Science
31. Chemistry of Advanced Materials
32. Computer Simulation
33. Physics & Instrumentation
34. Physics with Medical Physics
35. Radiography
36. Science Education (Teaching)
37. Nanotechnology
38. Toxicology
39. Wildlife Biology
40. Veterinary
41. Zoology

Engineering

1. Agricultural Engineering
2. Architectural Engineering
3. Biomedical Engineering
4. Biosystems Engineering
5. Building Services Engineering
6. Chemical Engineering
7. Civil Engineering
8. Computer Engineering
9. Electrical Engineering
10. Electronic Engineering
11. Energy Engineering
12. Environmental Engineering
13. Manufacturing Engineering
14. Product Design Engineering
15. Industrial Engineering
16. Marine Engineering
17. Mechanical Engineering
18. Mechatronics Engineering
19. Robotics Engineering
20. Science Engineering
21. Structural Engineering
22. Aeronautical Engineering

Computers

1. Computer programming
2. Software design
3. Data processing
4. Applications of software
5. Hardware Computing
6. Cloud Computing
7. Computer Coding
8. Computer Security
9. Computer Gaming
10. Computer Infrastructure
11. Business Computing
12. Computer Forensics
13. Web Design
14. Graphic Design

Mathematics

1. Mathematics
2. Mathematical Studies
3. Mathematical Science
4. Actuary Mathematics
5. Computational Mathematics
6. Financial Maths
7. Industrial maths
8. Applied Maths
9. Statistics
10. Mathematics Education

If you don't know what some of these are, or the difference between some them, who can research these courses yourself using what you will learn on page 24.

8. Making A Living Off The Land Or With Animals

There are apprenticeships and third level courses associated with land and animal use. Can you find the title of the course or apprenticeship the following people did.

1. A person qualified to diagnose and operate on animals
   ➔ *Veterinary.*

2. A person qualified to help and assist the person who operates on animals. ➔ *Veterinary Nurse*.

3. A person qualified to understand how best to sow and cultivate flowering plants. ➔ *Horticulture* .

4. A person qualified to sow, rotate, harvest, and replace crops.
   ➔ *Crop Production.*

5. A person qualified to manage herds of cattle, pigs, and sheep.
   ➔ *Herd Management.*

6. A person qualified to manage horse care and reproduction.
   ➔ *Equine Science.*

7. A person qualified to manage the business area of the race horse and show-jumping business. ➔ *Equine Business*

8. A person qualified to manage the science of food manufacturing and production. ➔ *Food Science*.

9. A person who is qualified to maintain and fix farm machinery.
   ➔ *Agricultural Mechanic*.

10. A person qualified to manage and maintain forests.
    ➔ *Forestry*.

11. A person qualified to manage the production of products produced from milk. ➔ *Dairy Business*.
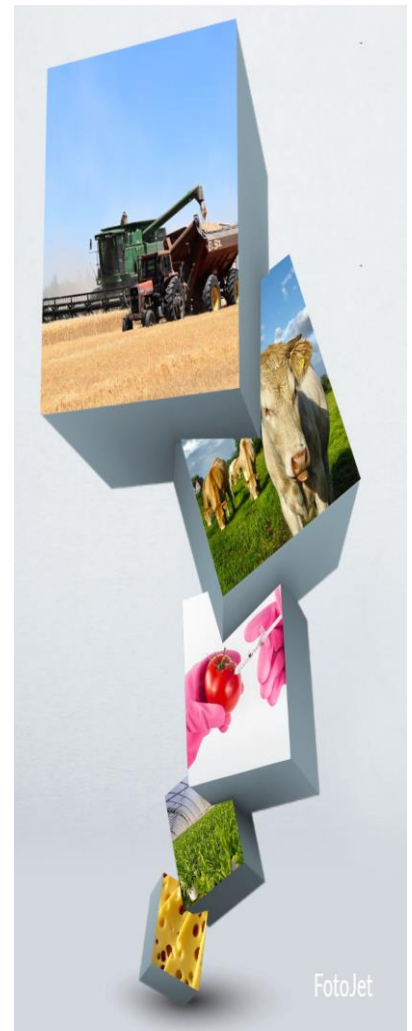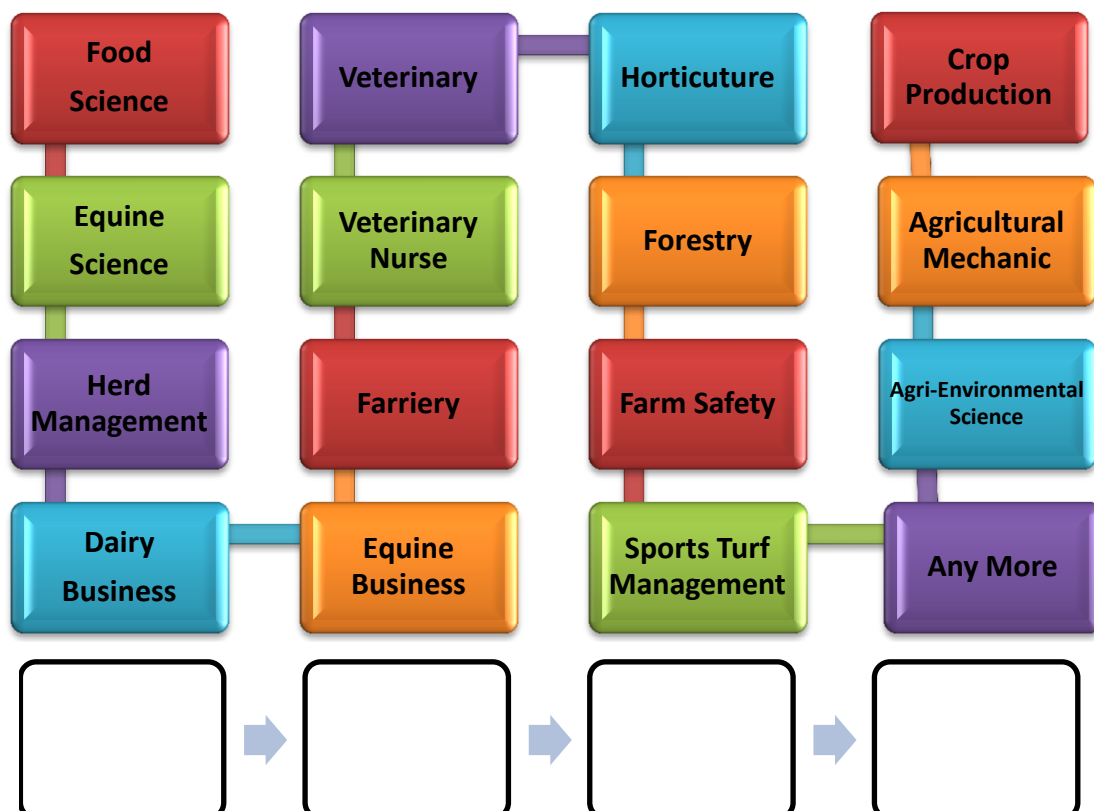
12. A person qualified to manage the grounds of golf courses and other sporting venues.
➔ *Sports Turf Management*.

13. A person qualified to manage the impact of farming on the environment.
➔ *Agri-environmental Science.*

14. A person qualified to advice on preventing accidents on a farm.
➔ *Farm Safety*.

15. A person qualified to put shoes on horses. ➔ *Farriery*.

Food Science	Veterinary	Horticuture	Crop Production
Equine Science	Veterinary Nurse	Forestry	Agricultural Mechanic
Herd Management	Farriery	Farm Safety	Agri-Environmental Science
Dairy Business	Equine Business	Sports Turf Management	Any More

9. Apprenticeships

An apprenticeship is defined as a programme of structured education and training which formally combines and alternates learning in the workplace with learning in an education or training centre. It is a dual system, a blended combination of on-the-job employer-based training and off-the-job training.

Apprenticeships open up exciting and rewarding careers, with learning grounded in the practical experience of undertaking a real job and it allows apprentices to earn while they learn and build valuable work-ready skills in a chosen occupation. Apprenticeships in Ireland are between 2-4 years in duration with a minimum 50% on-the-job learning that allows for flexible delivery – online, blended, off-the-job learning in increments/blocks. Apprentices are employed under a formal contract of apprenticeship and employers pays the apprentice for the duration of the apprenticeship.

There are over 70 different types (www.solas.ie) of apprenticeships ranging in areas from Construction, Engineering, Electrical, Biopharmaceuticals, Motor, Hospitality, Computers, Logistics, Aircraft Maintenance and Financial Services. Some individuals select a particular apprenticeship because of family tradition or because of family or other connections. However, it might be useful to do the following. Study the various types of apprenticeships and assess the differences between them. Assess your own interests and aptitudes and try and find the optimum match between these and the characteristics of the particular apprenticeships. In other words, an individual can select an apprenticeship that can be easier to organise, or select one that may be more fulfilling.

| List is a list of some of the apprenticeships available in Ireland			
If you don't know what some of them are, or if you don't know the differences between some of them, check out www.apprenticeship.ie			
Laboratory Technician	Accounting Technician	Farriery	Manufacturing Engineering
Brick & Stone Laying	Insurance Practice	Industrial Insulation	Farm Management
Carpentry	Financial Services	Geo-driller	Pipefitting
Painting & Decorating	Commis Chef	HGV Driver	Polymer Technology
Plasterer	Chef de Partie	Recruitment Executive	Sheet Metalworking
Plumber	Sous Chef	Retail Supervisor	Toolmaking
Stonecutting & Stonemasonry	Butcher	Scaffolding	Quantity Surveyor
Wood Manufacturing & Finishing	Cybersecurity	Sport Turf Management	Horticulture
Aircraft Mechanic	Computer Network Engineer	Stud Farm Manager	Arboriculture
Electrical	Software Developer	Telecommunications Technician	Baker
Electrical Instrumentation	Animation & Games Development	Sales Professional	Bar Manager
Electrical Security Systems	Agricultural Mechanic	Hairdressing	Logistics
Refrigeration & Air Conditioning	Financial Services	Healthcare Assistant	Manufacturing Technology
			Auctioneering & Property Services
			Accounting
			Farm Technician
			Construction Plant Fitting
			Heavy Vehicle Mechanics
			Motor Mechanic
			Vehicle Body Repair
			Mechanical Automation
			Metal Fabricator
			Wind Turbine Maintenance

10. Other Jobs/Careers That You May Know

1. Someone who sells houses. ***Estate Agent***.

2. Someone who sells paintings and antiques to the highest bidder. ***Auctioneer***.

3. Someone who will drive you from A to B in their car if you pay them. ***Taxi Driver***.

4. Someone who reads the news on T.V./radio or writes for a newspaper. ***Journalist***.

5. Someone who enforces the law. ***Garda***.

6. Someone who plays music on the radio or at a night club. ***Disc Jockey***.

7. Someone who teaches in a third level college. ***Lecturer***.

8. Someone who drive a vehicle that holds 20+ people. ***Bus driver***.

9. Someone who works in a museum. ***Archivist***.

10. Someone who helps people with their mental health. ***Psychologist***.

11. Someone who diagnoses learning difficult. ***Educational Psychologist***.

12. Someone who thinks of a new idea and set up a business. ***Entrepreneur.***

13. Someone who sells stocks and shares. ***Stockbroker***.

14. Someone who represent you in court. ***Barrister***.

15. Someone who flies a plane. ***Pilot***.

16. Someone who teaches teenagers. ***Secondary School Teacher***.

17. Someone who puts out fires. ***Firefighter.***

18. Someone who works for the army. ***Solider***.

19. Someone who buries people. ***Undertaker***.

20. Someone who looks after animals in a wildlife park. ***Gamekeeper***.

21. Someone who studies space. ***Astronomer***.

22. Someone who takes care of the passages on a plane. ***Air Stewart***.

23. Someone who does the paperwork for selling houses or for a Will. ***Solicitor***.

24. Someone who fits hearing aids. ***Audiologist***.

25. Someone who teaches children from 4/5 years to 11/12 years old. ***Primary Teacher***.

26. Someone who works for the Navy. ***Sailor***.

27. Someone who races horses. ***Jockey***.

28. Someone who represents you in the Dáil. ***Politician***.

29. Someone who teaches children under 4 years old. ***Montessori Teacher.***

30. Someone who determines how somebody dies. ***Coroner***.

31. Someone who looks after books in a library. ***Liberian***.

32. Someone who monitors earthquakes. ***Seismologist.***

33. Someone who watches the swimmers at a swimming pool. ***Lifeguard.***

34. Someone who looks after the animals in a zoo. ***Zookeeper***.

	A	**B**	**C**	**D**
1	Astronomer	Liberian	Psychologist	Auctioneer
2	Lifeguard	Audiologist	Montessori Teacher	Taxi Driver
3	Archivist	Estate Agent	Undertaker	Seismologist
4	Stock Broker	Firefigher	Coastguard	Politician
5	Air Stewart	Barrister	Zookeeper	Lecturer
6	Jourrnalist	Disc Jockey (D.J.)	Educational Psychologist	Solider
7	Secondary School Teacher	Bus Driver	Solicitor	Garda
8	Sailor	Jockey	Gamekeeper	Entrepreneur
9	Pilot	Coroner	Primary Teacher	Any More
10	Any More	_____	_____	_____
11	_____	_____	_____	_____
12	_____	_____	_____	_____
13	_____	_____	_____	_____

11. National Framework of Qualifications (N.F.Q.)

The National Framework of Qualifications works from levels 1 to 10. If a student has completed the Junior Certificate he is deemed to have reached level 3. If a student completes the Leaving Certificate he is deemed to have reached level 5. Level 6 is a Higher Certificate (normally 2 years), level 7 is an Ordinary Degree, and level 8 is an Honours Degree (normally 3 /4 years). Level 9 is a masters and level 10 is a PhD. More details on www.nqf.ie.
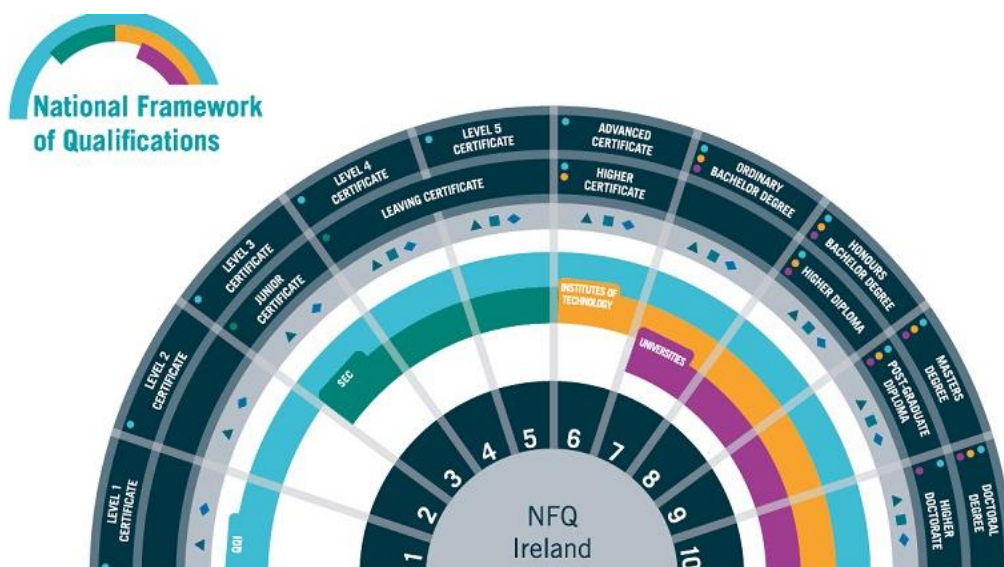
Some students obtain enough points at Leaving Certificate to enter directly into a Level 8 honours degree course. They therefore skip levels 6 and 7. Others obtain points to gain admission to a level 7 ordinary degree course and skip level 6. They can then progress and convert this level 7 into a level 8 by studying for an extra year or so.

Some students obtain points to gain admission to a level 6 certificate course. This can then be converted into a level 7 and then into a level 8.

Some students do a P.L.C. course (which require no points) and progress to a level 6,

or straight into a level 7 or 8.

PhD Level 10

Masters Degree Level 9

Honours Degree Level 8

Ordinary Degree Level 7

Higher Certificate Level 6

P.L.C.'s

Leaving Certificate Level 5

Leaving Certificate Level 5

Leaving Certificate Level 5

Leaving Certificate Level 5

Junior Certificate Level 3
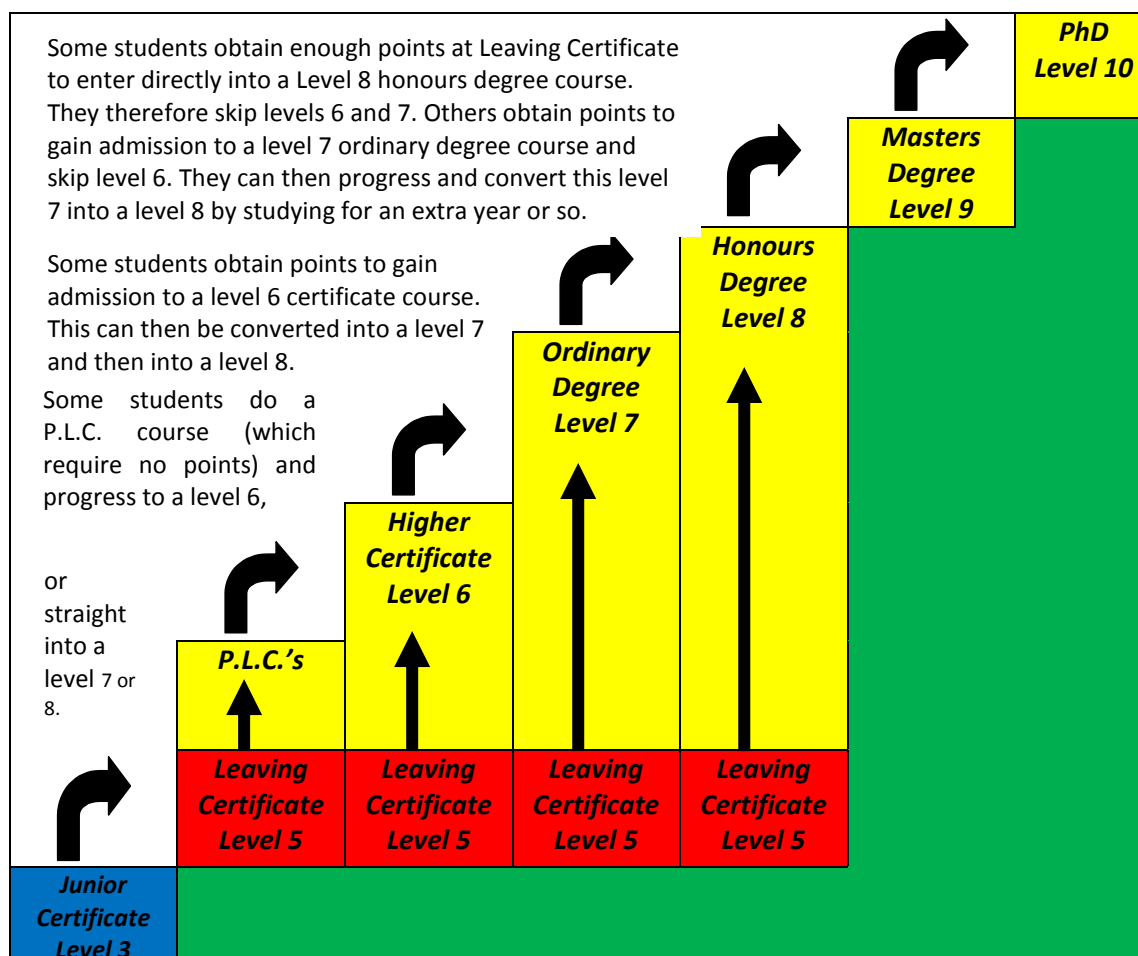
12. What Courses Can I Do & Where Can I Do Them?

The national database for all courses in the county is www.qualifax.ie . Here are some examples of how this website works.

Unit 13: P.L.C.

The letters P.L.C. represent the following

*P*ost
*L*eaving Certificate
*C*ourses

These courses do not require Leaving Certificate points, and need five pass as an entry requirement.

There are 100's and 100's of courses throughout the country.

To find courses in your area use www.qualifax.ie as follows.
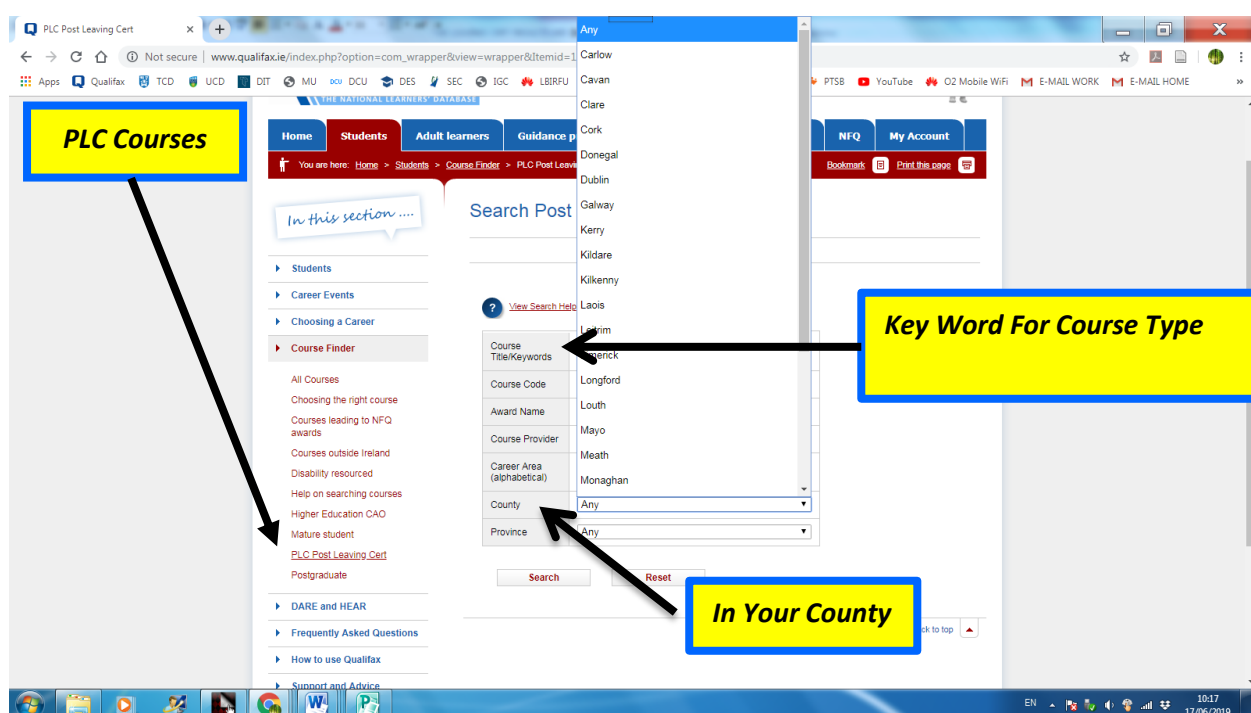
List a few courses available in our area or that are of interest to you	List a few venues where these courses are available.

14. The Labour Market

14.1 Swings In Employment Numbers

The tables below[1] shows the year on year increases or decreases in employment growth in the construction, I.C.T., Hospitality, and Financial Services sector. In 2008-2009 the employment in the construction sector decreased by 37%. Consider **Student X** who, at that time, wished to pursue an Architecture degree and may have been reluctant to do so because employment prospects were poor. However, six years later in 2013-2014 employment in the construction sector started to increase again just 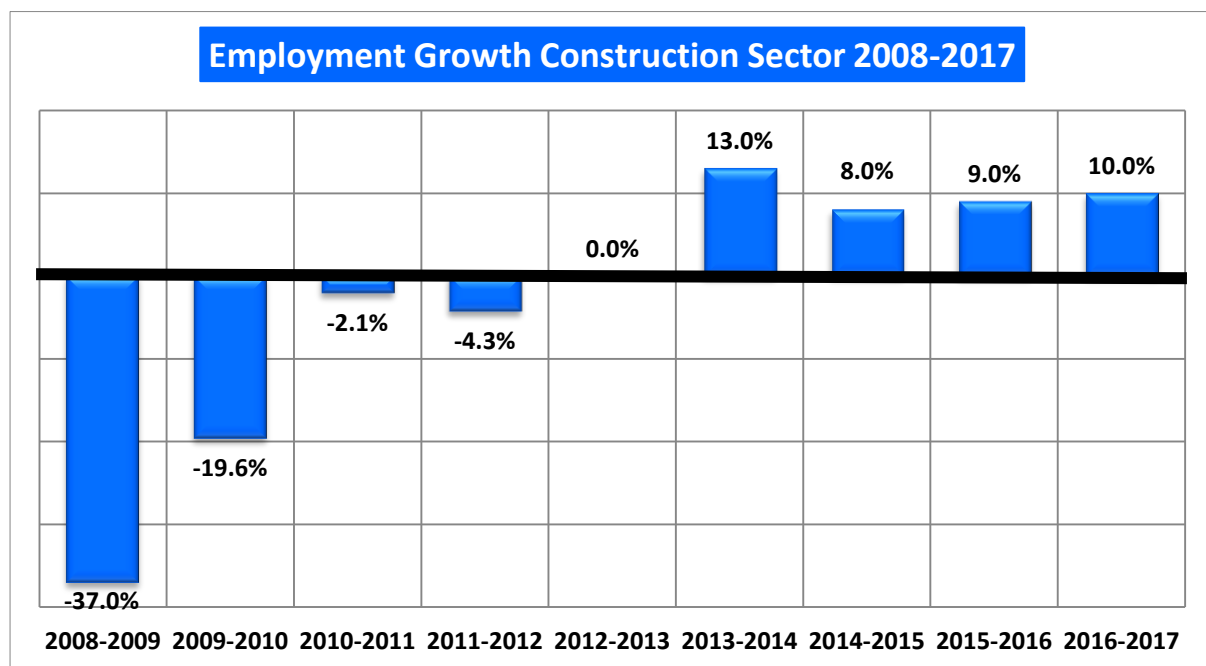as that potential Architecture student would have been graduating. Similarly, consider **Student Y** who wished to take on an apprenticeship may have, at that time, found it difficult to find an employer and therefore, gave up on their dream of becoming a carpenter.

Employment Growth Construction Sector 2008-2017

As the chart shows employment growth is very seldom constant and can go up and down with changes in the economy. This fluctuation can also been seen in the I.C.T. sector, the Hospitality sector and the Financial Services sector.

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[1] *National Skills Bulletin, Solas, Dublin, Employment Growth by Sector* (%) Year on Year Compassions (Q.4). 2018, p. 31, 2017, p. 29, 2016, p. 29, 2015, p. 28, 2014, p. 25, 2013, p.29, 2012, p. 22, 2011, p. 22, 2010, p. 22.

Employment Growth ICT Sector 2008-2017

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
	6.0%	-5.0%	8.5%	7.1%	-1.0%	1.0%	2.0%	5.0%	3.0%
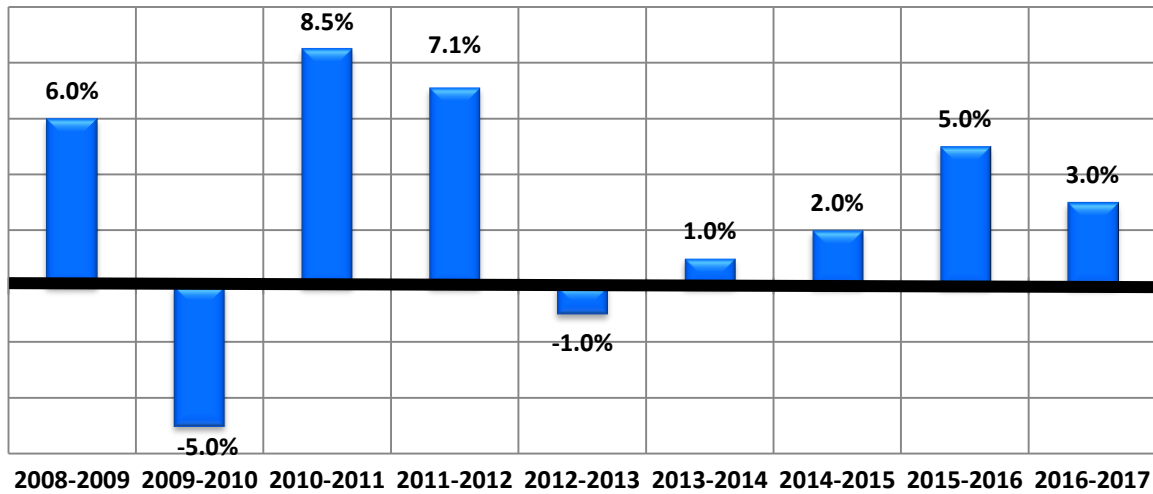
Employment Growth Hospitality Sector 2008-2017

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
	4.0%	-6.3%	0.5%	-1.3%	15.0%	1.0%	4.0%	3.0%	9.0%
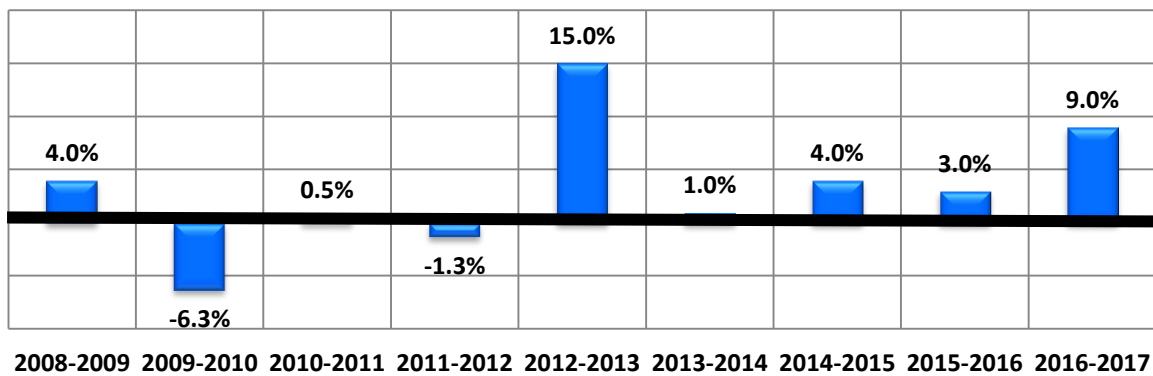
Employment Growth Financial Services Sector 2008-2017

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
	-2.0%	-8.3%	4.8%	-1.2%	-6.0%	5.0%	-4.0%	4.0%	-2.0%
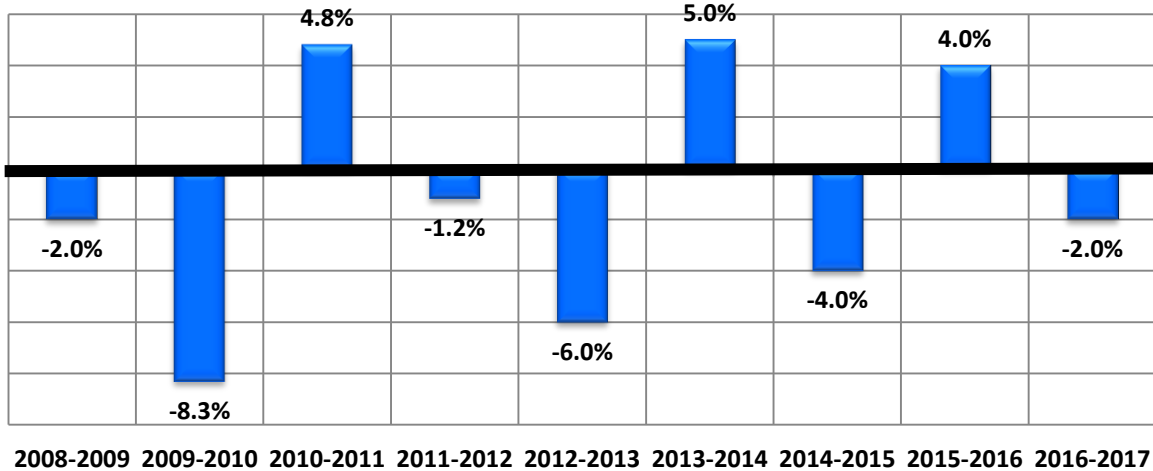
If can be a useful exercise to observe these employment trends in any given sector. However, these trends are not necessarily a predictor for job growth in four, five, or six years' time after an individual has finished training, or further or higher education. If there was a particular employment sector with continuous growth that could guarantee employment throughout an individual's working career, and if this area matches an individual's interest, aptitudes, and personal characteristics, then this avenue might be worth pursuing. By the way – there isn't one.

If employment growth figures are the only indictor used for career selection an individual might end up working in an area doing tasks each day that they may not be interested in, or doing task that are above or below their aptitude levels. Moreover, an individual might end up working in an environment that has characteristics that do not match the person's characteristics, e.g. outdoors when the person is better suited to indoor work, and visa-verse, or working in an area where the main task are interacting with people when the individual might be better suited to working on their own or in small groups. Think of your most hated subject in school. Think of the feelings that this class brought about. Nobody wants to end up having those same feelings in their working environment, no matter how much they get paid or how easy it is to get a job.

14.2 Employer Skills Needs Versus Being Yourself

A number of organisations and individuals state that what is needed from employees in today's working world are people who can work as a team, have the ability to speak in public, have another language and have sophisticated I.T. skills. These are very valuable and attractive attributes to prospective employers and indeed some individuals have these skills or the potential to acquire these skills. However, what about those who might prefer to work on their own or in small groups? What about someone who would prefer to carry out tasks that are not primarily I.T. based?
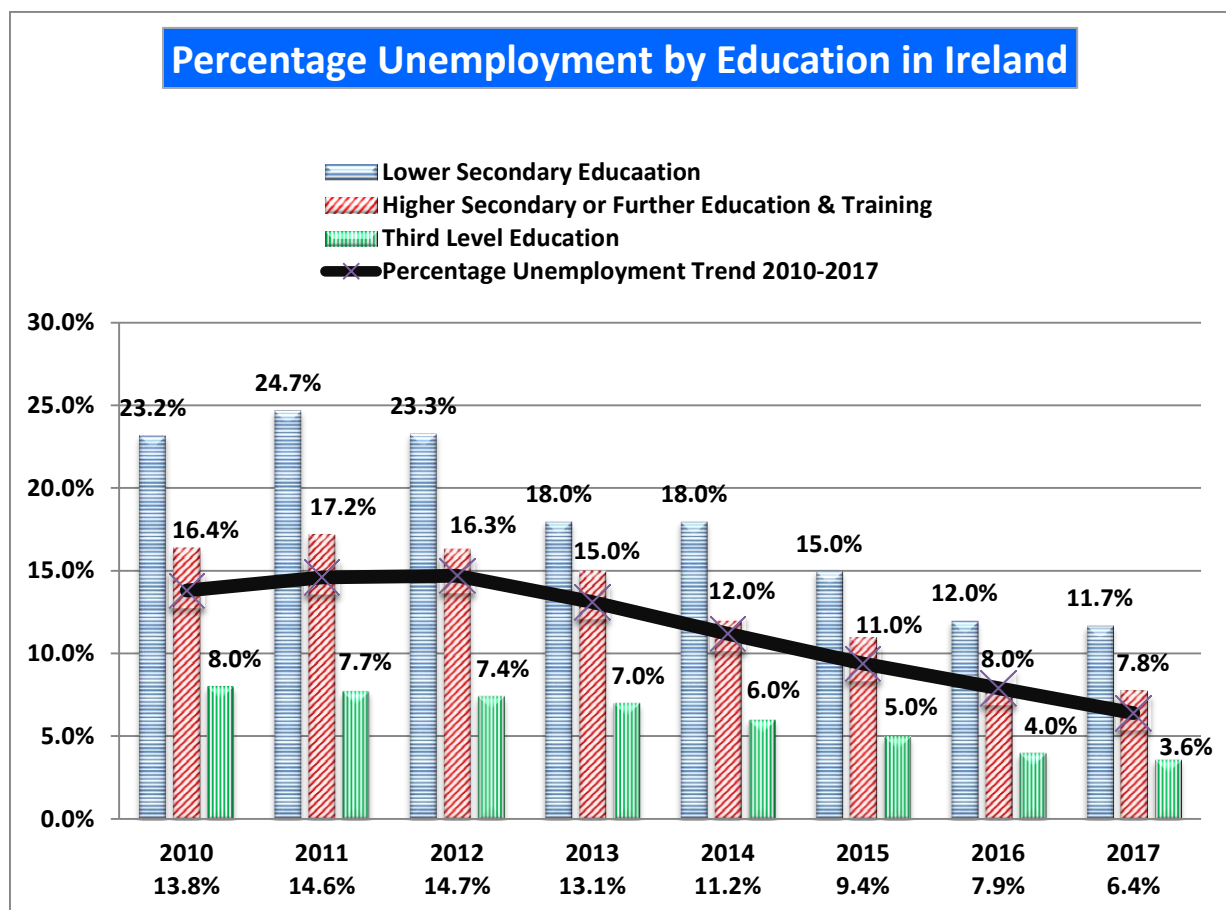
In other words, if an in individual is an extrovert, maybe they should pursue a job that requires this trait. If an individual is an introvert, maybe they should pursue a job that accommodates this characteristic. If an individual prefers to carry out tasks that are not primarily I.T. based, maybe they should find a job whose tasks accommodate this trait.

After all, we buy a book based on our own preferences rather than one that is one the best seller's list and we listen to music based on what we like rather than what is at the top of the charts. Therefore, while it can be useful to take into account the external needs of employers, this needs to be balanced with our own internal needs and personal characteristics. Imagine walking around all day in shoes that do not fit.

14.3 Staying in Training or Education for as Long as Possible

14.3.1 Employment and Unemployment

The tables[2] below show the percentage unemployment rates and earnings by education level.

Percentage Unemployment by Education in Ireland

Legend:
- Lower Secondary Educaation
- Higher Secondary or Further Education & Training
- Third Level Education
- Percentage Unemployment Trend 2010-2017

|	2010	2011	2012	2013	2014	2015	2016	2017
Lower Secondary	23.2%	24.7%	23.3%	18.0%	18.0%	15.0%	12.0%	11.7%
Higher Secondary	16.4%	17.2%	16.3%	15.0%	12.0%	11.0%	8.0%	7.8%
Third Level	8.0%	7.7%	7.4%	7.0%	6.0%	5.0%	4.0%	3.6%
Trend	13.8%	14.6%	14.7%	13.1%	11.2%	9.4%	7.9%	6.4%

[2] *National Skills Bulletin, Solas, Dublin*, Unemployment & Earning by Education (Q4 of each year). 2018 p. 51, 2017, p. 45, 2016, p. 46, 2015, p. 45, 2014, p. 44, 2013, p. 134, 2012, p. 131, 2011, p. 109.
[3] *Education at a Glance, OECD Indicators*, OECD Publishing Paris, 2018 p. 98, 2017 p. 114, 2016 p. 125, 2015 p. 125.

In 2010 the overall unemployment rate was 13.8%. During that year 23.2% of those with a lower secondary education (did not finish secondary school) were unemployed, and 16.4% of those who finish secondary school or had some further education were unemployed, and 8% of those with third level education were unemployed. The same relative pattern can be seen from 2011 to 2007. The conclusion from these figures is that the lower the level of education and training the greater the chances of being unemployed and the higher the level of education and training the lower the chances of unemployment. In other words, when economy is performing poorly the lower the level of education or training the greater the chances of being made unemployed.

14.3.2 Earning Potential

The table below[4] shoes the average earnings in Ireland according to educational attainment. In 2016, compared with those with an upper secondary education (those who finish secondary school are given 100%), those with a degree earned 83% more (183%), and those who did not finish secondary school earned 12% (88%) less that those who finish secondary school.

Average Earnings in Ireland From Education Attainment

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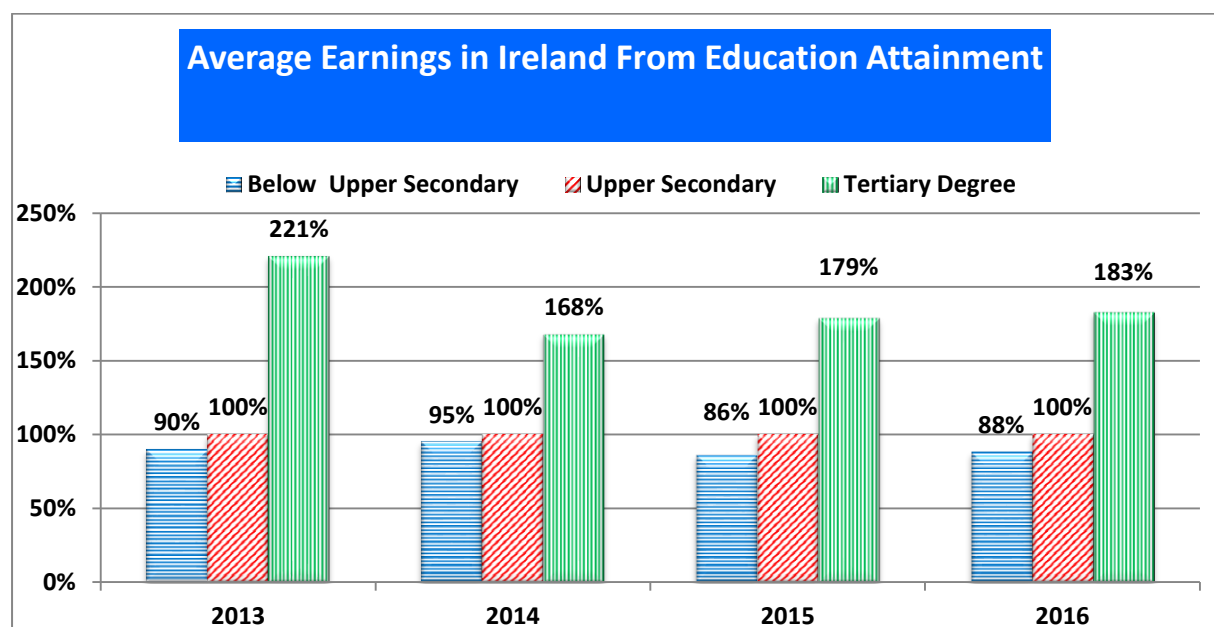
[4] Education at a Glance 2018, OECD Indicators, OECD Publishing Paris, 2018 p. 98, 2017 p. 114, 2016 p. 125, 2015 p. 125.

A similar trend exists for 2015, 2014, and 2013. This pattern of earning potential is repeated internationally. The table[5] below shows the average earnings in 35 O.E.C.D. countries. This table shows that in 2016, compared with those upper secondary education (those who finish secondary school are given 100%), those with a degree earned 54% (154%) more, and those who did not finish secondary school earned 22% (78%) less that those who finish secondary school. A similar trend exist for 2015, 2014 and 2013.
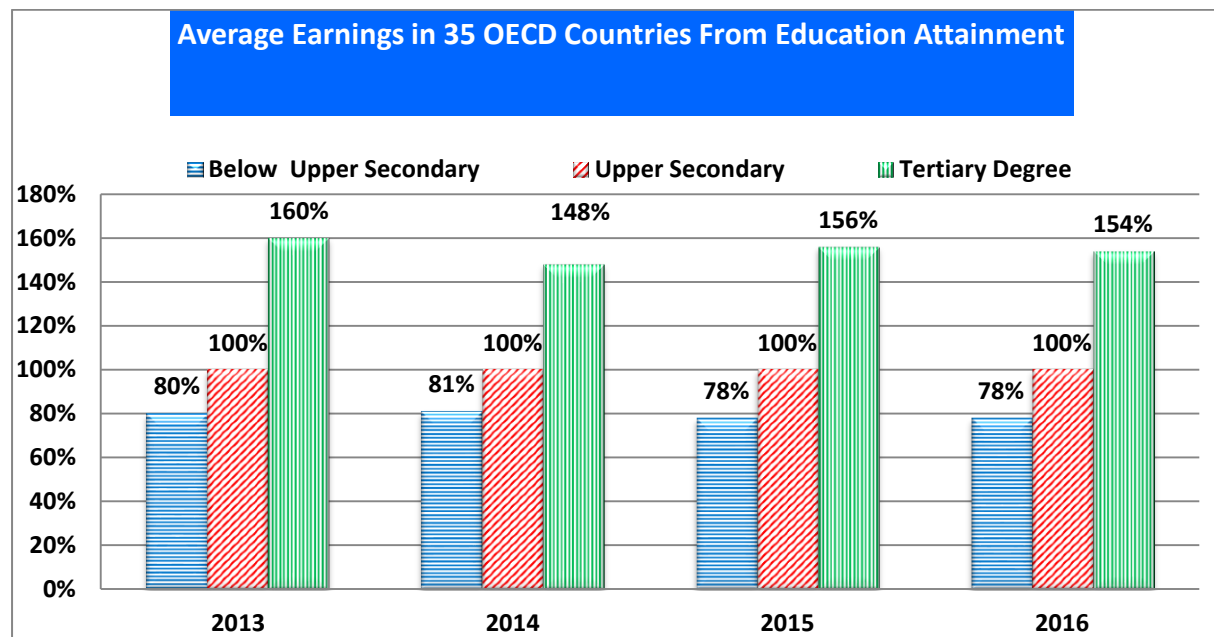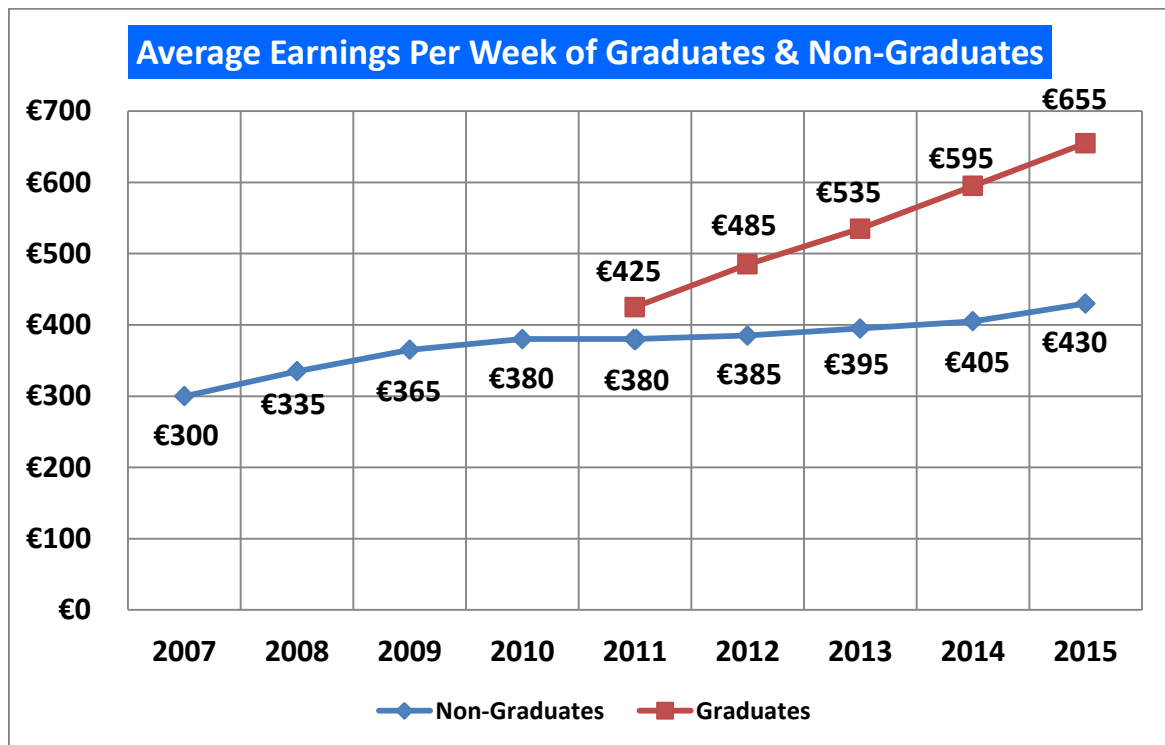

The graph below[6] shows the average weekly earnings of those without a degree (non-graduates) and those with a degree (graduates).

The group studied did their Leaving Certificate in 2007. Some went to college and some when into the work force. Four year later in 2011 the group that went to college graduated, and started working. At this stage, those that went straight to work after their Leaving Certificate had been working for 4 years.

At that point, their earnings were compared. In 2011, the non-graduates were earning €380 per week, having been working for 4 years. The graduates, now in their first year of work, were earning €425 year. In 2015 eight years after doing their Leaving Certificate, the non-graduate group were earning €430 per week and the graduates were earning €655 per week.

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[5] *Education at a Glance, OECD Indicators*, OECD Publishing Paris, 2018 p. 88, 2017 p. 104,
   2016 p. 114 & p.116, 2015 p. 116.
[6] *Higher Education Outcomes*, Central Statistics Office & Higher Education Authority, p. 74, 2018.

Average Earnings Per Week of Graduates & Non-Graduates

Non-Graduates: €300 (2007), €335 (2008), €365 (2009), €380 (2010), €380 (2011), €385 (2012), €395 (2013), €405 (2014), €430 (2015)

Graduates: €425 (2011), €485 (2012), €535 (2013), €595 (2014), €655 (2015)

The graph below[7] shows the average weekly earnings of graduates 5 years after graduation. Those with a Level 6 qualification earned €475 per week, those with a Level 7 earned €525 per week, Level 8, €650 per week, and those with a Level 9, €740 per week, and Level 10 €920 per week.

Average Earnings Per Week After 5 Years by N.F.Q. Level

Level 6: €475
Level 7: €525
Level 8: €650
Level 9: €740
Level 10: €920

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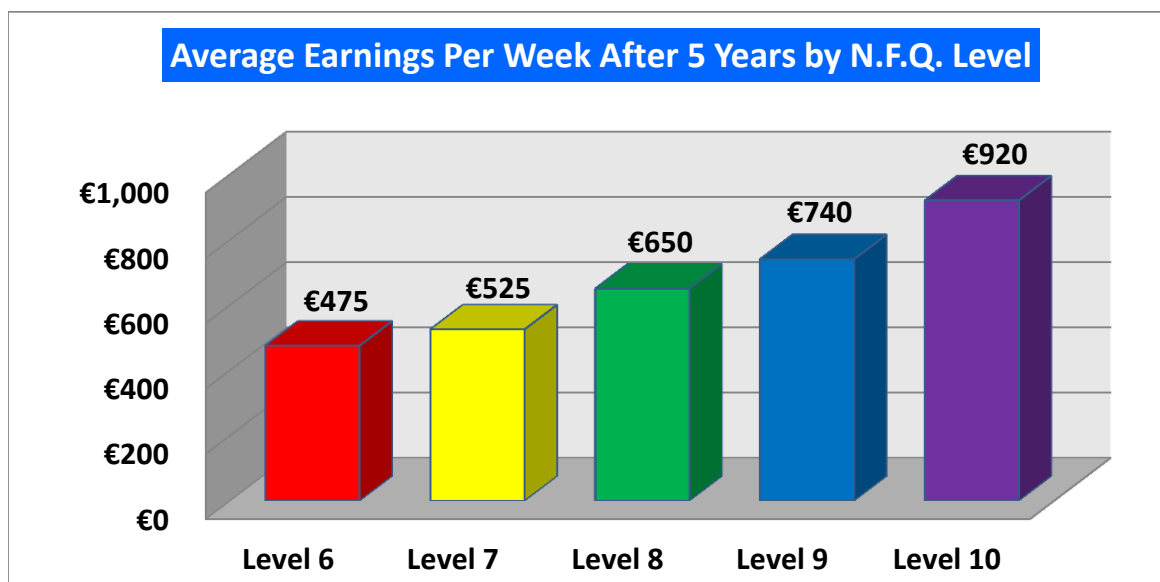
[7] 7 *Higher Education Outcomes*, Central Statistics Office & Higher Education Authority, p. 65, 2018.

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The conclusion from these figures is that the greater the level of education and training the greater the earning potential and the lower the level of education and training the lower the earning potential. In other words, the greater the skill level – be it through formal education or otherwise – the great the earning potential.

These unemployment and earning figures are averages. Therefore, there may be individuals who left school early and have never been unemployed and who earn more than someone with a degree. However, these individuals may have a pronounced talent or aptitude in their chosen area, and/or have a pronounced interest in, and aptitude for, a very specific and unique area, and/or are simply very lucky. Knowing someone like this does not necessary mean another person can copy this unless they have their own pronounced aptitude or talent in a particular or unique area, or are very lucky.

15. Ireland's Impact On The Global Economy

Our perception of the Irish economy is often determined by what we see on sale in supermarkets. However, the amount and types of products made in Ireland extend way beyond what we see in shops. Here are some examples.

1. 50% ventilators for medical use in hospitals in the world are made in Ireland[8].

2. 25% of the world's population that have diabetes relying on injectable devices manufactured in Ireland – about 30 million people[9].

3. 70% botox used thought the world is made in Westport Ireland[10].

4. Ireland is the 2nd largest exporter of malt extract (germinated cereal grain) used in making beer, whisky, chocolate food products and biscuits[11].

5. Ireland is the 3rd largest exporter of butter, the 4th for beef, and 4th for sheep meat[12].

6. 1 in 7 babies throughout the world are fed on baby formula made in Ireland[13].

7. 33% of the world's contact lenses are manufactured in Ireland[14].

8. 80% of global stent production is carried out in Ireland[15]. They are inserted into blood vessels to help them heal.

9. 75% of global orthopaedic knee production comes out of Ireland[16].

10. Penny's opened in Mary's street in Dublin in 1969. It now has 350 stores in 11 countries know as Primark[17].

11. More than $120 billion worth of aviation assets are managed from Ireland, representing 22% of all planes worldwide, and 40% of leased aircraft[18].

12. In 2010, 33 miners were trapped in a mine in Chile for 69 day. The drill used to rescue them was manufactured in Shannon[19].

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[8] https://www.idaireland.com/doing-business-here/industry-sectors/medical-technology
[9] Irish Medtech Association Statement of Strategy 2016-2020
[10] Source
[11] https://commodity.com/ireland/
[12] https://commodity.com/ireland/
[13] Source
[14] Irish Medtech Association Statement of Strategy 2016-2020
[15] Irish Medtech Association Statement of Strategy 2016-2020
[16] Irish Medtech Association Statement of Strategy 2016-2020
[17] https://www.primark.com/en/aboutus
[18] https://www.mhc.ie/latest/insights/10-things-to-know-about-the-aviation-industry-in-ireland
[19] https://www.irishcentral.com

13. Ireland is the 7th largest producer of Zinc ore (the compound from which Zinc metal is extracted), and the 12th largest producer of Lead ore[20].

14. Ireland is the world leader in exports for scented mixtures used in perfumes, and food[21].

15. Ireland is the biggest producer of Nitrogen Heterocyclic Compounds, a chemical used to make medicine[22].

16. Ireland is the second largest producer of human blood and animal blood products[23].

Other Products;

17. 70% of mushrooms sold in supermarkets in the U.K. are grown in Ireland?

18. Kerrygold is the second best-selling brand of butter in U.S. and the first in Germany[24].

19. Over 100 million bottles of Baileys Irish Cream are manufactured in Ireland each year and it is exported to over 160 countries.[25]

20. Sudocream was invented and is made in Dublin and is exported to 40 countries[26].

21. Penny's opened in Mary's street in Dublin in 1969. It now has 350 stores in 11 countries know as Primark[27].

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[20] https://atlas.media.mit.edu/en/profile/country/irl/

[21] https://atlas.media.mit.edu/en/profile/country/irl/

[22] https://atlas.media.mit.edu/en/profile/country/irl/

[23] https://atlas.media.mit.edu/en/profile/country/irl/

[24] https://www.independent.ie/business

[25] https://www.diageo.com/en/our-brands/brand-profiles/baileys/

[26] https://sudocrem.com/ie-en/five-things-you-might-not-know-about-sudocrem/

[27] https://www.primark.com/en/aboutus

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Exports From Ireland 2018, Percentage to Country

Thailand, 0.10%
Turkey, 0.50%
Saudi Arabia, 0.60%
Singapore, 0.50%
South Africa, 0.20%
South Korea, 0.40%
Taiwan, 0.20%
Other countries, 3.00%
Bulgaria, 0.07%
Croatia, 0.03%
Austria, 0.20%
France, 3.90%
Estonia, 0.01%
Switzerland, 5.50%
Russia, 0.30%
Finland, 0.25%
Germany, 6.90%
Cyprus, 0.02%
Czech Republic, 0.40%
Norway, 0.30%
Denmark, 0.05%
Great Britain, 9.80%
USA, 28.70%
Greece, 0.20%
Hungary, 0.20%
Italy, 2.40%
Latvia, 0.05%
Lithuania, 0.02%
Mexico, 1%
Malaysia, 0.10%
Japan, 2.60%
Canada, 0.01%
India, 0.20%
China & Hong Kong, 3.50%
EU country not specified2, 0.10%
Slovenia, 0.06%
Sweden, 0.60%
Spain, 1.80%
Slovakia, 0.05%
Romania, 0.20%
Portugal, 0.30%
Poland, 0.70%
Northern Ireland, 1.40%
Malta, 0.10%
Luxembourg, 0.10%
Netherlands, 5.10%

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