

The STEM Engagement Galway Visit April 2016- Background Information

Galway

Galway City originally formed from a small fishing village located in the area near the Spanish Arch called 'The Claddagh' where the River Corrib meets Galway Bay. Galway later became a walled town in the year 1232 after the territory was captured by the Anglo Normans lead by Richard De Burgo. A charter was granted in 1396 by Richard II which transferred governing powers to 14 merchant families, known locally as the 14 tribes of Galway.

Galway City is a thriving, bohemian, cultural city on the western coast of Ireland. Along with being a popular seaside destination with beautiful beaches and long winding promenade, it also has a buzzing cosmopolitan city centre. The city is also well known for its many festivals throughout the year with huge crowds gathering for the annual Galway Arts Festival, Races and numerous other events. Old Ireland is present too with turf fires and traditional music featuring in many pubs to compliment your enjoyment of a well earned pint of Guinness.

Galway City, Capital of the West of Ireland, is now the third largest City (County Borough area) in the Republic of Ireland after Dublin and Cork. The City has experienced phenomenal growth in recent years. Galway City has a strong local economy with complementary business sectors, including manufacturing industry, tourism, retail and distribution, education, healthcare, and services that include financial, construction, cultural, and professional.

Galway holds many attractions for both Galwegians and visitors alike:

- Unique location on Galway Bay with Connemara to the West
- Lively vibrant City Centre with traditional medieval streets
- Extensive shopping and business facilities
- Youthful population and its living culture of music
- Theatre and language
- Local Economy

www.galwaytourism.ie/

<http://visitorflix1.com/new/activities.php?id=148>

<http://salthill.galway-ireland.ie/>

National Digital Strategy for schools

The Digital Strategy for Schools provides a rationale and a Government action plan for integrating ICT into teaching, learning and assessment practices in schools over the next five years.

The Department of education's vision for ICT integration in Irish schools is to:

Realise the potential of digital technologies to enhance teaching, learning and assessment so that Ireland's young people become engaged thinkers, active learners, knowledge constructors and global citizens to participate fully in society and the economy.

<https://www.education.ie/en/Publications/Policy-Reports/Digital-Strategy-for-Schools-2015-2020.pdf>.

Education in Ireland

Education is now regarded as a central plank in the economic, social and cultural development of Irish society. Governments and the social partners view it as strategically interlinked with national planning. There is a high level of public interest in educational issues, which has been further developed by the consultative approach adopted by the Government in the formulation of education policy.

Irish pupils perform in the top sectors in international studies such as the Organisation for Economic Co-operation and Development (OECD) PISA evaluations. Employers, both national and international, affirm the quality of graduates from the Irish education system.

Education in Ireland is compulsory from age 6 to 16 or until students have completed three years of second level (post-primary) education. While there is no national provision for pre-schooling in Ireland, first level schools accept children on or after their Introduction 5 Introduction E fourth birthday. The typical first level school enrolls pupils by age into eight year-groups or classes, ranging from junior infants to sixth class. The vast majority of schools are State funded, privately owned "all-through" schools, catering for pupils from 4 to 12 years of age.

The curriculum followed is a child-centred one and it allows for flexibility in timetabling and teaching methods. The great majority of pupils transfer to second level school when they have completed the full first level course – generally at about 12 years of age. For registration in a second level school, students must be aged 12 on 1 January in the first year of attendance. The second level education sector comprises secondary, vocational, community and comprehensive schools. While each category of school evolved from a distinctive historical context, and have different ownership and management structures, they have a great deal in common. They are largely State funded and follow the same State prescribed curriculum and take the same State public examinations. The second level school span is predominantly a six-year cycle, taken by ages 12 to 18. The terminology of "lower secondary" and "upper secondary" is not used in Ireland, but the terms "Junior Cycle" and "Senior Cycle" are commonly used. Apart from internal

school tests, there are two key public examinations taken by students – the Junior Certificate (age 15/16) and the Leaving Certificate (age 17/18). These are external examinations set by the State Examinations Commission.

A great deal of public attention is focused on the Leaving Certificate Examination as entry to third level education is closely linked to the results achieved by students at this examination. Third level education in Ireland is provided mainly by universities, institutes of technology and colleges of education. In addition, a number of other third level institutions provide specialist education in a number of professions such as medicine and law. Most third level education institutions are supported very substantially by the State.

For young people and adults who have left education early or without adequate qualifications, second-chance and alternative programmes are available. Adult, further and community education all have a role to play in providing second-chance education opportunities, addressing skills needs and promoting equality and social inclusion.

<https://www.education.ie/en/The-Education-System/>

<https://www.education.ie/en/Publications/Education-Reports/A-Brief-Description-of-the-Irish-Education-System.pdf>

Galway Technical Institute

GTI is one of the leading colleges of Further Education in Ireland, providing QQI Level 5 & 6 courses to over 1,300 learners annually. At GTI, courses are designed to be of immediate and practical use in the workplace or as a stepping stone to further study and higher qualifications. Everything our students learn will be valuable to them throughout their lives.

Our Applied Learning approach is designed to enable students learn more effectively in real-life situations. Applied Learning provides our students with learning experiences that involve solving problems that are based on real-life situations. This involves learning the role of a journalist or editor at GTI Gazette, becoming a sound engineer, film editor or production co-ordinator at CladdaTV. It may also involve working as a Beauty Therapist in GTI's Poise Salon, or as a designer in GTI's Annual Fashion Fiesta. Each department has its own unique real-life, real-time production/event/project. By bringing the real world into the classroom and the classroom into the real world, Applied Learning has become the most effective and exciting way to learn the key skills required for the 21st Century. GTI's underlying philosophy is about learning together. This is centred on learner activity, collaborative learning and critically, learning to learn.

Facilities at GTI include recording studios, creative digital media laboratories, hairdressing and beauty salons, furniture design workshops, fashion studios plus a wide range of specialist IT facilities. Our European Links provide work placements abroad for over 100 GTI students annually. Students currently travel to France, Portugal, Spain, Finland, Italy, Turkey, Scotland and the Canary Islands. These placements are fully funded and afford students the opportunity to gain valuable work related training in institutions and enterprises throughout Europe.

www.gti.ie

NUI Galway National University of Galway Ireland

Founded in 1845, NUI Galway has earned international recognition as a research led university with a commitment to top quality teaching.

With over 17,000 students and more than 2,400 staff, NUI Galway is the largest and oldest University in the West of Ireland. Over the past 170 years, it has built a distinguished reputation for teaching and research excellence in the fields of arts, social science, and celtic studies; business, public policy and law; engineering and informatics; medicine, nursing and health sciences; and science.

NUI Galway is ranked in the Top 2% of universities worldwide for the quality of our teaching and research.

The University's approach to innovative programme development means that courses are developed to reflect the ever-changing needs of the job market and the economy. It has one of the highest graduate employability rates in Ireland, with over 90% of students employed or in further study each year. <http://www.nuigalway.ie/index-internal.html>

Medtronic Ireland

Medtronic is the global leader in medical technology, alleviating pain, restoring health and extending life for millions of people around the world. With deep roots in the treatment of heart disease, Medtronic now provides a wide range of products and therapies –every three seconds, another life is improved by a Medtronic product or therapy.

Medtronic is present in Ireland since 1999. Its state of the art facility in Galway is a centre of excellence for the development and manufacture of a number of the company's key medical technologies for the treatment and management of cardiovascular and cardiac rhythm disease. Medtronic also has a sales and shared service office in Dublin supporting key businesses including Cardiac Rhythm Disease Management, Neuromodulation, Spinal and Biologics, Diabetes, CardioVascular, and Ear Nose & Throat (ENT). Through its businesses, it partners with medical professionals to develop life-changing technologies that improve the way chronic diseases are treated.

<http://www.medtronic.ie/about-medtronic/medtronic/>

Clare Galway College/ Coláiste Bhaile Chláir na Gaillimhe

The school actively uses digital technologies in teaching and Learning. Most notably there are no textbooks or e-books but rather teacher and student generate teaching and learning resources.

Coláiste Bhaile Chláir is committed to the highest standards of teaching and learning and in all instances will place the student at the centre of everything that happens in our school.

Coláiste Bhaile Chláir in Claregalway, Galway was selected by Microsoft as a 2014-2015 Microsoft Showcase School for its excellence in transforming its learning environment to deliver more personalized education to students, using mobile and cloud technology to better prepare students for success in the workplace.

Teachers Lara Dabbagh and Gareth Callan have also been selected as Expert Educators under the innovative schools program. They join a group of 800 teachers worldwide who have been acknowledge for their practice in the classroom.

Coláiste Bhaile Chláir joins an exclusive community of over 150 premier schools from around the world, recognized to celebrate their truly pioneering efforts and innovation in rethinking teaching, learning and assessment in order to drive deep 21st century competencies.

<http://www.colaiстеbhailechlair.com/>