

MCAST LINK

ISSUE 33 - SUMMER 2010

THE OFFICIAL MAGAZINE OF THE MALTA COLLEGE OF ARTS, SCIENCE AND TECHNOLOGY



 **MCAST**
MALTA COLLEGE of ARTS, SCIENCE & TECHNOLOGY

Information Pg4	Malta Qualifications Council Pg9	Student Page Pg12	Information and Support Services Pg16
Learning Support Unit Pg18	Sports Pg22	Institute of Agribusiness Pg26	Institute of Art and Design Pg28
Institute of Community Services Pg36	Institute of Electrical and Electronics Engineering Pg40	Institute of Information and Communication Technology Pg43	Maritime Institute Pg44
Institute of Mechanical Engineering Pg47	Gozo Centre Pg49	International Programmes Office Pg52	Chaplain's Message Pg58



On the cover: Alana Paula Bondin at the Institute of Electrical and Electronics Engineering.

EDITOR'S MESSAGE



Caroline Balzan
Communications
and PR Manager

The Malta College of Arts, Science and Technology has signed a memorandum of agreement with Max-Born, a vocational college in Recklinghausen, Germany. Max-Born College is a technically-oriented college that focuses primarily on the practical application of engineering subjects in the areas of civil engineering, electrical engineering and mechanical engineering. The two colleges plan to work closely and organize joint courses in the field of alternative sources of energy combined with sustainable growth and to provide new exchange opportunities for both students and members of staff.

Several MCAST students have made the College proud due to their attainment of international and local medals and prizes. Quintin Grech from the Institute of Building and Construction Engineering and John Vella from the Institute of Mechanical Engineering were awarded the City & Guilds Gold Medals for Excellence in joinery and automobile engineering respectively. The Medals for Excellence are awarded to exceptional students whose work stands out amongst that of thousands of students from hundreds of colleges world wide. Four Art and Design students, namely Sean Camilleri, Nicholas Caruana, Jennings Falzon and Matthew Galea, won various prizes at different local and international art competitions. The achievement of these medals and prizes is proof of the students' academic and vocational preparation, drive, dedication and hard work.

For the first time the College organised *Health Week* - a full week of health and well-being activities for students and members of staff. Several events were coordinated including discussions, drama and music clips, testimonials as well as a whole day of various sports activities. Through the organization of *Health Week* the College aimed to instil and promote a healthy and stable lifestyle.

This issue sees the introduction of a new regular feature by Electrical and Electronics Engineering student Jurgen Borg. Jurgen will be keeping us updated and informed on the Maltese and international clubbing scenes. Articles will also include exclusive interviews with prominent local and international DJs.

**I would like to wish all
readers enjoyable, restful
Summer holidays!**

MCASTlink is produced by the Communications and PR Office
Produced & Edited: Caroline Balzan, Communications & PR Manager
Design: mps marketing communications
Printing: Gutenberg Press
Proofreading: Joyce Hili

Advertising enquiries: caroline.balzan@mcast.edu.mt

All rights reserved. Reproduction in whole or in part is strictly prohibited without written permission. All reasonable care is taken to ensure truth and accuracy, but the editor cannot be held responsible for errors or omissions in articles, advertising, photographs or illustrations.

A handwritten signature in blue ink that reads "Caroline Balzan".

INFORMATION

MCAST PRINCIPAL HONoured BY CITY AND GUILDS OF LONDON INSTITUTE



Prof Maurice Grech, Principal and CEO, receiving the award from Mr Michael Howell, Chairman of Council

Professor Maurice Grech, MCAST Principal and CEO, recently received a Fellowship of the City and Guilds of London Institute (CGLI). Receiving this prestigious honour with Professor Grech were Professor Julia Buckingham, Professor Sir Deian Hopkin, Ms. Julie Jones CBE, Professor Sir Peter Knight FRS and Sir Michael Latham. The award ceremony was held in London at the CGLI head offices on 10 March 2010. Fellowship of the Institute is the highest award that can be conferred by the Council of City and Guilds. It denotes the ability to manage people, information and operations in complex professional or technical situations and to formulate and implement strategies at the highest levels of responsibility. This achievement is to be demonstrated over a number of years in demanding appointments. Fellows are people who have demonstrated excellence in their field, who have gained the respect of their peers and who can be considered role models for their profession. As the citation on the award states, it recognises outstanding professional and personal achievement.

The City and Guilds of London Institute was established in 1878 by the Corporation of the City of London ('the City') and a number of key London Livery Companies ('the Guilds'). Since its foundation the CGLI has become the premier awarding body of technical and vocational qualifications in the UK. Last year it awarded nearly two million qualifications in over 80 countries. It is in the forefront of technical and vocational education and training offering approximately 500 qualifications in over 28 industries worldwide. Industries span the alphabet and include advice, guidance and counselling, construction, design, education and training, engineering, hairdressing, hospitality, land based industries, telecommunications and travel and tourism. Prof Grech joins a rather select number of Fellowships numbering approximately 400 worldwide. It is a fitting and well-deserved award for Professor Grech as the Principal of the centre of excellence in Malta and Gozo for technical and vocational qualifications.



From left: Mr David Bonello, Deputy Director, Mr Ray Farrugia, Registrar, Prof Richard Evans, Fellow of City and Guilds, John Vella, student, Prof Maurice Grech, Principal and CEO, Quintin Grech, student, Mr John Vella, Director Institute of Building and Construction Engineering, and Mr Artur Rego, City and Guilds Business Development Manager

MCAST STUDENTS AWARDED MEDALS FOR EXCELLENCE

On Thursday 15 April 2010, students Quintin Grech from the Institute of Building and Construction Engineering and John Vella from the Institute of Mechanical Engineering were awarded the City & Guilds Gold Medals for Excellence in joinery and automobile engineering respectively. The awards were presented by Mr Artur Rego, City & Guilds Business Development Manager, in the presence of Prof Maurice Grech, MCAST Principal and CEO, Dr Richard Evans, Fellow of City & Guilds, Directors of Institutes and lecturing staff. City & Guilds, the UK's leading awarding body for work-related qualifications, has awarded medals for excellence every year since 1879. The programme rewards talented people who have displayed exceptional standards as students or educational professionals. Adrienn Fritz, General Manager of City & Guilds European Branch Office, said, "Our medallists truly represent the best of

the best in vocational training in Europe and have made us proud this year." Chris Jones, Director General and CEO, City & Guilds said, "The medal winners encapsulate the type of people that will ensure Malta's economy grows in the coming years - passionate, diverse and equipped with the skills and experience they need to rise to the top of their professions." Prof Maurice Grech, MCAST Principal and CEO, congratulated the students and tutors. He pointed out that MCAST receives similar awards every year, proof of the calibre of students and staff and the high standing of the College.

Medal winners are now in the running to win one of nine prestigious National Lion Awards, which will be announced later this year at a gala event to celebrate learning, success and achievement, at The Lancaster, London.

MCAST AND MAX-BORN VOCATIONAL COLLEGE, GERMANY TO OFFER JOINT COURSES IN ALTERNATIVE SOURCES OF ENERGY AND SUSTAINABLE GROWTH



Prof Maurice Grech, MCAST Principal and CEO, and Dr Lawrence Schulte-Bannert, Principal of Max-Born College, signing the agreement

Prof Maurice Grech, MCAST Principal and CEO, and Dr Lawrence Schulte-Bannert, Principal of Max-Born College, a vocational college in Germany, have recently signed a memorandum of agreement on behalf of the two institutions. Mr Emanuel Attard, MCAST Managing Director, MCAST Gateway to Industry, was present for the signing.

The Max-Born Berufskolleg is a technically-oriented college in Recklinghausen, a town in North Rhine-Westphalia, a federal state mainly known for its industrial past. With its capital Dusseldorf, NRW is the most densely populated federal state in Germany. As well as being a leading industrial region, an important international economic centre and a modern centre of technology, it is also a major base for culture and the media. The college lays particular emphasis on the engineering subjects and practical application in the

fields of civil engineering, electrical engineering and mechanical engineering.

Collaboration between MCAST and Max-Born started over five years ago mainly as a result of projects, student and staff exchanges and placements in industry which proved to be of mutual benefit for all those who took part. Between 2005 and 2008, for example, the MCAST Institute of Building and Construction Engineering coordinated a technologically-oriented Comenius project entitled "Roofs of Europe". Four countries participated in this project which took a closer look at the physical and mechanical properties of materials used for roofing. The project formed part of the Lifelong Learning programmes funded by the European Union.

Another project called "Prima Klima Box" studied heat transfer relating to the thermal behaviour of buildings. It is known that at least a third of the energy consumption of industrialized countries is lost on creating acceptable thermal and lighting conditions in buildings. Between them, these two projects led to the mobility of thirty-six students. A new project, which builds on the earlier experiences of both colleges, has already been submitted and is now being evaluated.

Also as a result of the collaboration during the last few years, six Maltese students and ten German students have been invited to take up work placements in industry, while two Maltese lecturers from the Institute of Building and Construction Engineering have in turn benefited from a one week Leonardo da Vinci training programme.

The aim of the memorandum, which was signed by both parties at Max-Born in Recklinghausen, is to consolidate what the two colleges have achieved so far. It is also planned to organize joint courses in the field of alternative sources of energy combined with sustainable growth. These courses will seek to exploit the knowhow of the two institutions and to encourage exchanges from which students and staff may continue to benefit. Both institutions aim to provide all the support necessary so that both MCAST and Max-Born take full advantage of one another's strengths and expertise.

MCAST OPEN WEEKEND

VISITS AND TOURS TO INDUSTRY

On Friday 26 and Saturday 27 February 2010 the Malta College of Arts, Science and Technology (MCAST) organised an Open Weekend. The Open Weekend took place at the MCAST Main Campus, Corradino Hill, Paola. The Open Weekend aimed to provide prospective students and their parents with a useful picture of the various learning opportunities and resources available in each of the different MCAST Institutes. The College also provided those interested with a unique opportunity to visit and tour a number of industrial establishments with which MCAST works in close collaboration. This was intended to give prospective students an idea of the true meaning of vocational education and to help them catch a glimpse of career opportunities they may wish to consider. The industrial establishments that participated were: Actavis, Dedicated Micros Ltd, Golden Harvest Co, Maypole Ltd, Playmobil Ltd, Rayair Automation Ltd, Solea Pharma Ltd, ST Microelectronics, TEK-Moulds Precision Engineering Ltd, Toly Products Ltd and Trelleborg.

The satellite institutes, namely the Institute of Agribusiness, the Institute of Art and Design, the Institute of Building and Construction Engineering and the Maritime Institute, also set up a stand on the Main Campus.



Fifth form students visiting the Institute of Mechanical Engineering



Explaining to interested students and their parents

MCAST STUDENTS BENEFIT FROM HSBC BOOKS DONATION

Some €3,000 worth of books has been donated by HSBC to the MCAST Library and Learning Resource Centre. The books, 65 in total, are all specialised in Agribusiness, Art and Design or Business and Commerce.

On presenting the donation, renewing HSBC's annual support to MCAST, HSBC Area Director Speranza Catania said HSBC invests in students' academic formation as they are tomorrow's resources who will be shaping the country's future. "The students of today's society are also the ones to ensure continuity of the sustainable economic growth we are working for," she said.

Prof Maurice Grech, MCAST Principal and CEO, explained that courses offered by the College varied widely in subject matter and level. Furthermore the College was regularly venturing into new grounds to satisfy better the needs of the industry. The donation of books by HSBC was most welcome because it

supplements MCAST's allocation of funds for the library. Paul A Attard, President of the Board of Governors, stated that the HSBC donation was an investment in the potential of our young people and adults attending MCAST courses. MCAST delivers the knowledge, competences and skills required by industry in order to provide the required human capital for Malta's development.

MCAST has invested heavily in the six Libraries and Learning Resource Centres. Besides the classical library facilities and services the Libraries are also Learning Resource Centres. This is in line with the strategy of ensuring that its graduates acquire the skill of life-long independent learning. It is this skill that will guarantee that MCAST graduates, over the years, can continuously keep up to date with their chosen area of expertise and as necessary branch out into new areas of knowledge for their own and their employers' mutual benefit.



From left: Speranza Catania, HSBC Area Director, during the presentation of the books donated with Prof Grech, Principal and CEO, MCAST. Also present (from left) Laurence Zerafa, Librarian, and Mr Paul A Attard, President of the MCAST Board of Governors

MALTA'S NATIONAL QUALIFICATIONS FRAMEWORK

What is the National Qualifications Framework?

Malta launched its National Qualifications Framework (NQF) for Lifelong Learning in June 2007. The Framework encompasses all levels of education and training including formal, informal and non-formal and ensures quality assurance of all qualifications within the Framework. The Framework is governed by a Legal Notice (347 of 2005) which will be amended to reflect the developments of the Framework.

The NQF is based on the following principles:

- A learning-outcomes approach to all qualifications at all levels
- A valorization of all learning - formal, informal and non-formal;
- Comparable qualifications from different learning pathways including vocational, professional and academic qualifications;
- Clear exit points and vertical and sideways progression within the Framework;
- Lifelong learning;
- Mobility and
- Quality assurance.

What is the European Qualifications Framework?

The NQF has been referenced to the European Qualifications Framework (EQF). This is a Framework on which all EU countries can align their qualifications system so that a person's qualifications obtained from one country will carry the same value in any other country within the European Union. It is also a guarantee that the qualification will have a recognized value when the person applies for a job or wants to further his studies.

This referencing to the EQF has seen an increase in training providers who are eager to reform their current qualifications system in exchange for a wider market base. By 2012, all public and private education institutions in Malta will be carrying the MQF/EQF levels.

WHAT ARE THE FUNCTIONS OF THE MALTA QUALIFICATIONS COUNCIL?

The main function of the Malta Qualifications Council (MQC) is to safeguard the quality and standards of local and foreign qualifications. It hosts two specialized units, one focused on standards and qualifications and the other on the validation of informal and non-formal learning. Both units have regular meetings with stakeholders on the required standards as pre-requisites which need to be fulfilled by public and private training providers when offering qualifications referenced to the NQF. The stakeholders are involved in the design of qualifications, which are learning outcomes based and demand-driven, and this ensures that learners have better chances for employability and mobility. When the standards have been established, MQC and the training provider sign a formal Protocol outlining level-rating of all qualifications.

Training providers who escape this standardisation process will be margined out by the market itself. Unrecognized certificates will be refused by future employers and people will learn this and will not go back to the same providers. This form of quality assurance thus safeguards the interests of the customer and the skills and competences needed to increase the nation's quality of life and sustain economic growth.



THE MALTA QUALIFICATIONS FRAMEWORK

- has 8 levels of qualifications and is compatible with the EQF and the Framework of Qualifications of the European Higher Education Area;
- defines qualifications by what a person knows and is capable of doing, rather than by what he has been taught;
- is a reference tool using the learning outcomes approach;
- is a common translation device between various qualifications, qualifications systems (including sectoral qualifications frameworks) and levels;
- will place sectoral qualifications within a common agreed Framework of Qualifications;
- increases transparency of qualifications, recognition of learning outcomes and builds mutual trust among all stakeholders;
- adheres to the Bologna and Copenhagen processes and aims at attracting more individuals to learning experiences and to employability;
- contains learning outcomes at NQF Level 5 which correspond to the descriptors for the higher education short cycle of the Bologna process;
- contains learning outcomes of NQF levels 6, 7 and 8 which correspond to the descriptors for the 1st, 2nd and 3rd cycle in the Qualifications Framework of the European Higher Education Area;
- has a Vocational Education and Training (VET) Framework with 8 levels of qualifications from VET Level 1 to a VET Higher Diploma;
- contains 8 Key Competences whose level descriptors are in line with the EQF. These Competences facilitate mobility and progression of Malta's workforce;
- will eventually include informal and non-formal education and training, as well as the Recognition of Prior Learning (RPL).

MALTA'S NATIONAL QUALIFICATIONS FRAMEWORK FOR LIFELONG LEARNING*

8	DOCTORAL DEGREE		8
7	MASTER'S DEGREE POSTGRADUATE DIPLOMA POSTGRADUATE CERTIFICATE		7
6	BACHELOR'S DEGREE		6
5	UNDERGRADUATE DIPLOMA UNDERGRADUATE CERTIFICATE	VET HIGHER DIPLOMA	5
4	MATRICULATION CERTIFICATE ADVANCED LEVEL INTERMEDIATE LEVEL	VET DIPLOMA	4 (e)
3	GENERAL EDUCATION - LEVEL 3 SEC GRADE 1-5	VET LEVEL 3	3 (d)
2	GENERAL EDUCATION - LEVEL 2 SEC Grade 6-7	VET LEVEL 2	2 (c)
1	GENERAL EDUCATION - LEVEL 1 SCHOOL LEAVING CERTIFICATE	VET LEVEL 1	1 (a/b)

VET stands for Vocational Education and Training

Annotations:

* The National Qualifications Framework is designed in such a way as to be able to include diverse forms of qualifications not as yet covered by this Framework.

(a) Attainment of the Basic Employment Passport together with either the Adult Skills Certificate or the MQC 8 Key Competences at level 1 are also considered as a Full VET Level 1 qualification.

(b) The MQC recommends that a Full VET Level 1 qualification should enjoy the same parity of esteem as a Full School Leaving Certificate.

(c) The Malta Qualifications Council recommends that a Full VET Level 2 qualification should enjoy the same parity of esteem as 4 General Education Level 2 subjects.

(d) The Malta Qualifications Council recommends that a Full VET Level 3 Qualification should enjoy the same parity of esteem as 6 General Level 3 subjects.

(e) The Malta Qualifications Council recommends that a Full VET Diploma should enjoy the same parity of esteem as 3 Advanced Level subjects.

For further information on the NQF the general public may access the Council's website www.mqc.gov.mt or may contact the Council at mqc@gov.mt or on tel: 2754 0051, 2180 1411.

STUDENT PAGE BY JURGEN BORG



Hey everybody, and welcome to the new clubbing section in this magazine. My name is Jurgen, I'm 19 years old and studying at the MCAST Institute of Electrical and Electronics Engineering.

I have been invited to take over the new Student Pages in the college mag. Together we'll get to know a bit more about the guys and gals who manage to get us going on Saturday evenings and also on what to anticipate on "Eve of a Public Holiday". Established and also upcoming deejays will be interviewed... with the hope of adding a few surprises for you readers once in a while. This issue is featuring an interview with established artist and record label entrepreneur Alvin Gee.

On behalf of the editor, I would be pleased to extend an invitation to other students who would like to come up with suggestions and even contributions which may be of interest to our readers.

A sneak peak about Alvin Gee:

A natural musical passion is a characteristic inherent in us all. Some enjoy hearing music whilst others devote their lives entirely to its making and it is within such a group of people that we find Alvin Gee. Heavily inspired by Mauro Picotto, he was discovered at the age of fifteen by Mario Mifsud at which time Alvin was already making himself heard via a community radio station, DJ's Radio, which aired on 95.6fm. After that he was selected as a resident DJ at Axis Discotheque in Paceville. Success after success followed from then on.

Fresh Music Agency, one of Malta's most prestigious organizations, also noted Alvin's talent and decided to take him in as one of their own residents as well. From that point onwards Alvin was able to play alongside some of the world's finest deejays such as: Antoine Clamaran, Judge Jules, David Guetta, Josh Wink, Axwell, Dr. Electroluv, Paul Van Dyk, Tiesto, Laidback Luc, Hernan Cattaneo and many more. Also, Alvin's fame grew to such an extent that he has been invited to some of the world's most renowned clubs. These include: The Honeycomb (Brighton), The Gallery, Turnmills (London) pacha (London), Pacha (London), Madox (London), Bora Bora (Tunisia), Primadonna (Tunisia) and Coco Bongo (Mexico).

Alvin Gee has also focused on several musical productions which include the very finest local talent such as Ira Losco, Fabrizio Faniello, Kristina Casolani, Tribali, J Joy, Glenn Franz, Luc Adams and Tenishia. He has also worked with several

foreign artists such as Marcella Woods, Andrea Britton, Jan Johnston, Kirsty Hawkshaw, Audrey Gallagher and Lee Thomas. Alvin's collaboration with Lee Thomas, the official remix for Losing My Religion, proved to be highly successful worldwide, awarding him the 16th place on Buzz's Top Tracks List and a spot on DMC's Essential Club Hits. This allowed Alvin to promote himself beside renowned foreign superstars such as Beyonce, Lady Gaga and Ferry Corsten.

His experience in conducting radio shows grew further as he hosted his own two hour show on Xfm which featured one hour and a half of dance music. The final half an hour of the programme was dedicated to upcoming artists signed with OldSkool Promo, which specialises in discovering new talent. The show generated a lot of interest becoming an instant hit both because of its content and also because it allowed new artists to showcase their work.

Recently he has had the privilege of performing at the Isle of MTV Malta Special and all of the Ministry of Sound related events of which he is also an organiser. As one can see this DJ has not been idle and has worked his way to the top through the years in order to become one of Malta's most respectable artists. His continuous drive towards success guarantees that whatever task Alvin works on, it will not only be carried out, but executed in the finest way possible.

INTERVIEW

Q: So first of all, thanks for having me here. I know you're quite busy so I'll get to the point quickly. The usual icebreaker would be ... What got you into deejaying? Anybody in particular inspired you?

I had a friend of mine, Mark Micallef, back in school who always wanted to become a DJ, and he also insisted that I should learn the art with him. We were 14 years old at the time. Then one day I heard an advert on DJ's radio about this course in which one would be able to learn the skills needed to become a radio DJ. So I applied and managed to master it, then I took the next step and learnt what was needed to become a club DJ...thanks to DJ Nojz who tutored me. As far as an influence goes I would credit it to Mauro Picotto.

Q: What does music mean to you? Is it an expression of one of the things in life you enjoy the most (deejaying) or simply the product of something you have become accustomed to (again... deejaying)?

It's an expression of one of the things in life I enjoy the most.

Q: What software do you use for production?

Logic Studio!!

Q: Tell us a bit about your record label...what's its aim? What are you hoping will come out of Gee Records in the future?

Well basically it's a new record label here in Malta which is going to sell and promote House Music... that makes it the first ever House Music Record Label here in Malta. Its aim is to sell tracks by Maltese and foreign producers around the globe giving a chance to all those new upcoming producers here in Malta who are fed up of sending demos which record labels do not even listen to.

I have got a good feeling about this label because it is already signed with huge distributors, so it will be selling its tracks on major online shops such as I Tunes, Beatport, Audiojelly, Trackitdown, Juno and more. We got on board some of the best names in business such as: Jo Micali, Glenn Frantz, Deep Funk, Toby, U bahn, Gee Bros, Ross Paterson, Thomas Penton, AudioFreak, Mr M. Jaymee and others. Delivering big room house tracks... so yes I believe that this label is going to do very well.



Q: Name an instance which made you feel proud standing there on the deejay stand and another which was not so glorious... in fact the more embarrassing it is, the better.

Last year was the year when I released the REM hit single LOSING MY RELIGION. That track still makes me feel proud every time I play it... I love to cut that part when it says Losing My Religion and hear the crowd sing along.

My best experience has got to be me playing right after Sebastian Ingorrosso last month at Numero Uno. To add with all of that, Sebastian decided to hear my set for the best part of an hour. Considering that he is one of my idols, I was practically in heaven.

My worst experience took place when I was playing at Axis in front of 2500 people and as soon as I got my CD out from one of the cdjs the other just stopped working. I was so embarrassed that night.

Q: Any new tracks which we will all be listening to on local radio stations soon?

Yes, sure. After Rush of Love I'm currently working on my new track with Scream Daisy, which will hopefully be out by July not only on Local Radio Stations but also around the globe via Gee Records.

Q: Any advice for future deejays out there?

Yeah sure. Just enjoy music and enjoy delivering good nights to people around - Malta... The key to success is as simple as that... Do not forget that the people on the dance floor are important as much as the DJ. A down to earth DJ is a successful DJ.

So there you have it. This was our very first official interview. I will be bringing you more of the sort next issue, and as I said - watch out because the future might be holding a couple of surprises as well. Until then, enjoy yourselves, be safe and be good.

For any suggestions on what you might want to see in this page, just send me an email on Jurgen@oldskoolpromo.com.



SUPPORT SERVICES

HEALTH WEEK AT MCAST

The College organised a Health Week across all the MCAST Institutes between the 15 and 18 March 2010. The main aim of this week was to instil and promote a healthy and stable lifestyle amongst students. Several studies have shown that through stability students are more likely to achieve educationally, increase their performance and contribute to the overall success of the College and society.

Activities were countless and took various forms such as testimonials, discussions, demonstrations, drama clips and sports amongst others. Professional staff from several organisations, including Richmond Foundation and Sedqa, delivered sessions to the students. Among the topics covered were Assertiveness and Stress Management, Self-Esteem and Self-Confidence, the Importance of Sleep, Examination Stress and Suicide Prevention, Peer Pressure and Choices, Addictions, Substance Misuse and Aggressive Behaviour and Abuse. A number of these sessions were held at MCAST Main Campus whilst others were held at the Satellite Institutes. They were conducted in small groups through an experiential style for their maximum effectiveness.

Dr Elaine Zerafa, from the Health Promotion Unit, conducted sessions on Nutrition. The students participated in these sessions by designing and distributing their own flyers to promote this concept. HELP Tobacco Manifesto erected a tent near the Library and carried out tests on volunteer students who wished to check their lung impurities.

Several sports activities were also organised during Health Week. A popular event was the demonstration given by MCAST Naxxar Weight-lifting Club near the canteen area. This generated interest and appreciation towards the physical strength exhibited by the weight-lifters. The week came to an end with Sports Day organised by the MCAST Sport Department.

Ms Kate Gonzi attended Health Week and visited several of the activities taking place. She expressed her appreciation for the organisation of these events as they contribute to the well-being of the students. She heard the positive comments by three national team athletes following the Sport (Development, Coaching and Fitness) Course and met Ira Losco who shared her story of success with the students.

On another occasion Thea Garrett, an ex MCAST student, who represented Malta in the Eurovision Song Contest with her song 'My Dream', also addressed the students.

The College would like to thank all those that contributed to the success of this event namely Sedqa, Richmond Foundation, the Cybercrime Unit, the Malta Exercise and Health Fitness Association, and Fr. Franco Fenech. Dr. Roderick Bugeja, Mr. Gino Schiavone, Mr. Edward Aquilina and Ms. Christabel Catania.

HEALTH WEEK 2010

Weight lifters



Weight lifters



Thea Garrett singing 'My Dream'



Thea Garrett interviewed by Josef Mizzi



Ira Losco sharing her success story with MCAST students



One of the well-attended talks on Health and Well Being



Ms Kate Gonzi meeting the College athletes



Ms Kate Gonzi, Mr Paul A Attard, Prof Maurice Grech, Mr John Bartolo at the Help-EU Tobacco Free Stand



Ms Kate Gonzi meeting up with students following the Degree Course at the Institute of Electrical and Electronics Engineering



LEARNING SUPPORT UNIT

On Thursday 15 and Friday 16 April 2010, MCAST organised a two day seminar about Embedded Teaching and Learning at the Students House and Learning Support Centre, Paola. Embedded teaching and learning combines the development of literacy, language and numeracy with vocational and other skills. The skills acquired provide learners with the confidence, competence and motivation necessary for them to succeed in qualifications, in life and at work.

There is no best way of delivering embedded learning but often students who experience most of their literacy and numeracy skills as part of their vocational component are more likely to succeed than those who learn key skills detached from vocational modules.

MCAST is striving to improve student achievement and retention, and promote learner progression to higher levels of learning. In view of this, from next year 2010-2011 the College will be introducing a Level 1 Foundation Certificate embedded learning programme.

The aims of the seminar were:

- to ensure a better understanding of what embedded learning means;
- to devise approaches which facilitate the introduction of embedded programmes;
- to raise the quality of effective teaching and learning.

Helen Casey and Vera Hutchinson from the National Research and Development Centre (NRDC) delivered the seminar. Helen Casey is Executive Director of NRDC and

has conducted several research projects about embedded learning, such as, "Comparing embedded and non-embedded teaching of literacy, language and numeracy for learners on vocational programmes". Vera Hutchinson is Professional Development Manager at the Faculty of Policy and Society, Institute of Education, University of London.

Helen Casey presented findings and results of several research studies conducted by NRDC in the U.K. Studies showed that students on embedded courses had better staying-on rates than those on non-embedded courses, and more positive attitudes towards key skills. The embedded courses also had higher success rates than non-embedded courses.

Vera Hutchinson spoke about the key elements that need to be considered when setting out to embed language, literacy and numeracy skills into vocational learning. In brief she mentioned six key themes, namely, getting started, planning ahead, implementing an embedded approach all over the college, supporting and training staff all along, keeping up the momentum and engaging and motivating learners.

On Friday, vocation-specific workshops were held in which LSU key skills lecturers, LSAs, subject coordinators and vocational lecturers discussed issues related to embedding and started planning the Level 1 Foundation Certificate embedded schemes of work according to the framework and guidelines presented by the speakers.

During the Embedded Learning Seminar



DYSLEXIA



by Nadia-Maria Vassallo, Learning Support Unit, Senior Lecturer

What is Dyslexia?

Dyslexia is a language-based information processing difficulty. It causes difficulties in learning to read, write and spell. Short-term memory, mathematics, concentration, personal organisation and sequencing may also be affected.

Dyslexia does occur among the very bright, the average and the less academically able population. The very bright and the average child who are underperforming in literacy, are easy to identify, because of the gap between expectation and their attainment. This may not be so obvious in the less able child because the difficulties may be put down to limited ability.

The first thing that indicates the presence of dyslexia is usually a difficulty in learning to read, write and spell. Of course dyslexic people will not experience difficulties in all areas, nor will their difficulties be equally severe in all areas. Some dyslexic people will experience severe problems while others will be affected only to a small degree.

Patterns of Difficulty

Perception is the skill of understanding information received by the senses. Weak auditory perceptual skills lead to difficulties in discriminating between sounds, hearing sounds in the right order, hearing rhythms in speech; learning through listening will not be easy. Visual perception is responsible for seeing the shapes of words, relative size, judging distances. Many dyslexic individuals have a specific auditory perceptual difficulty in the area of phonological awareness.

Difficulties in spatial and motor skills can give rise to poor skills in size and shape concepts such as page layout, puzzles, size and shape in maths. Classroom skills such as copying from the board and interpreting maps, diagrams and charts may also be affected. Motor skill difficulties and difficulties in hand to eye co-ordination create problems in handwriting and mastery of sports and games.

Poor auditory perception may give rise to the late development of spoken language, including sounds, vocabulary or sentences. Pupils may exhibit poor listening

skills, inability to follow verbal instructions, slow response to verbal stimuli, and poor comprehension of speech and/or limited expressive language.

A difficulty in short-term auditory memory is common to the vast majority of dyslexic people. This impairs the ability to follow instructions, to remember word shapes and names and to hold information long enough for it to be established in the long-term memory store. As short-term or working memory is a central skill in the learning process, it can be seen that this difficulty will have far-reaching educational consequences.

The dyslexic person's thinking may be different from that of his peers. Difficulties may be experienced in linking ideas together. There may be problems in organising and sequencing ideas and in predicting, with consequent difficulties in essay writing, revision and examinations.

Difficulties in personal organisation may present as untidiness, forgetfulness or poor concept of time, days of the week etc. The older student may have great difficulty in organising his time and his work space, in being in the right place at the right time with the right equipment.

It is very clear that the difficulties listed above have serious implications for the learning process, and the dyslexic student is likely to experience a degree of educational failure.

How can the dyslexic student be helped?

There is plenty of research evidence to show that the earlier the problem is detected the more effective is the remedial intervention. It is particularly advantageous if special teaching can start early (at less than age seven) because less time would be needed for catching up. When diagnosis of dyslexia is made in the first two grades of school, 80% of the students can be brought up to their normal classroom work with adequate support.

Dyslexia cannot be prevented or cured. Early intervention can lessen the long term effect of the symptoms when it is accompanied by appropriate remediation, sympathetic understanding and awareness that there may be weaknesses and lateness in acquiring fundamental life skills. With the correct attitude secondary emotional and behavioural problems that might have developed can be reduced.

It is also important that parents and others associated with the student are counselled and given encouragement and constructive practical advice on matters that can improve the student's performance. All involved must be mindful of the old adage that 'diagnosis without remediation is unethical'.

MCAST'S PARTICIPATION IN MODEVAL 2 PROJECT THE BARCELONA MEETING BY MARIA GALEA, LECTURER LSU

Between the 28 and 30 January 2010, the MODEVAL 2 project partners met in Barcelona for the fourth European meeting. The Modeval 2 project, which is now nearing its end, is a Leonardo Transfer of Innovation Project aimed at developing training materials targeted towards tutors and trainers in the area of low level skilled adults. David Muscat and Maria Cassar, LSU Coordinator and LSU Lecturer respectively, represented MCAST at the meeting.

Following the final contribution by the Greek partners from the University of the Aegean, the Training Manual of the Modeval Project is now finalised. This Training Manual accompanies the actual tool which was developed by the Modeval partners. This test is a comprehensive tool that can be used to determine an adult's level in literacy. The different partners are currently trying out the testing tool in their respective educational settings. The partners will be training trainers who in their line of work come into contact with low level skilled adults. An evaluation questionnaire will collect the participants' feedback on the training session with the aim of improving the tool.

Modeval 2 partners are entrusted with the dissemination of the tools developed during the project. The partners will work towards mobilising various networks onto the project



Professor Jean-Marie Besse explaining MODEVAL 2 training module

as well as distributing the project's products. In this respect a copyright agreement between the authors of the project has been written.

For more information about the Modeval2 Project visit www.modeval.org



During the Seminar

PATHWAY TO INDEPENDENT LIVING COURSE

LIVE-IN FOR STUDENTS FOLLOWING THE PATHWAY TO INDEPENDENT LIVING COURSE

Students following the Pathway to Independent Living Course participated in a live-in at the Mellieha Holiday Centre between the 23 and 25 March 2010.

During the day the students had the opportunity to master the skills of daily living which are learnt during the two-year Pathway to Independent Living Course. The students handled everyday tasks such as grocery shopping, meal preparation, paying bills, ordering their own food in a restaurant and maintaining their bungalows in order.

The live-in also proved to be a good opportunity for students to enrich their social skills as they engaged in a variety of activities in which they were encouraged

to interact with their peers. They also participated in different sports events such as mini-golf, table-tennis, football and bowling.

The aim of the live-in was to empower the students and to provide them with opportunities to grow and realise they can change their circumstances with their own actions. Students were each given a total amount of points based on performance, behaviour and effort. The student who scored the largest number of points and therefore reached most of the goal was Angele Azzopardi.

The students also prepared a report in the form of a powerpoint or photostory on their experience.



Angele Azzopardi



The Group

SPORTS

SPORTS TOURNAMENTS

Recently a number of sports tournaments were organised including one at St. Aloysius College on the 27 January 2010 where MCAST students participated in male and female football, volleyball, basketball and table-tennis against Higher Secondary, Junior College, St. Aloysius, De La Salle and St. Martin's 6th Forms. Good results were registered in particular by the basketball team as well as the female football team who won all games against their competitors.

Another sports tournament was held in Gozo on the 24 February 2010 where MCAST students participated against Gozo 6th Form, Higher Secondary and Junior College in volleyball, football and squash. MCAST students also tried their hand on the climbing wall at the Gozo Sports complex. The best results were achieved by Joseph D'Amato and Maria Angela de Battista in squash.

A handball tournament was also held on the 25 February 2010 between MCAST, Junior College, Higher Secondary, De La Salle and St. Aloysius 6th Forms.

MCAST Sector 7 team play against Higher Secondary, Junior College



All the participants





Conrad Vassallo, ICT lecturer in action

KARTING

Recently a team of staff members from the Institute of Information and Communication Technology took part in a karting activity. There was some crazy driving to be seen with Christian Calleja being the overall winner of the competition.



Winners of the karting challenge

NAXXAR GYM

This gym has been used regularly this year with students making good use of the weight lifting area, which has been kindly refurbished by the MCAST Naxxar Weightlifting Club.



Manuel Abela working on his abs



Jonathan Bonnici working out

MCAST students warming up before the run



WOMENS' DAY RUN

A number of female students participated in the Women's Day Run organised by the Women's Commission within the Maltese Olympic Committee on the 7 March 2010.

TREKKING

Several treks have been held over the past months with the climax being the Round Gozo Trek in three days. The participating students enjoyed this tremendously despite having to carry 12-15kg backpacks, tents and camping during the night.





TENNIS OFFICIATING

Once again this year MCAST students participated in the Tennis Officiating Course organised by Dr. Mohab Fahmi of the Malta Tennis Association. Students learned the theory and also had practical sessions in officiating which culminated in them officiating during an international tennis tournament which was held in Malta during the Easter weekend. Students declared that this was a great part-time job since they also got paid for their services.

SPORTS DAY 2010

Sports Day was held on the 18 March 2010 and was very well attended by both students and staff. The sports played included football, basketball, volleyball, fun games, street soccer, chess, table-tennis, tennis, cross-country and aerobics. The following results were registered:

Football

Swedish Avengers – Institute of Information and Communication Technology
Under Construction – Institute of Business and Commerce

Basketball

Lectures – Institute of Information and Communication Technology

Volleyball

Art Attack – Institute of Art and Design

Chess

Christian Pullicino - Institute of Business and Commerce
Alexander Farrugia - Institute of Business and Commerce
Christian Darmanin - Institute of Business and Commerce

Table-Tennis

Alex Wright – Administration
Eugene Debono - Institute of Information and Communication Technology
Innocent Sciberras – Institute of Mechanical Engineering

Tennis

Eugene Debono - Institute of Information and Communication Technology
Grace Barbara - Administration

Cross Country

Christian Briffa – Institute of Art and Design
Sean Grech – Institute of Art and Design

Fun Games

Pathway students



Basketball team in action



MCAST Female Football Team



Football Winners

Chess Tournament



Naxxar Staff Team

Fair PlayStand



Eugene Debono, Tennis champion

Stephen Chang and Nigel McCarthy



ACTOR STEPHEN CHANG VISITS MCAST

MCAST Sports Department had the opportunity of inviting Grandmaster Stephen MD Chang for a demonstration for MCAST students, on the 5 March 2010. Chang is one of Hollywood's greatest martial artists, fight coordinator and actor in the business. Worldly known for his roles as the VC Commander alongside Silvester Stallone in Rambo, the large man in the X-Files and Dad Li in the award winning Double Happiness, Grandmaster Chang shared some Martial Arts and Hollywood Stunt Secrets with our students. Thanks goes to Mr Chris Cassar, ICT lecturer, Shaolin Hung Gar Kung Fu, Malta Chief Instructor, and Old Yang Style Tai Chi, Malta Chief Instructor, for making this possible.

AGRIBUSINESS INSTITUTE

INTERNATIONAL CONFERENCE ON ORGANIC FARMING

The Malta Organic Agricultural Movement together with the Ministry for Gozo and in collaboration with the International Federation of Movements on Organic Agriculture (IFOAM-EU) organised an international conference entitled 'Organic Agriculture and Eco-Gozo: A World of Challenges, Opportunities and Innovation'. The conference took place on the 18 March 2010 and embraced the vision to turn Gozo into an ecological island.

Gozo as a small island involves challenges such as double insularity and urban sprawl but presents major opportunities like the tourism potential and scenic beauty and hospitality. Speakers from Malta, Iceland,

Belgium, Slovenia, Hungary and Germany tackled issues about the use of alternative energy, sustainable agriculture and resource management.

Students following the National and First Diploma Courses had the opportunity to attend this conference in the light of their BTEC course work related to Sustainable Development and Organic Farming. Such topics require an understanding of the industry as well as the environmental and social aspects. The students also had the opportunity to converse with the speakers and put forward their opinions about sustainable agriculture in the local context.



Group photo of the National Diploma students together with Mr. Paul Spiteri and Ms. Jeanette Borg at the Eco-Gozo conference



Staff and students meeting Hon. Minister Giovanna Debono, Minister for Gozo. From left to right: Ms. Jeanette Borg, Assistant Lecturer, Tonio Mifsud, Mark Calleja, Karl Scerri, Mario Micalief, Mr. Mario Salerno, Assistant Lecturer, Hon. Giovanna Debono, Minister for Gozo, Gilbert Bonavia, John Gauci, Karol Azzopardi, Ms. Silvana Camilleri, Director Institute of Agribusiness, Robert Debono, Mr. Paul Spiteri, Assistant Lecturer

Nicholas Farrugia



PUTTING THEORY INTO PRACTICE

On Monday 5 April 2010 the Higher National Diploma class in Animal Management participated in a practical session carried out on a commercial layer (egg producing) farm. Although it was half way through their Easter holidays, the students immediately accepted to participate. This practical session was important as it complemented what the students had learnt in theory during the lecturing of the Animal Health and Welfare Unit.

The work consisted in the administration of intramuscular vaccinations to around 4,000 four week old pullets (young hens). This was no mean feat, for the birds were young and the students had to be very careful when administering the intramuscular injection. The work was carried out very professionally by the students, so much so, that the farmer offered the students the opportunity to visit again when the pullets are ready for their next vaccination.

The Institute would like to thank Mr. Mark Vella, co-owner of Ballut Farm, for accepting to host the students and also the Higher National Diploma students for their dedication and commitment in their course of studies thus making this practical session such a success.

From left: Nicholas Farrugia, Giancarlo Borg and Robert Debono



ART AND DESIGN

WINNERS TAKE IT ALL AT THE
INSTITUTE OF ART AND DESIGN!!

INCREASINGLY, STUDENTS
FOLLOWING DIFFERENT COURSES
AT THE INSTITUTE OF ART AND
DESIGN ARE PERPETUATING THEIR
SKILLS AND TALENTS BY TAKING
PART IN VARIOUS COMPETITIONS
IN DIFFERENT CREATIVE FIELDS,
AND THE MAJORITY MAKE IT TO
THE TOP RANKS AND CLINCH
PRESTIGIOUS PRIZES!

SEAN CAMILLERI

(HND FINE ART – YEAR 2)



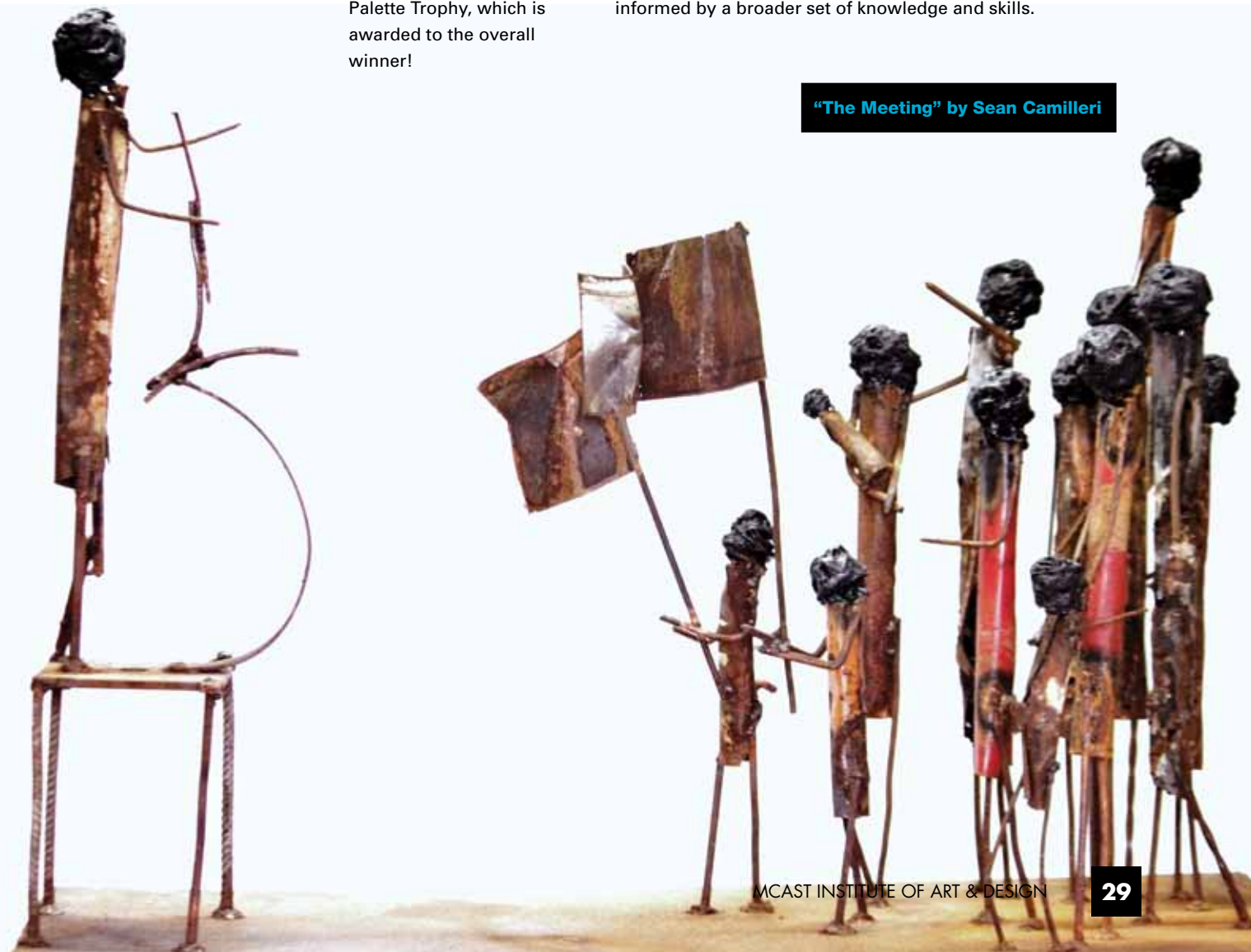
As a member of the Malta Society of Arts, Manufacture and Commerce, Sean was invited to participate in the national bi-annual Silver Palette Arts Competition and Exhibition. Set up to promote budding artists, the event was open to people over 16 years of age, who wished to submit works of art in any of the two categories from Paintings and Sculpture/ Ceramics. Sean's entry, a sculpture entitled (The Meeting), triumphed spectacularly because it was awarded both the first prize for the Sculpture category and the Silver Palette Trophy, which is awarded to the overall winner!

For the last two years, Sean has been experimenting and perfecting the technique of using scrap metal from found objects and welding different bits and pieces ingeniously to create fascinating figurative pieces. Although Sean is very nimble with other materials, such as clay and stone, he chose to work in this technique because he felt that it would allow him originality in medium, as well as in content.

"The idea to depict a meeting of people came to me after my first experience as a voter in the last general elections," explained Sean. "The huge throngs of people who crowd together in mass meetings intrigued me, so I started taking tonnes of photographs, capturing different elements and characteristics of the wide array of individuals who, together, form a whole mass."

While winning this competition was undeniably a great honour for him, Sean admits feeling that he has a long way to go. In fact, as soon as he finishes his Higher National Diploma programme, he is determined to pursue his degree year, which he believes will help him confirm his status as a fully-fledged artist whose works are backed up and informed by a broader set of knowledge and skills.

"The Meeting" by Sean Camilleri



NICHOLAS CARUANA

(FOUNDATION DIPLOMA IN ART AND DESIGN)



Nicholas Caruana, who is currently following the Foundation Diploma in Art and Design, has ranked fourth in an international competition in 3D Design. This global competition, organised monthly by the Gnomon Workshop website, is open to those who are interested and skilled in using 3D Design applications such as Maya, Cinema 4D and 3D Studio Max.

"I was searching for online tutorials on Maya, the 3D application of my choice," said Nicholas. "This introduced me to the

Gnomon Workshop website, which organises competitions aimed at everyone, from students to professionals, particularly those working in the film and gaming industry."

Nicholas explained how, after a number of attempts submitted for these contests, he finally managed to clinch the fourth place in the January issue, the theme of which focused on the design and development of a Pandoran Creature. "The goal of this competition," he explained, "was to fashion a creature that would fit within the scenario of the blockbuster movie, Avatar."

Apart from being awarded five free tutorials, Nicholas' work was also presented to the lead designer of Avatar, Neville Page. "This is of course a huge honour, but it could also open up new windows of opportunity to me, and I am sure it may have a highly positive effect on my career."

Link for the website (<http://forums.thegnomonworkshop.com/showthread.php?t=2728>)



Avatar Creature by Nicholas Caruana

JENNINGS FALZON (HND FINE ART)

MATTHEW GALEA (FOUNDATION DIPLOMA IN ART AND DESIGN)



Jennings Falzon following the Higher National Diploma in Fine Arts programme and Matthew Galea enrolled on the Foundation Diploma in Art and Design have submitted works which were selected to participate in the European Ceramics Contest in Bornholm, Denmark. This biennial symposium for contemporary ceramics is aimed at promoting contemporary European ceramics on a global level.

With over a hundred artists participating from thirty different European countries, this competition is divided into three categories. Jennings and Matthew submitted work to participate in the New Talent Category, which was introduced

for emerging professional ceramic artists under the age of 35. All entrants will have their work displayed during a two-month long exhibition to be inaugurated come September.

Matthew and Jennings became aware of this opportunity through their ceramics teacher, Mr George Muscat, who drew their attention to a press release issued by the Malta Council for Culture and the Arts, inviting Maltese ceramics artists to submit up to three works produced in the last four years. The submissions underwent a selection process, and the works of four Maltese artists, including those of Jennings and Matthew, were chosen to participate in the Denmark competition.

Both students agree that they are very excited at the prospect of having their work exhibited abroad, alongside so many other European counterparts.

"All these success stories are witness to the abundance of artistic and creative talent present on our small island," said Mr Stephen Vella. "However, this must be constantly nurtured and given the right exposure so that it may truly flourish!"



Forms and movements in space by Jennings Falzon



"Memorji ta' Tfulitek" by Matthew Galea



The participants



CREATIVITY WITHOUT BORDERS!!

The Leonardo Cultural Exchange Project undertaken by the Institute of Art and Design is indeed turning out to be an exercise which gives evidence of how far reaching creativity can be. Initiated in October 2009 in cooperation with Adam Smith Institute of Hair and Beauty in Kirkcaldy, Scotland and the Aarhus Tech in Denmark, the main aim of this project is to mobilize students and staff from the participating countries so that everyone involved may get a glimpse into each other's cultural background and educational environment.

At the same time, skills, knowledge and practices are shared in the development of work which targets a realistic brief. In fact, students from the three participating countries are working on a hair and fashion project demonstrating the individual flair, styles and abilities of students. Resultant work carried out during the various exchanges will then feature in a website, which together with branding and relevant promotional material, is also being designed and developed by the students themselves.

The first activity took place in Scotland in November, while this time it was Malta's turn. The first Malta mobility involved

a project on the theme of 'Music and Culture'. Teams made up of a mix of members from the three participating countries worked towards setting up a fashion and hair photo-shoot. While the hair and make-up was inspired by different music genres, Mdina and Valletta provided a unique cultural backdrop, resonant of the theme. At the same time, media students were constantly present to capture footage to be featured both on the web as well as on the MediaCAST Programme, 'Int min Int?', aired on the local national television.

The mix was intended to enhance the cultural element, which was further boosted by the involvement of the MCAST Institute of Community Services in the project. In fact, this proved to be a brilliant move, since it did not only provide the necessary resources and expertise to back up the event, but it also allowed for the synergy of the Institute of Art and Design and the Institute of Community Services into what is hoped to be the first of many collaborations. Students from both local institutes mingled and got to know each other, particularly the students-turned-models-for-the-day, who did a fantastic job of it all! The cherry on the cake was having as many as twelve members of the Malta Institute of Professional Photography during both photo sessions, which proved to be a learning experience for the students while providing the project with a series of professionally captured images.

At the end of the three-day project brief, students from the three participating countries presented the results of their labour to students, lecturers and administration staff at the Institute of Art and Design. This was a huge success! The foreign guests also expressed their appreciation for the impeccable organization and planning of the whole event, praising the fact that everything, from transport to schedules, were perfectly synchronized. They were also especially satisfied with the fact that each and every individual student and staff member who travelled to Malta was involved equitably in the project. Of course they could not help being grateful for the wonderful edifying experience which they savoured during the cultural trip to Gozo, where they were treated to the Island's natural and man-made splendors!

Ultimately, creativity shined through from all nooks and creeks! Creativity brought together individuals with different cultural and educational backgrounds, working as a multidisciplinary team, including fashion design, hair, web design, graphic design, photography and media, in an exercise which reflects the nature of the creative industries and the way they are developing.



NSTF SCIENCE WEEK

The variety of life ought to be cherished and celebrated. Consequently, the United Nations declared year 2010 as the International Year of Biodiversity. It invites us all to contribute in cultivating the richness of life in all its forms and variations.

This year's NSTF Science Week, that took place between 11 and 17 April 2010, promoted the theme thoroughly and, throughout the exhibition, one could become more aware of the need for safeguarding Earth and its inhabitants. Most science projects considered ways of looking after the planet including energy conservation and solutions to reduce our carbon footprint, the insulation of buildings to save on air-conditioning, and alternative ways of producing electricity. The latter included scaled models of villages complete with functional wind-turbines and solar-panels. One particular project suggested we could look more into harnessing the power of the waves, which is an alternative worth considering.

The Institute of Art and Design kept its annual appointment, and for the fifth consecutive year, organised the Little Scientist Village. Held for the first time at MCST, Kalkara, students following the ACCESS to Foundation Diploma in Art and Design course successfully put their creativity and presentation skills to fruition. Mr. Mark Theuma, Deputy Director, designed and coordinated the activity.

As in previous years, primary school children from a number of localities eagerly attended the one-hour

sessions. This year, the theme of Biodiversity inspired us to focus on insects and insect flight. Children participated in an interactive session, learning about insect anatomy and classification. The simplified lesson included diagrams, uncomfortable close-up shots of six-legged bugs and wriggly video clips which also received a few frowns from accompanying teachers! Children were intrigued by videos of smoke-chamber experiments which clearly demonstrated how mini vortices above an insect's wings create suction that keep it hovering in very tight spaces.

The lesson was complemented by a science toy that was constructed on-site by the children with a little help from our students. The toy was a model bee which was complete with Head, Thorax and Abdomen and flapping wings! Modelled with CAD software, the bee was constructed in cardboard which was coloured, folded and glued into place.

The creativity of art and crafts makes science fun and more appealing to a young audience. Such an approach should engage children in creative thinking but also encourage them more to consider sciences as an exciting and achievable study option. Such activities aim towards motivating children into being more receptive to learning and in turn more likely to retain the learnt information.

On behalf of MCAST Institute of Art and Design and NSTF, we would like to thank our ACCESS students for their enthusiasm and contribution to another successful Science Week.



The participants



Busy at work

ART AND DESIGN STUDENTS WORK FOR THE MCAST LIBRARY



Art and Design students have teamed up under the guidance of ceramics lecturer, Mr George Muscat, to work on the design and production of an original ceramics mural to be displayed in the MCAST Library at the Main Campus. The goal behind this project was the embellishment of the library area, thus rendering studying a more pleasant activity.

Five years ago, National Diploma students had worked on another project for the Library, with the final piece in ceramics mounted on a stainless steel base, still being the jewel in the library in terms of visual arts. This year, it was a group of students following the Foundation Diploma in Art and Design who were entrusted with this challenging task.

The project took off on the initiative of MCAST Library Manager, Mr Laurence Zerafa, who together with the Director of the Institute of Art and Design, Mr Stephen Vella, briefed the students and gave them the opportunity to unleash their creative abilities. The brief revolved around having the library, and other campus elements, inspire ideas which could then be developed into a mural representation.

Following a thorough brainstorming and idea generation session, the main theme which emerged was that of the library as container of heaps of knowledge and sources of inspiration for its users. Eventually, the mural was entitled the "Tree of Knowledge", and was designed in such a way as to be produced out of fifty ceramic elements, mounted individually on a fifty-metre wall space, to make up one whole artwork.

Each and every element of this mural is inspired from different facets of learning which may be found in MCAST, and they consist of an abstract representation of the different fields such as technology (keyboards, monitors and CDs). Other elements were inspired from

books, letter types and other symbolic references often associated with learning, information technology and other means of communication.

The mural was prevalently produced in a range of ceramics techniques. However, the use of other materials, such as glass, was introduced to create a range of attractive contrasts, which blended effectively with the primary medium. With green predominating as the universal representation of nature, colours play an important role in the overall composition, while the natural hue of the terracotta was duly respected and left to transpire in different areas of the mural.

"While working on this real-life project, students had the opportunity to experiment and use an array of methods and techniques," stated Mr Stephen Vella. "This has not only provided them with a priceless learning experience, but it has also given them a huge boost in self-confidence and pride in knowing that thousands of current and future MCAST students may relish and admire the inspirational work they contributed to producing."



George Muscat together with Art and Design students working on the Library mural

INSTITUTE OF COMMUNITY SERVICES

STUDENTS FROM THE INSTITUTE OF COMMUNITY SERVICES PARTICIPATE IN THE ANNUAL NSTF CONTEST FOR YOUNG SCIENTISTS

Between the 11 and 17 April 2010, three students from the Institute of Community Services presently following a National Diploma in Applied Science participated in the National Student Travel Foundation (NSTF) Contest for Young Scientists held at Villa Bighi during the annual NSTF Science Week. The participating project was entitled 'Use of algae in establishing a pollution scale index for freshwater sources in Malta'. The students participating in this competition were Leanne Libreri, Lisa Grech and Melissa Zahra.



From left: Lisa Grech, Melissa Zahra and Leanne Libreri during the NSTF competition at Villa Bighi

The NSTF Contest for Young Scientists involves undertaking a scientific investigation or experimental research that is not only original and innovative but also in an area where further research and development could be carried out.

Water pollution is one of these subjects that creates a lot of awareness with people around the world. This is because water is considered to be essential for life as it is vital for all known forms of life. Thus it is important to know when water is polluted and when it is not. Water that is considered suitable for drinking is called 'potable water' and this has certain characteristics such as nutrient content that distinguishes it from water that is not fit for drinking. One such nutrient parameter is water nitrate level where water having a nitrate content of less than 50mg per litre is considered good

for drinking. Nutrients are important for water quality for several reasons, but most often are associated with algal growth, including microalgae. Microalgae are microscopic algae, typically found in fresh water and marine systems, possessing chlorophyll which is the green pigment essential for photosynthesis.

Water pollution is the contamination of water bodies by human activities such as pesticides and fertilizers, which cause nutrient pollution, sewage wastewater and underground storage leakages which cause natural conditions such as eutrophication. Eutrophication is a process that gives rise to algal blooms in water bodies that have received excessive nutrients such as nitrates and phosphates. These nutrients would stimulate plant and algal growth thus leading to the formation of these algal blooms. Although the presence of nitrates does not have a direct effect on aquatic insects and fish, excess levels of it can also create conditions that will make it difficult for them to survive. Such conditions result due to lack of sunlight in the water and anoxic conditions (i.e. absence of oxygen) owing to the decomposition of the dead algae by bacteria.

Therefore, since it was found that there is a relationship between nutrients, microalgae and water pollution, it was decided to study fresh water microalgal species and their contribution to water pollution.

This relationship between water pollution and microalgae was studied in 1969 by Mervin Palmer who created a water-scale algal pollution index based on microalgal genus and species in order to rate water bodies for high and low organic pollution. In his studies, Palmer allocated twenty types of micro-algal species that were most tolerant to pollution and therefore are indicators of organic pollution.

The aim of the project was to identify the microalgal species present in three fresh water areas found in the Maltese Islands, being Chadwick Lakes, Għajn Riĥana and Simar, and test their nitrates, phosphates and chlorophyll A levels (tested for by the Water Services Corporation). Then, using the Palmer's Pollution Index as a guide to work with, amendments needed to be made in order to relate it to the Maltese scenario and

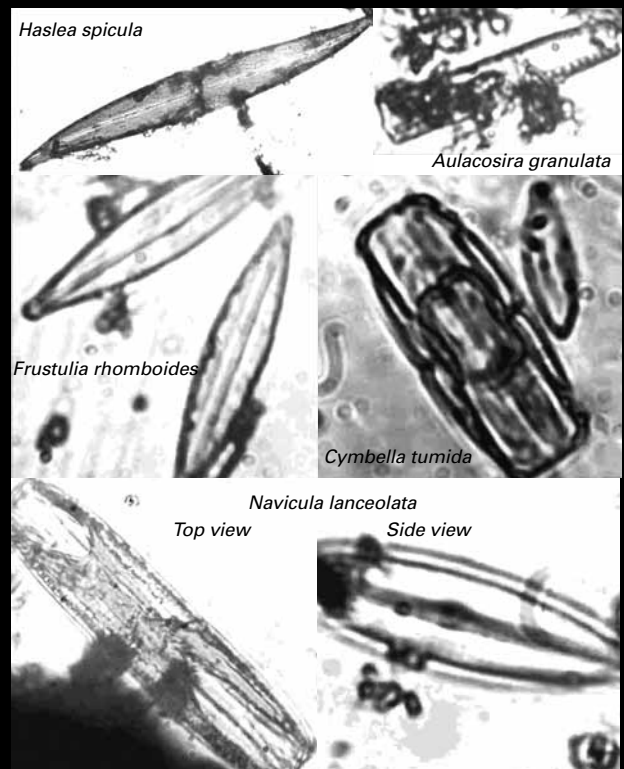
originate with the new 'Leamellis Pollution Index'. The primary concern when doing this project was to see whether these three fresh water bodies were considered to be highly polluted, slightly polluted or not polluted at all. The investigation and analysis consisted in collecting six water samples from each location each week for two months. Each time then three water samples were taken to the Water Services Corporation for nitrates, phosphates and chlorophyll A analysis while the other three samples were taken to the MCAST laboratory for microalgal identification.



At the MCAST Science lab, 10% formalin was added to the samples in order to preserve the microalgae and then were left to stand for one day. The hand pump was then used to remove the water, until a quarter of the bottle remained, which was then filtered. 0.003grams of the sample collected was mixed with 100µl 10% formalin and put on a slide which was observed under a compound light microscope.



From the observation of each slide, five different microalgal species, that are *Cymbella tumida*, *Frustulia rhomboides*, *Navicula lanceolata*, *Haslea spicula* and *Aulacosira granulata*, were identified and a pollution factor was established for each species. In our analysis, amendments to the Palmer's Pollution Index were made since the microalgal species present in Malta are different as they are specific to the Maltese Islands. This gave rise to the 'Leamellis Water Pollution Index' which was then used for further conclusions on the water bodies tested. The 'Leamellis Water Pollution Index' thus includes five different types of microalgal species being *Haslea spicula*, *Frustulia rhomboides*, *Aulacosira granulata*, *Navicula lanceolata* and *Cymbella tumida*.



30/11/2009	Cymbella tumida	Frustulia rhomboides	Navicula lanceolata	Haslea spicula	Aulacosira granulata	Polution Index Value
Chadwick Lakes 1	2	0	4	0	2	0
Chadwick Lakes 2	2	0	0	1	4	0
Chadwick Lakes 3	1	0	3	1	3	0
Ghajn Rihana 1	0	0	5	0	0	4
Ghajn Rihana 2	2	5	6	3	1	11
Ghajn Rihana 3	0	3	5	1	0	6
Simar 1	2	2	2	4	0	0
Simar 2	0	0	1	0	2	0
Simar 3	0	0	0	0	2	0

Table showing the microalgal count of each slide and the final pollution index value.

The algae which was most in abundance on each slide was recorded. If two or more algae had the same exact abundance each was recorded. This was done in order to establish how many times the five algae were abundant the most.

Each alga that was present five times or more was considered a pollution contributor. Each microalga considered as a pollution contributor has a resulting pollution index which can be found from "Leamellis Water Pollution Index". The resulting pollution index for each microalga was added up for each slide. The results obtained gave rise to the pollution index value.

Name of Algae	Types Most in Abundance	Pollution Index
Cymbella tumida	0	2
Frustulia rhomboides	34	5
Navicula lanceolata	16	6
Haslea spicula	10	4
Aulacosira granulata	8	3

Table showing the abundance of each algae and their relative pollution index ('Leamellis water pollution index')

The pollution index is established according to the range on how many times that particular alga was present in abundance in every slide. In order to come up with the values for the pollution index a particular range was chosen.

Range	1-3	4-6	7-9	10-12	13-15	16-18
Pollution Index	1	2	3	4	5	6

Table showing the range chosen together with the respective pollution index, used in determining Leamellis water pollution index.

DETERMINING THE WATER POLLUTION

According to MERVIN PALMER (1969); and the pollution index value is 20 or more, this is evident proof that there is high organic pollution when the pollution index value is 15-19 this shows slight organic pollution, while a lower value than that, shows very low organic pollution. One can notice that since the water bodies tested had a pollution index value that ranged between 0 and 17, organic pollution was low, probable or none at all.



Since water bodies, algae feed on nitrates and therefore the higher the nitrate content is, supposedly this will result in a higher amount of algae present.

The pollution index value was further analysed so as to find out which of the three different places investigated was the most polluted. This was carried out by counting the number of times each place resulted in having organic polluted water. The results obtained were then compared with the results of the nitrates. Chadwick Lakes was found to have the highest amount of both, as the nitrate content varied from 92-234mg/L and this place was considered to exhibit some level of organic pollution for eight times. Chadwick Lakes was followed by Għajn Rihana where the nitrate content varied from 1-30mg/L and some level of organic pollution was found to be exhibited six times; and finally by Simar where the nitrate content varied from 1-12mg/L and some level of organic pollution was exhibited five times. The fact that Chadwick Lakes is surrounded with fields that are fertilized by farmers is a clear indication that the probability that runoff ends up in Chadwick Lakes causing the nitrate level to increase is high. This is clearly shown from the results obtained from Water Services Corporation and the amount of algae found.

Tests for phosphates and chlorophyll A were also done by the Water Services Corporation. Phosphates can result from the presence of sewage, pesticides but also from detergents in the water body. The phosphates content in all three locations was minimal and considering the fact that all the three places are found in rural areas, this means that contamination from phosphates such as from wastewater containing detergents and laundering agents does not take place or takes place in very little amounts. The resulting values of phosphates do not vary much from one another, ranging from <math><0.05\text{mg/L}</math> to 0.715mg/L. Chlorophyll A is evident proof of the presence of algae because chlorophyll A is an indication that algae are present. From our results we noticed that the values ranged from <math><0.002\mu\text{g/L}</math> to $0.21\mu\text{g/L}$.

This range of values is an indication that few algae were to be found in our water samples and this proved right, because at times it was even impossible to get the required amount of algae in order to make the slides.

Although recordings of pH and temperature were taken, there was not a great variation in values and consequently they did not affect our final result.

From the analysis, it was found that nitrates play a very important part in causing water pollution. Specialized water treatments that remove nitrates in water include the following: ion exchange, biochemical denitrification and reverse osmosis. One must keep in mind that such treatments are very costly and so will only be incorporated if such a water body will be used for drinking purposes. Further research should be done on less costly ways how to remove the nitrates found in the water bodies.

During the whole analysis, problems have been encountered. One of the main problems was that the allocated time for the realization of this project was very short and so was the sampling period. It would have been ideal if this sort of analysis was done over a longer period of time so one can examine the seasonal changes and their effect on the water bodies. Samples would be taken more frequently, example every day, and could also be taken at different times of the day, being in the morning, at noon and in the evening. Such results would be more accurate and will have a more meaningful purpose.

Further research can be done on the presence of other different algae in the Maltese Islands so that 'Leamellis Water Pollution Index' could be extended. Additional development can also be done as to be used for other countries of the Mediterranean. Moreover, since the 'Leamellis Water Pollution Index' is based on fresh water, the Water Services Corporation could make use of it so as to determine whether a particular water body is polluted.

ELECTRICAL AND ELECTRONICS ENGINEERING ON-THE-JOB TRAINING AT HOB SOFTWARE GERMANY

BY MATTHEW CINI SARREO

I joined HOB Software in 2008 right after completing the Diploma in Computer Engineering at the MCAST Institute of Electrical and Electronics Engineering. Working and living in a foreign country sounded intimidating at first, but this has been a rewarding experience as it enabled me to learn a lot about software engineering and has also helped me in character building and formation.

I was assigned to the Connectivity Department managed by Mr. Manny Galea, an ex Fellenberg Institute student, while Mr. Richard Wunderlich was assigned as my mentor. I spent the first year working on software engineering assignments and getting used to developing large projects. A variety of training was provided. Focus was given to C++ syntax, proper programming techniques, software design approaches and debugging techniques. The latter involved using advanced debugging tools (for example, Insure++)

used to discover memory related bugs which in some cases can be almost impossible to notice in large projects.

Most of the projects I worked on also involved network communications and therefore a substantial amount of training on networks was also provided. This included courses on a number of network debugging tools and network design tools. Other courses covered JAVA and X86 architecture and assembly language.

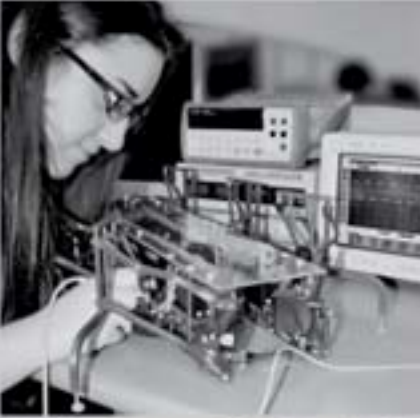
The modules followed in the Diploma in Computer Engineering course including programming, algorithm design, data information systems and operating systems proved to be a good base for my on-the-job training. I would like to thank HOB Software Germany for this excellent training experience which I would recommend to anyone!



Matthew Cini Sarreo at HOB Software

“We at HOB Software Malta are mainly focused in doing research and developing better products. We strive to give our customer a product with something special. 'One idea more' is imprinted in the company's mentality. To accomplish this, our employees require creativity, initiative, maturity and intuition in extending innovation and implementing products by doing extensive research.

We believe that many of our young people have the raw competence to achieve this and the year spent in Germany helps these people to polish their abilities and develop the necessary skills to be able to work in such an environment.” (Noel Beck, HOB Software)



PROJECTS EXHIBITION



MCAST INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERING



The aim of this exhibition is to showcase the students' end-of-year projects as well as to provide prospective students, parents and persons from the various industrial sectors with an idea of the various learning and training opportunities available at the Institute of Electrical and Electronics Engineering.

Venue: The Malta Chamber of Commerce, Enterprise and Industry,
The Exchange Buildings, Republic Street, Valletta

Date: 2 July – 5 July 2010

Viewing Hours: Friday 9am-6.30pm, Saturday 9am-6.30pm, Sunday 9am-1pm, Monday 9am-6.30pm

Institute of Electrical and Electronics Engineering

Main Campus, Triq Kordin, Paola PLA 9032

Tel: 00356 2398 7700 • Fax: 00356 2398 7740 • E-mail: eei@mcast.edu.mt

ALBERTA GROUP DONATE A PHOTOVOLTAIC SYSTEM TO THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERING



Alberta Group has recently donated a photovoltaic system to the Institute of Electrical and Electronics Engineering. The system consists of eight 180Wp panels connected to a 1.5kW Fronius inverter. The system chosen for the project includes an automatic shutdown system that will be activated in case of a fault in the electrical system. This shutdown system generates 1.4kWp, which means that it will provide the Institute with approximately 2300Kwh (or units) each year. Because it is 'grid-tied', MCAST's photovoltaic system will be converting solar energy into electrical energy, which in turn will be fed into the utility grid. It is estimated that the system will generate around €60 of electricity per year.

The system also includes a networked connection, which can download a number of parameters from the inverter to be displayed on a remote screen. Such parameters include kWh generated, CO2 emissions and also savings in euro.

The Institute is working hard to introduce modules focusing on renewable and sustainable energy during the coming academic year.

Alberta Group is a leading provider of total solutions and specializes in fire, safety and security. Alberta's portfolio of services has now been extended to include Energy Solutions including photovoltaic systems, solar water heaters, water heat pumps and UV film.

INFORMATION AND COMMUNICATION TECHNOLOGY

ICT STUDENTS VISIT THE EUROPEAN PARLIAMENT IN BRUSSELS

Between the 5 and 7 May 2010 thirty six students from Institute of Information and Communication Technology accompanied by four lecturers were invited to the European Parliament in Brussels for a three day visit in order to get acquainted with this European institution that governs the EU member states.

This visit was possible with the funds acquired by the Institute of Information and Communication Technology from the European Parliament under the 'Opinion Multiplier Scheme'. Besides the places of interest, the group visited the Maltese Representation to the European Union and the European Parliament where they were met by two Maltese MEPs, Dr Simon Busuttill and Prof. Edward Scicluna. Both MEPs devoted an amount of time and explained the functions of the European Parliament. This meeting was followed by a parliamentary preliminary hearing on the 'Greek financial crisis' that was going on at the time.

Mr Mario Pace, Acting Director at the Institute of Information and Communication Technology stated, "Our students stand to benefit from visits like these to the heart of Europe. Not only do they provide a better understanding of how the European Union is governed but the students are exposed to different cultures and new experiences outside their restricted parameter."

Mr Mario Zammit, group leader and organizer of this expedition commented, "I was really impressed by the amount of teamwork and solidarity the whole team has shown, so that the venture could be a total success. The experience gained is enormous, especially for a number of students who went abroad for the first time:



MARITIME INSTITUTE

Former MCAST Maritime Institute students presented with 'Best Officer Cadet' Awards by Grimaldi Group, Naples



Dott. Guido Grimaldi presenting Mr. David Mercieca with a cheque for Euro 5000

On Thursday 22 April 2010 three former Maritime Institute Officer Cadets were presented with the Grimaldi Group Awards for achieving the highest grades during their training course as Officers in Charge of a Navigational Watch. Dr Guido Grimaldi, Commercial Manager of Grimaldi Lines, presented the award in the presence of the Hon. Dr Austin Gatt, Minister for Infrastructure, Transport and Communications, Mr Paul Attard, President, MCAST Board of Governors, Prof Maurice Grech, Principal/CEO, Capt Reuben Lanfranco, Director, Maritime Institute as well as senior representatives from Malta Motorways of the Sea and MCAST Maritime Institute Staff.

This year the prize was awarded for the September 2006 Officer Cadet intake, who ended their course in 2009. Mr

David Mercieca placed first and received a €5000 cash prize, while Mr. Steve Gauci and Mr. Mark Mercieca placed second and third and received cash prizes of €3000 and €2000 respectively. The students were chosen following a rigorous selection process whereby a panel of lecturers gave points to each student registered for the Officer in Charge of a Navigational Watch Course for his/her performance. Points assigned were based on students' performance during assessments and assignments as well as final examinations. This is the second time that Grimaldi Lines awarded these awards to former students of the Maritime Institute. The previous prize was awarded in 2008.

In 2007, the MCAST Maritime Institute entered into a cooperation agreement with Malta Motorways of the Sea, a Grimaldi Group Company. Through this agreement, Malta Motorways of the Sea committed itself to support the training of Maltese Officer Cadets in the process of becoming merchant marine deck and engineering officers. Maritime Institute Officer Cadets are offered opportunities to undertake their sea-time training on board vessels sailing under the flag of Malta Motorways of the Sea and other companies of the Grimaldi Group. It was through this close and positive relationship developed with MCAST's Maritime Institute that Malta Motorways of the Sea had donated €133,000 for the upgrading of a modern simulator to support the training of Malta's maritime human resources.

Italteam Shipping Srl continue Training Courses at the Maritime Institute

After a successful Refresher Training Course was run for Italteam Shipping Srl Deck and Engineering Officers during February and March 2010, another course of training commenced on Monday 17 May 2010 at the Maritime Institute for Italteam Shipping Srl through the Italteam Malta Branch, represented locally by S. Mifsud & Sons Ltd. The training consists of refresher courses for Deck and Engine personnel as well as courses in Maritime English. New components on the International Ship and Port Facility (ISPS) Security Code as well as the International Safety Management (ISM) Code were also included in the May training sessions for all deck and engine personnel. The emphasis of the training is that despite the different nationalities of the students attending, all courses are being delivered in English to enhance the communication skills of the participants in this language.

Armed Forces of Malta complete VTS Training Course at the Maritime Institute

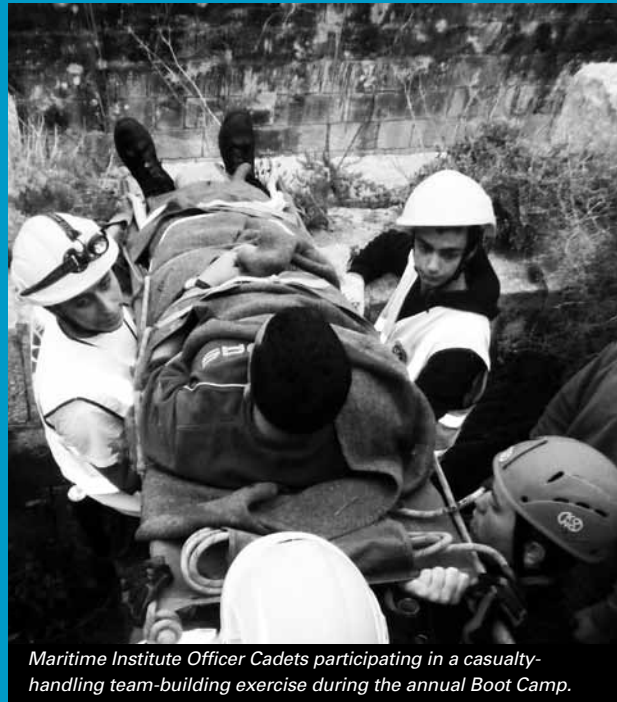
Once again the Armed Forces of Malta have completed yet another Vessel Traffic Service (VTS) Operators Training Course at the MCAST Maritime Institute. Sixteen Non-Commissioned Officers and other ranks spent four weeks of intensive training at the Maritime Institute on a course run jointly by Capt. Anand Dayal and Capt. Reuben Lanfranco together with Maritime Institute full-time lecturing staff. This was the second VTS Operators course organized at the Maritime Institute since 2009 and was intended for personnel serving as Operators and Supervisors at the Malta VTS Station at AFM Operations Centre, Luqa.



Maritime Institute Officer Cadets Training at Fort Madalena, Madliena

Between the 12 and 14 March 2010, MCAST Maritime Institute Officer Cadets participated in an adventure training camp at Fort Madalena, Madliena. The camp was organized by Mr. Martin Borg who is the Institute's Physical Training Instructor. The Officer Cadets participated in a series of leadership and adventure training programmes and also participated in activities with members of the St. John Rescue Corps over the weekend. After the camp, a large number of Officer Cadets even volunteered to join the St. John Rescue Corps to participate further in specialized rescue training. MCAST and the St. John Rescue Corps have in the past signed a Memorandum of Agreement on mutual cooperation and training.

In line with the Leadership and Management training programme, first-year Officer Cadets attended a two-day preparatory session organised by the MCAST Counselling and Guidance section on how to cope with certain issues which they may face during their 12-month phase of training at sea. For many who have never experienced being away from family and friends for a long duration of time or served on a ship which poses a totally different and difficult environment, this may become a problem. It is therefore important to prepare for this challenging phase and to train oneself to accept the new environment he or she will be living in over the next 12 months.



Maritime Institute Officer Cadets participating in a casualty-handling team-building exercise during the annual Boot Camp.

It was with this intention in mind that the MCAST Counselling and Guidance section launched a two day training course to prepare the Officer Cadets for the challenges that lie ahead. The training was held at Fort Madalena, Madliena, Headquarters and Training School of the St. John Rescue Corps, where the cadets had the chance to work together in an isolated and different environment. The Cadets thoroughly enjoyed the course and recommended it to other Officer Cadets who will be embarking on sea-going vessels.

OFFICER CADETS AT SEA

The following Officer Cadets were at sea on the following vessels during the period this article was written:

Cadets at Sea	Embarking Vessel	Date Embarked
Pierre Mangion	MSC Boston	9th August 2009
	Conti Shanghai	24th February 2010
Alexia Fenech	MV Eurocargo Istanbul	10th August 2009
	MV Sorrento	16th December 2009
	MV Euroferry Sicilia	25th March 2010
James Sammut	MV Grande Buenos Aires	17th August 2009
	Salina Bay	5th April 2010
Fabrice Bonello Dupuis	HMS Lawrence	21st August 2009
	MSC Alexandra	March
Benjamin Borg	MV Grande Francia	23rd August 2009
	Conti Singa	27th March 2010
Christian Coleiro	MT Salina Bay	26th August 2009
	Grande Colonia	8th December 2009
Luke Fenech	MV SCI New Delhi	22nd September 2009
Gordon Lungaro	MV Grande Sicilia	4th October 2009
Kenneth Ciantar	MT Paradise Bay	5th October 2009
Max Galea	MV Grande Napoli	8th October 2009
	MV SCI New Delhi	25th March 2010

MCAST Maritime Institute



**OIC
NAVIGATIONAL
WATCH**

**OIC
ENGINEERING
WATCH**

CHIEF MATE



**PROBATIONARY
OFFICER CADET**



INSTITUTE OF MECHANICAL ENGINEERING

ERASMUS PROGRAMME

STAFF MOBILITY – STAFF TRAINING



The participants

During the 23 to the 27 March 2010, Mr. Emanuel Gatt, Lecturer and Ms. Mariella Fenech, Assistant Lecturer, both members of the lecturing staff at the Institute of Mechanical Engineering, had the opportunity to attend staff training at the Dublin Institute of Technology.

This visit was held under the Erasmus Programme for staff mobility and training and was co-organised by MCAST. The preliminary contact was made by Mr. David Bonello, Deputy Director of the Institute of Mechanical Engineering with the Director of Dublin Institute of Technology, Mr. John Lawlor. Mr. David Bonello recommended this institution due to the similarity of their courses to those held at the Institute.

In rather cold but sunny weather, the lecturers lodged at Cassidy's Hotel, just ten minutes away from Dublin Institute of Technology. The major advantage was that no linguistic preparation was required because the Irish, apart from their language, make use of the English language as if it were their own. The only preparation done was to slightly alter the lectures in order to suit different cultured students.



*Ms Mariella Fenech and Mr Emanuel Gatt outside the
Dublin Institute of Technology*

The staff mobility visit started with a meeting with the head of the school during which the courses offered by both institutions were discussed. This was followed by a tour of the workshops and labs available on the campus during which the lecturers viewed the various machinery, both conventional and computerised, that the students use to train and to manufacture their projects. Most of the lectures were delivered in these labs and workshops. The students showed great interest in the way Maltese students tackle certain problems while working on their projects. After the lectures the lecturers had the opportunity to meet students who were reading for their Masters and also others who were working on their PhD projects.

During their staff mobility, they also had the opportunity to attend a lecture on the importance of having a portfolio, how to construct it and what to include in it, by a visiting American professor at the Institute. The lecture was extremely interesting and instructive.



Students at the Delimara Power Station



HND Mechanical Engineering Students at AFM



Rapid Deployment Unit at the Maritime Squadron

Industrial Visits

Ms. Mariella Fenech, Assistant Lecturer, Mr. Emanuel Gatt and Ing. Louis Aquilina, Lecturers at the Institute of Mechanical Engineering, together with students from the Higher National Diploma Course, visited a number of industries in order to assist the students to associate the knowledge they learn in class with its practical application.

These visits were held at Medelec Switch Gear Ltd, Methode Electronics Ltd and Trelleborg Sealing Solutions Ltd. During these visits, students had the opportunity to follow the whole process in which products such as external/internal car switches (in the case of Methode Electronics Ltd), 'O' rings used for fuel injectors (in the case of Trelleborg Sealing Solutions Ltd) and switch gears (in the case of Medelec Switch Gear Ltd) are being produced in high quantity and quality, that is from the raw material to the finished product. The processes included injection moulding and compression moulding (the process of how products are produced), spark erosion (the process of how the contra-forma is made), ultrasonic welding, shaping/bending machines, punching machines and many others. Representatives of the three companies stated that investments were being made to buy new machines in order to produce new products and that they will continue to sponsor apprenticeship students from MCAST in the future.

During this semester, students from the Higher National Diploma Course (Marine, Plant and Mechatronics streams) at the Institute of Mechanical Engineering also visited the AFM Maritime Squadron. The visit was a successful one and the students were taken around one of the patrol boats of the AFM Maritime Squadron. The guide gave an overview of life and operations at the Maritime Squadron and particularly on an AFM patrol boat. The students were extremely interested and put forward various questions which were duly answered by the AFM hosts. The visit was made possible through the kind intervention of Captain David Aquilina, Captain Joseph Cachia and Captain Carmelo Mangion.

The visit to the Delimara Power Station was very interesting and, with the help of Ing. Testaferatta, students had the opportunity to see the 75MVA BHEL electric generators, 47MVA and the 55MVA brush generators, the 37.5MW and 38MW gas turbines, the 60MW fully condensing steam turbines, steam generators, and the 132kV and the 33kV outgoing feeders. The latter was installed for future use.

Gozo Centre Sports day at Gozo Centre



On Friday 23 April 2010 students and staff at the Gozo Centre participated in Sports Day organized with the help of Adele Muscat, Sports Coordinator and Louis Sciberras, Lecturer. Sports Day was held at the Gozo Seminary Gym.

The various disciplines in which students participated were divided into competitive and non-competitive sports. The competitive sports included football (5-aside), volleyball and basketball, while the non-competitive sports included table tennis and billiards. Students were also invited to join in gym sessions while others also joined in aerobic sessions held by Ms. Elaine Atkins and Ms. Daniela Sciberras.

Through the organization of Sports Day the Centre tried to instil the values of fair play, sportsmanship, self-discipline and respect for rules, together with an understanding of the importance of exercise in maintaining a healthy lifestyle.



LIVE-IN EXPERIENCE IN MALTA

Thirty six students and four lecturers from the Gozo Centre participated in a teambuilding exercise during a weekend in Malta between Friday 19 and Sunday 21 March 2010.

This extra-curricular activity was successful in bringing the students attending the Xewkija and Xaghra Centres closer together and also in bridging the gap between the lecturers and students. The paintball game was one of the most popular activities and also provided a great opportunity for all to practise teambuilding skills. The

students even impressed the owner of the paintball site who congratulated them for their good behaviour and adherence to the rules!

On Sunday morning, the group participated actively in the Sunday Mass held at the Millenium Chapel, Paceville. They thoroughly enjoyed this live-in experience and have already asked administration to plan the same activity for next year, hopefully on a bigger scale!

The group that attended the Live-in Experience in Malta



VOLUNTARY WORK DAY AT RICHMOND FOUNDATION

Friday 26 February 2010 was a very different day for the MCAST Xewkija Centre staff and students. Instead of the usual lectures and tutorials, lecturers and students carried out philanthropic work at various residences of the Richmond Foundation. The day commenced earlier than usual as the group caught an early ferry to Malta. Staff and students spent the day cleaning, plastering, painting and carrying out gardening tasks.

These initiatives contribute to the holistic formation of students. Ms Doris Gauci, CEO Richmond Foundation, expressed gratitude and appreciation for this noble initiative and stated that young people have the potential of offering an immense contribution to organizations. The work performed by the staff and students saved Richmond Foundation hundreds of Euros.

One of the teams that helped out at Richmond Foundation



INTERNATIONAL PROGRAMMES OFFICE

ELECTRICAL AND ELECTRONICS ENGINEERING STUDENTS IN ITALY

by Dario Schembri, Benjamin Micallef and Rebecca Galea, BTEC National Diploma in Electrical and Electronics Engineering

Our placement took us to Copertino in the south of Italy, a place rich in history, traditions and cultural heritage. Copertino will have a special place in our hearts after spending three weeks living and working in this historical city. This experience of working and living in a foreign land has helped us understand different lifestyles and work environments. Being away from our families, our loved ones and our schoolmates was very hard to digest in the first few days; however, by the end of it all, we wanted to stay for another week! We immediately clicked and in fact during our first meeting we all said the same words, "This is going to be fun and a good experience," and I can assure you that it was really fun and interesting!

Anna Lisa Trono, our coordinator in Lecce, was very helpful and helped us to settle down. During our first week we attended basic Italian lessons organized by the IRIS organisation. Fortunately enough, we were all working with 'TEA di Salvatore Martino'. Benjamin and I were instructed to work on solar panels installations while Rebecca had an office job.

During our day off we visited the skiing resort of Pescasseroli, which was a six hour drive from Copertino. This was one of the best experiences we ever had since Rebecca and I drove on foreign soil. However, Benjamin was to sit at the back regretting the fact that he was not licensed to drive. The weekend flew by and on Sunday we were on our way back to Copertino.

The following week of work rolled by and the last day was one of the funniest days since the three of us were working with Giuseppe, one of the employers, preparing a structure for the solar panels to fit on. Rebecca was trusted to drive the company's truck while I had to drive the car. The last night in Copertino was one to remember, meeting Giuseppe, having our last meal and one or two drinks.

This experience will definitely help us in our studies and in our work. This experience has also changed the way we perceive working away from Malta. On behalf of my friends, I would like

to thank Anna Lisa Trono for her patience and help during our stay and TEA Company for providing us with the three week work placement. Also, I would like to thank Bjorn Azzopardi for the preparation meetings and for his patience.



Rebecca Galea and Benjamin Micallef in freezing temperatures just few miles away from Malta, in Southern Italy



One of the photovoltaic systems that MCAST students worked on... wonderful experience for Electronics students

ERASMUS MOBILITY EXPERIENCE AT HUB BY KRISTY LEE SEYCHELL

I was very surprised to learn that my colleague and I had been chosen for an Erasmus mobility experience. During the last two years the MCAST International Office established new contacts with various European academic institutions and Mr Bjorn Azzopardi had preliminary contacts with Mr Stefaan Debrabandere, International Programmes Co-ordinator at Hogeschool University Brussels.

Mr Debrabandere provided us with the opportunity to participate in the staff mobility training at HUB. He warned us that most of the documents at HUB were in Dutch since that is their mother tongue language but he also assured us that our staff training would be in English. We agreed on a final programme from 15 to 19 February 2010. I started my research on HUB to familiarise myself with the Institution prior to the start of my staff training programme.

HUB (Hogeschool University Brussels) founded in 2007 is the result of a merger of four Brussels institutions for Higher Education (EHSAL, HONIM, VLEKHO and the Catholic University of Brussels). It is recognized and subsidised by the authorities of the Flemish Community. HUB unites 6,000 regular students in degree programmes and 9,000 participants in lifelong learning education. The population of regular students is truly multi-cultural, with over 500 non EU students, over 100 EU students (non Belgians) and the rest Belgian students. The total staff population at HUB is 1,100.

HUB offers Professional Bachelor Programmes and Academic Bachelor and Master Programmes. Programmes are taught in Dutch, however, since there are a lot of foreign students, most programmes are also offered in English. The programmes are equivalent to Level 6, Level 7 and Level 8 of the European Qualifications Framework.

My experience started on Sunday 14 February 2010 on a flight from Malta to Brussels Airport, followed by a shuttle train to Central Station. The hotel was a stone's throw away from the central station. The weather was very cold and there was snow everywhere, I felt like I was in a Christmas card. That evening I was very excited that our journey at HUB was about to start.

On Monday morning, we met Mr Stefaan Debrabandere, International Programmes Co-ordinator (our host), who gave us a presentation on the HUB Campuses and also gave us a tour of four of the campuses. I had a meeting at Campus Stormstraat on Student Counselling with Mrs Martine Vanpoucke, who co-ordinates Students' Activities and

Participation, International Services, Student Coaching and Social Services. Student Counselling unites ten staff members in all, who offer a one-to-one individual service to students. The peak season of this department is at the end and at the beginning of a new academic year or between semesters when students tend to resign/fail the most. Students can visit the office during office hours and if no one is available, they may have to make an appointment or come back at a later day. At the beginning of the academic year students are given a presentation on student counselling and are also given leaflets. Information is also available on the HUB website and on the notice boards, so students can take the initiative to ask for the service. This department works close to the students administration (Registration Office) and is very similar to the Information and Support Service at MCAST. Unlike MCAST, students at HUB have to pay a Registration Tuition Fee of €560 per academic year, whereas at MCAST only foreigners (non EU students) have to pay a registration fee. Like MCAST, prior to starting a course, students with learning difficulties will have to sit for an aptitude test so as to test their deficiency.

During the whole week I had several meetings. I had a meeting at Campus Koningstraat on the Alumni database with Mr Ward Haylen who is responsible for Alumni Professional Programmes, and with Ms Marie Claire Demeue, Alumni Co-ordinator, who is responsible for Alumni Academic Programmes.

I had a meeting on External Relations with Ms Micheline Gevelers, Director of External Relations, and Ms Leen Smisdom where I delivered my presentation on Maintenance Grants. They were really interested in our system of grants and were actually surprised! Afterwards, I asked them to give me some information on HUB Apprenticeships. The weeks of apprenticeship may differ according to the profession of the students. In some professions, like teachers and nurses, students have to carry out apprenticeships throughout the whole academic year – dual system of school and work, similar to MCAST Apprenticeship Schemes, TAS and ESTS. Academic students do not follow any apprenticeship. Their studies are more theoretical, focused on fundamental research and geared towards further studies at Master Level.

I had a fruitful interview session at Campus Koekelberg with Ms Els Jacobs, Co-ordinator and one of the committee members of the Social Welfare Service. She explained their system of Credits which is linked to the Grants System. A student at HUB has to have 60 credits every year, to benefit from the full grants. If the student has less credits, it means

that the student was not fully successful and will therefore get lower subsidies from HUB and a lower Flemish government allowance, if applicable. I think it would be beneficial if the same system is adopted at MCAST.

- Help and guidance with grants of the Flemish Government
- Advance on the grant of the Flemish Government
- Staggered payment of the tuition fee
- Additional (STUVO) student allowance
- Guidance on how to find the perfect accommodation.

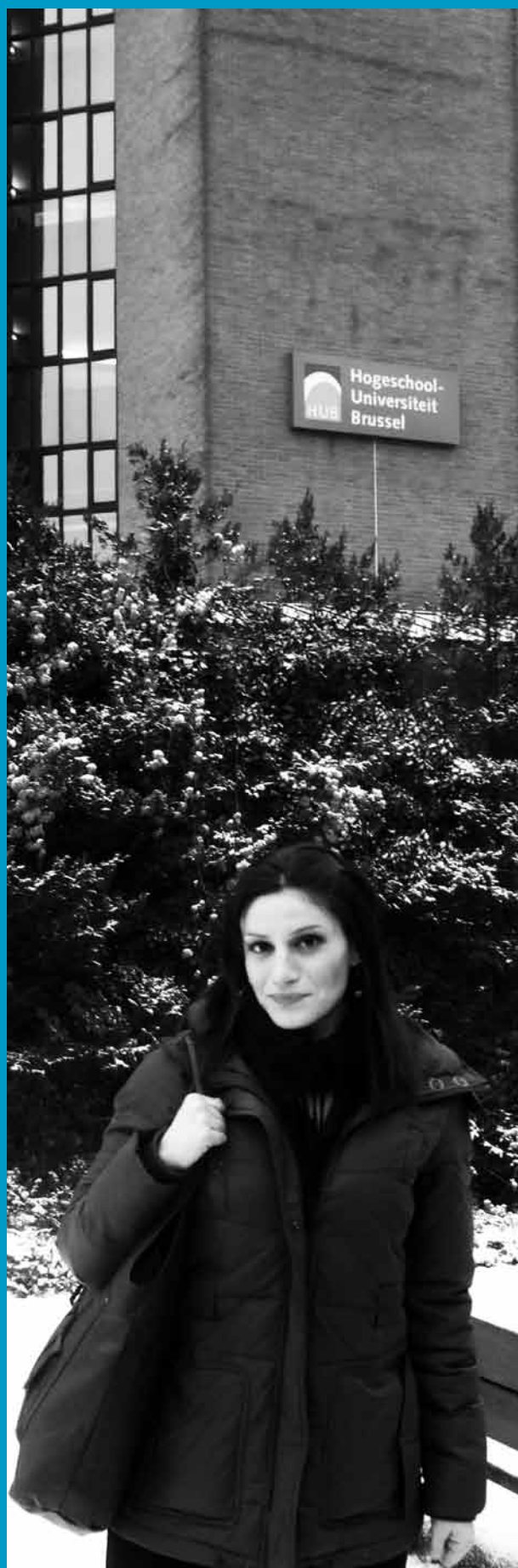
I also had a meeting at Campus Nieuwland with Ms Karline Jolie and Ms Annaleen De Ridder, both Administrative International Officers. Ms Jolie spoke to us about International Projects. At HUB innovative and renewed projects are designed, focusing on important social developments. There is a wide range of running projects and each project can take a maximum of 3 years during which young students get to meet older people and learn from their experience and exchange ideas.

Ms De Ridder gave us a presentation on the International Programmes, especially on Erasmus. She also showed us the database they use as well as the files. She showed us around the whole campus where we took some photos of the classrooms, library and the medieval building. She also gave us a tour at the New Campus Terranova where I was really impressed with all the modern equipment. In the afternoon we had the closing meeting at Campus Koekelberg with Mr Stefaan Debrabandere and then he took us for dinner to celebrate the end of a fruitful experience.

It was a very intensive week, and though we had to travel a lot, we met a number of staff at HUB who made us feel very welcome. I would like to thank everyone at HUB and MCAST International Office for providing us with this wonderful experience.

On Saturday we had some time for cultural sightseeing and to do some shopping and then in the afternoon we took a taxi to Brussels airport to fly back to Malta.

I have enjoyed multi-cultural views and informative meetings. I feel that my exchange experience in Brussels exposed me to new ideas. I realised that there is quite a number of similarities between MCAST and HUB but there are also different practices and different methodologies which I believe may be beneficial should they be implemented at our college MCAST.



Kristy Lee Seychell, clerk at the Stipends office, in front of the Hogeschool Brussel Building in Brussels, Belgium

MECHANICAL ENGINEERING STUDENTS ON A WORK EXPERIENCE IN SWEDEN

Three Mechanical Engineering students studying Motor Vehicle Engineering, namely Luke Borg, Chris Falzon, and Daniel Zarb, were selected to go for a three-week work experience in Norrtalje, Sweden.

Arrangements were carried out by Ms Paivi Wedin, International Coordinator and lecturer at the Teknikgymnasiet, Norrtalje, Sweden and Mr David Bonello, Deputy Director within the Institute of Mechanical Engineering, with the assistance of the MCAST International Programmes Office.

The three students were sent to Norrtalje, a town which is situated around 100 kilometers North East of Stockholm. Luke carried out his work experience within the Volvo/ Renault selling and servicing outlet, while Daniel worked at the Scania Truck Building Plant and also at the Buslink Servicing Company. Christian worked at the Buslink Servicing Company.

The aim of these work experiences was to show students how large heavy vehicle servicing garages handled large fleets of buses or trucks. Most of the servicing carried out on these large vehicles is based on routine maintenance based on the mileage and running hours for each bus.

The Norrtalje Buslink servicing garage is one of the various satellite garages that Buslink owns. Norrtalje Buslink base is responsible for a fleet of 250 buses. The students displayed excellent knowledge and skills during their work placement and as a result have been invited by Buslink to carry out further work experience during the coming summer months.

Apart from the on-job-training experience, the three students also had time to socialize with their work colleagues. They participated in cultural visits in the Swedish capital, Stockholm, they visited the Vaasa Museum and were just in time to attend to the changing of the guards within the Royal Palace of Stockholm.



Daniel Zarb and Christian Falzon at the Buslink Garage



Christian Falzon at his work placement in Norrtalje, Sweden



Colleagues at work - Christian Falzon and Daniel Zarb, third and fourth from left, at the back row.

ART AND DESIGN STUDENTS IN IRELAND



Charlene Scicluna, Angele Azzopardi and Maria Bezzina about to go skiing



Charlene Scicluna caught in action

Three Art and Design students, Charlene Scicluna, Maria Bezzina and Angele Azzopardi participated in an exchange programme in Ballybrack, Ireland. Ballybrack is a very quiet area in the suburbs, close to Killeny Bay and Hills.

Angele Azzopardi had the opportunity to work in a design studio and worked on interesting projects such as the design of menus, logos and also picture re-touching. She also designed layouts for popular companies like Aviuva Health Insurance. She gained experience in the new Adobe programmes like Indesign, Coral Draw, and also Photoshop

and Illustrator. Charlene Scicluna worked as a photographer with Lensmen Photographic Agency. She worked on different techniques including editing and also got the opportunity to work on outdoor photography and also in the studio. Maria Bezzina worked with Interiors, a small family-run business. Her duties included assisting co-workers with the tasks that needed to be accomplished. She learned lots of new things about interior design including satisfying the clients' needs, being patient and also technical issues such as measuring and cutting certain fabrics.

GOZO CENTRE STUDENTS IN THE UK

Christian Bonello, Christabelle Camilleri and Aaron Cini, students following Care Courses at the MCAST Gozo Centre, participated in a Leonardo Da Vinci work experience mobility in the UK. The initial preparatory meetings were conducted during the Summer recess and the three week exchange programme took place in January 2010.

The three weeks in Lincoln were great. The students spent four days at the work placement and one day at Lincoln College. Christabelle was placed at Magical Moments. This is a nursery which caters for children aged between 0–5 years. This nursery is divided into two sections, one for children aged zero to two years and the other section is for two to five year olds. In this nursery, children play and learn how to communicate with other children. The main daily tasks at Magical Moments were playing with the children, feeding them, reading some books and communicating with them. The staff were really helpful and it was a great experience working at Magical Moments.

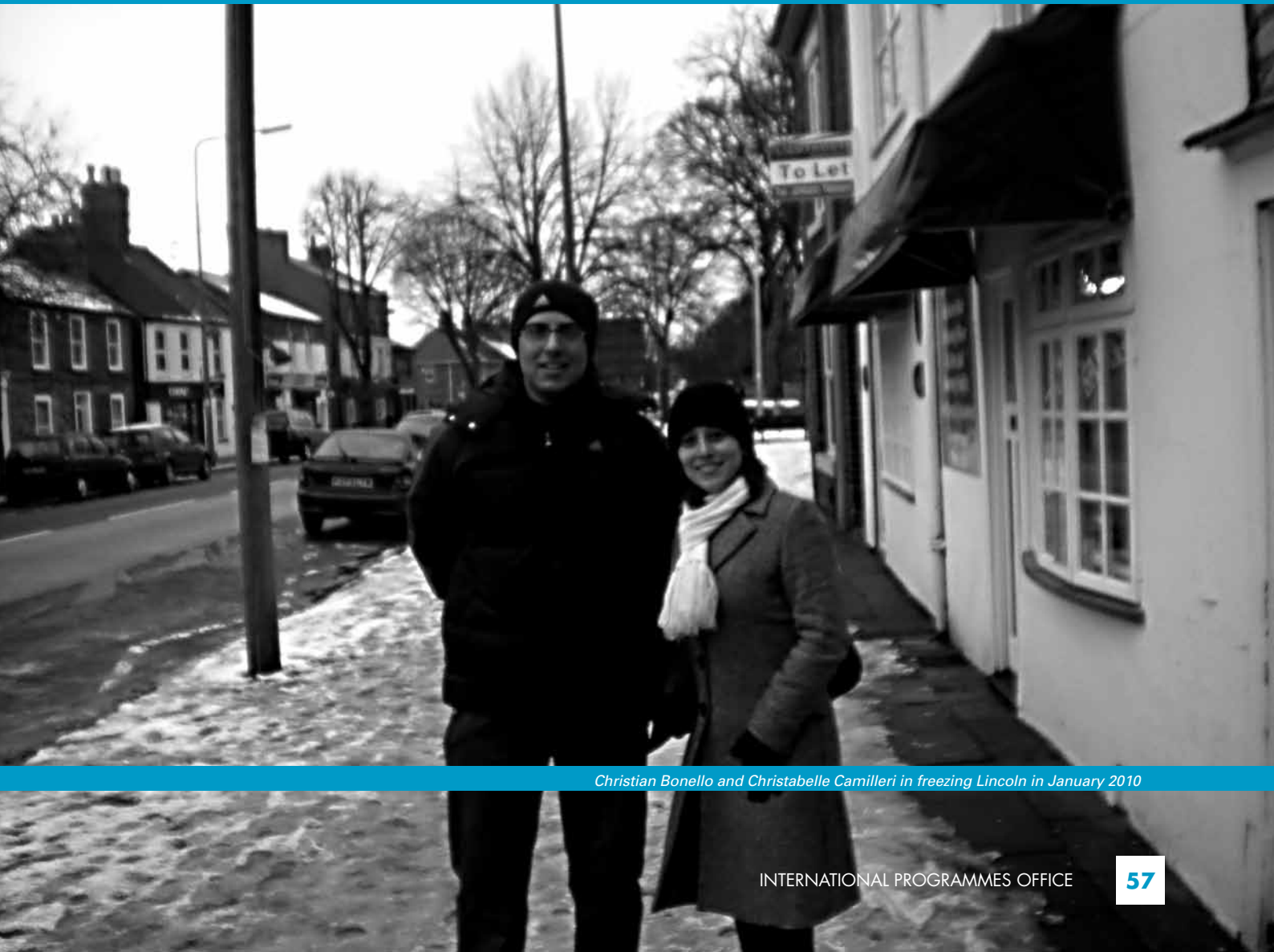
Christian Bonello's placement was at YMCA. YMCA is a home which caters for homeless people. This home provides training to clients so that they improve their skills - such as computer skills, daily living skills, sports - so that they can be

responsible for themselves. Christian's main duties included office work, meeting staff and clients, room checking, communication with clients, and also attending some activities that the home organized, such as football.

Aaron's placement was at Nomad Trust which is an organisation that provides shelter for homeless people. Nomad Trust provides the service users with their daily needs. This organisation also has people responsible for helping the clients to find accommodation according to their budget and also assists them to find a job. During his placement at Nomad Trust, Aaron learned how to deal with homeless people and help them live a better life.

After work the students usually did some shopping, washed the clothes, cooked some food. During the weekends they used to explore Lincoln. They were impressed by Lincoln Cathedral and its history. Its architecture is really beautiful and amazing.

These work placements helped the students understand what their future jobs would entail. It was a learning experience that they really enjoyed.



Christian Bonello and Christabelle Camilleri in freezing Lincoln in January 2010

MESSAGE FROM THE CHAPLAIN

GRATITUDE TO GOD



Fr John Curmi



Blessed are the grateful! They know how to acknowledge and appreciate.

However, the million dollar question will always remain the same: Do we express our gratitude? When was the last time we said a sincere thank you to our boss or to our employers, or to our parents or children, or to our brothers and sisters, or to our husband or wife, or to our friends and colleagues?

And with regards to God, do we say thank you? I once read the story of an astronaut, a self proclaimed non-believer, who, on landing his spacecraft back on earth, sighed a thank you God with great relief. His colleagues looked at him with surprise. The astronaut did not take his words back!

Yes, indeed, do we say thank you God on waking up in the morning, blessed with the gift of a new day? Do we say thank you God before we go to sleep after a busy day? Do we say thank you God in front of a beautiful sunset or a breath-taking country view? There is a never ending list for which we must say thank you to God.

Some days ago I received a very inspiring email. It went like this.

I dreamt that I went to Heaven and an angel was showing me around. We walked side-by-side inside a large workroom filled with angels ... My angel guide stopped in front of the first section and said, "This is the Receiving Section. Here, all petitions to God said in prayer are received!"

I looked around in this area, and it was terribly busy with so many angels sorting out petitions written on voluminous paper sheets and scraps from people all over the world.

Then we moved on down a long corridor until we reached the second section. The angel then said to me, "This is the Packaging and Delivery Section. Here, the graces and blessings the people asked for are processed and delivered to the living persons who asked for them." I noticed again how busy it was there. There were many angels working hard at that station, since so many blessings had been requested and were being packaged for delivery to Earth.

Finally at the farthest end of the long corridor we stopped at the door of a very small station. To my great

surprise, only one angel was seated there, idly doing nothing. "This is the Acknowledgment Section," my angel friend quietly admitted to me. He seemed embarrassed. "How is it that there is no working going on here?" I asked.

"So sad," the angel sighed. "After people receive the blessings that they asked for, very few send back acknowledgments."

"How does one acknowledge God's blessings?" I asked.

"Simple," the angel answered. Just say, "Thank you, Lord."

"What blessings should they acknowledge?" I asked.

"If you have food in the refrigerator, clothes on your back, a roof overhead and a place to sleep you are richer than 75% of this world. If you have money in the bank, in your wallet, and spare change in a dish, you are among the top 8% of the world's wealthy."

"And if you get this on your own computer, you are part of the 1% in the world who has that opportunity. If you

woke up this morning with more health than illness ... You are more blessed than the many who will not even survive this day."

"If you have never experienced the fear of war, the loneliness of imprisonment, the agony of torture, or the pangs of starvation ... You are ahead of 700 million people in the world."

"If you can attend a place of worship without the fear of harassment, arrest, torture or death you are envied by, and more blessed than, three billion people in the world ..."

"If your parents are still alive and still married ... you are very rare."

"If you can hold your head up and smile, you are not the norm, you're unique to all those in doubt and despair."

I suddenly woke up, convinced that the angel was still reading the list of blessings I should be acknowledging!

Count your blessings everyday and learn to say **thank you God**



FULL-TIME COURSES 2010/11



Talks to Prospective Students & Parents - Admission 2010

DATE	INSTITUTE	TIME	PLACE	
Monday	5/7/2010	Art and Design	09:00 hrs	Students' House, MCAST Main Campus, Paola
Monday	5/7/2010	Agribusiness	10:30 hrs	Agribusiness Institute, Qormi
Monday	5/7/2010	Building and Construction Engineering	17:30 hrs	Institute of Building and Construction Engineering, Naxxar
Monday	5/7/2010	Information and Communication Technology (Surnames starting A to K)	18:00 hrs	MCAST Theatre, Main Campus, Paola
Tuesday	6/7/2010	Agribusiness	09:30 hrs	MCAST Theatre, Main Campus, Paola
Tuesday	6/7/2010	Gozo Centre	09:30 hrs	MCAST Gozo Centre, Xgħara
Tuesday	6/7/2010	Community Services	10:00 hrs	Students' House, MCAST Main Campus, Paola
Tuesday	6/7/2010	Electrical & Electronics Engineering	18:00 hrs	Students' House, Main Campus, Paola
Tuesday	6/7/2010	Maritime	18:00 hrs	Maritime Institute, Kalkara
Tuesday	6/7/2010	Agribusiness	18:30 hrs	Agribusiness Institute, Qormi
Wednesday	7/7/2010	Information and Communication Technology (surnames starting L-Z)	18:00 hrs	MCAST Theatre, Main Campus, Paola
Thursday	8/7/2010	Business and Commerce	09:30 hrs	MCAST Theatre, Main Campus, Paola
Thursday	8/7/2010	Mechanical Engineering	18:30 hrs	Students' House, Main Campus, Paola
Friday	9/7/2010	Building and Construction Engineering	17:30 hrs	Institute of Building and Construction, Engineering, Naxxar

If you would like to discuss your future learning and training opportunities at MCAST you can call for an appointment on Tel No. 23987100. Between the 12 and the 30 July 2010, both dates inclusive, the Career Guidance and Counselling Service will be offered without an appointment at the MCAST Students' House, MCAST Main Campus, Paola, between 08:30hrs and 16:00hrs.

Students who would like to request special entitlements are to call for an appointment on Tel. No. 23987100 prior to submission of application.

Information and Support Centre

MCAST Main Campus,
Corradino Hill, Paola
Tel: 23987100
E-mail: information@mcast.edu.mt
Website: www.mcast.edu.mt

Counselling Service

Students' House
Corradino Hill, Paola
Tel: 23987129/23987133
E-mail: counsellors@mcast.edu.mt
Website: www.mcast.edu.mt

Career Guidance Service

Students' House
Corradino Hill, Paola
Tel: 23987135/6
E-mail: careerguidance@mcast.edu.mt
Website: www.mcast.edu.mt