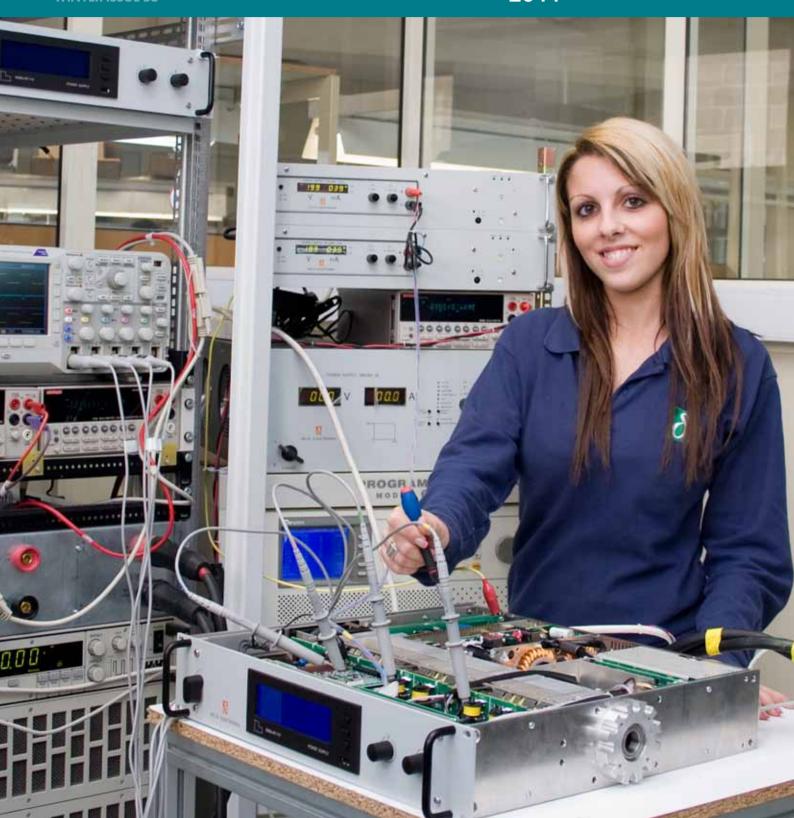
MCAST LINK

WINTER ISSUE 38

- MCAST CELEBRATES its 10th ANNIVERSARY
- 7 FOUNDATION DAY 2011



- EDITOR'S MESSAGE pg3
- INFORMATION pg4
- CHAPLAIN'S MESSAGE
- COUNSELLING DEPARTMENT
 pg10
- INTERNATIONAL PROGRAMMES
 OFFICE
 pg13
- LIBRARY AND LEARNING RESOURCE CENTRE pg15
- LEARNING SUPPORT UNIT
 Pg17
- MATHS CORNER pg18
- STUDENT'S PAGE pg21
- STUDENT COUNCIL pg24
- SPORTS DEPARTMENT pg26
- INSTITUTE OF AGRIBUSINESS pg30
- INSTITUTE OF ART AND DESIGN pg33

- INSTITUTE OF BUILDING AND CONSTRUCTION ENGINEERING Pg39
- INSTITUTE OF COMMUNITY SERVICES
 pg44
- INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERING pg46
- MARITME INSTITUTE pg48
- INSTITUTE OF MECHANICAL ENGINEERING
 Pg50
- READING THE FUTURE
 OF HIGHER EDUCATION
 IN EUROPE
 Pg58
- VOCATIONAL TEACHERS
 TRAINING UNIT
 pg62



Amy Anne Spiteri, Institute of Electrical and Electronics Engineering student at Delta Malta

EDITOR'S MESSAGE



The College celebrated its 10th anniversary with a commemorative event at the Corradino Main Campus. Minister Dolores Cristina, Mr Joseph Farrugia, President of the Board of Governors, and Prof Maurice Grech, Principal and CEO, addressed the guests and praised the efforts of the staff that contributed to MCAST's success story. They explained that the College has made great steps and achieved major milestones during the past ten years yet there is still a long way to go with plans for the next few years centred around further improvement in the quality of programmes and services offered by the College.

Foundation Day was celebrated during the first week of October. Students and members of staff participated in several activities organised on the day including the celebration of Holy Mass by Archbishop Paul Cremona as well as a live concert by popular bands Airport Impressions and Funk Initiative. This day was an opportunity for the whole College, including the Gozo Centre, to come together in an informal environment and celebrate the day together.

Students and members of staff are invited to participate in exchange programmes co-ordinated by the College's International Programmes Office. Antoinette Cefai, International Programmes Co-ordinator, presents an overview of the projects the Office is currently working on as well as the various opportunities available to students and members of staff.

The Counselling Unit has embarked on an interesting project which gives students the opportunity to attend a Basic Helping Skills Training Course whereby they are trained to help other fellow students. Four students that have completed the course share their experiences. Well done to these students and one hopes that more will follow in their footsteps.

JoAnne Carabott, Assistant Librarian at the Library and Learning Resource Centre, provides an interesting article whereby she describes the continuous evolution of the Library in order to respond directly to the changing needs of the students.

I would like to wish all students and members of staff a peaceful Christmas and a New Year full of challenges and opportunities!

HAPPY CHRISTMAS!



SUPPORTING INDUSTRY
DEVELOPING YOUR POTENTIAL

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 accurancy, but the editor cannot be held responsible for errors or omissions in articles, advertising, photographs or illustrations.

INFORMATION

MCAST CELEBRATES its 10th ANNIVERSARY

This academic year the College is celebrating its tenth anniversary since its inception in 2001. An event to celebrate this milestone was held at the College's Main Campus in Paola on the 28 September 2011.

"MCAST needs to continue offering opportunities to all, regardless of age and aspirations," Minister Cristina said, "however, it must also strike a delicate balance. While it continues to provide more and more career opportunities accessible to all, the College has to maintain a superior level of quality education." She hailed the dedication of the College's lecturers and staff, adding that "we would not have achieved this development without their commitment."

Since its establishment ten years ago, the College experienced unprecedented growth, as the student population rose from 1,500 in 2001 to over 6,000 full-time students and 4,000 part-time students this year.

The Hon. Dolores Cristina, Minister of Education, Employment and the Family, expressed her gratitude to all those individuals who have contributed to the success of the Malta College of Arts, Science and Technology. She was addressing current and past members of the College's Board

of Governors, directors and other distinguished guests. Minister Cristina explained that MCAST caters for a wide variety of students, from those with few or no qualifications who are given a second chance at developing their skills and personality, to others who have all the requisites to take up courses at the University of Malta or other post-secondary institutions but who make MCAST's programmes their first choice for their career development.

"MCAST needs to continue offering opportunities to all, regardless of age and aspirations," Minister Cristina said, "however, it must also strike a delicate balance. While it continues to provide more and more career opportunities accessible to all, the College has to maintain a superior level of quality education." She hailed the dedication of the College's lecturers and staff, adding that "we would not have achieved this development without their commitment."

Mr. Joseph Farrugia, President of MCAST's Board of Governors, explained that MCAST's success is crucial for the development of Malta's economy. He cited as an example MCAST's development of its Aircraft Maintenance Training Centre, which provided the required qualified workers to attract lucrative private investment and hundreds of new jobs in this sector. This



Mr. Farrugia, Mr. Falzon, Hon. Minister Cristina and Prof. Grech unveiling the commemorative sculpture.

relationship with different industrial sectors must be strengthened even further so that MCAST continues to offer more courses that meet the current and future requirements of the Maltese economy.

The event was also addressed by Prof. Maurice Grech, MCAST Principal and CEO. He outlined the College's plans for the next three years, centred around further improvement in the quality of programmes and services offered by the College. This target, he explained, will be achieved through three extensive projects, funded by the EU, and which are already

materials and new training resources. It will facilitate the shift towards innovative teaching methods to ensure that different learning needs are catered for. It will also help to raise retention rates within MCAST and increase the number of students who progress to higher education levels, thus boosting their employment prospects.

A concurrent project will focus on the upgrading and accreditation of all MCAST's Level 4 to Level 6 courses, which will be redesigned following consultation with the respective industrial sectors. It will also lead to the introduction of several

its current and upcoming developments. "As we celebrate this anniversary, it is no time to lower our guards. The challenges and the rewards ahead are nothing short of remarkable. Our target to sustain MCAST's reputation as a centre of excellence in vocational education is demanding, but always within reach. With the successful

completion of our upcoming projects, we

are confident that this goal will be achieved."

offered through this method in the next few

years. This, together with the launching of

new systems for the accreditation of prior

and experiential learning, will open up new

lifelong and adult learning opportunities

for many Maltese individuals. Prof. Grech

also mentioned the continued professional

development of the College's staff and the

building of the new MCAST Campus, among

During the event Minister Cristina unveiled a commemorative sculpture symbolising the College's growth and development throughout the last decade. This work of art was created by local sculptor Jennings Falzon, who joined MCAST's foundation courses a few years ago and obtained his Bachelor of Arts (Fine Arts) degree from the

same College last year.

"As we celebrate this anniversary, it is no time to lower our guards. The challenges and the rewards ahead are nothing short of remarkable. Our target to sustain MCAST's reputation as a centre of excellence in vocational education is demanding, but always within reach. With the successful completion of our upcoming projects, we are confident that this goal will be achieved."

being implemented. The first one includes the upgrading of all the College's Level 1 to Level 3 courses, with increased training of staff to improve the students' learning experience, upgraded teaching

new courses. The College is also looking at the introduction of blended learning, which brings together traditional teaching methods with distance and online learning technologies. Several courses will be



Dr Joseph Muscat, Leader of the Opposition meeting students at the Institute of Electrical and Electronics Engineering

T LEADER OF THE OPPOSITION DR JOSEPH MUSCAT VISITS MCAST

On Friday 28 October 2011 Dr Joseph Muscat, Leader of the Opposition, visited the College. He was shown around the Campus by Mr Joseph Farrugia, President of the MCAST Board of Governors, Prof Maurice Grech, MCAST Principal and CEO, and Mr Anthony Saliba, Deputy Principal. He met students at various Institutes. They discussed their projects and their aspirations with him.

Dr Muscat said that the Labour Party (PL) is committed to build on the present achievements in education and is in total agreement with the project for the new MCAST Campus. He said that there is national consensus for such a project that brings together all the institutes of the College on one campus. Dr Muscat said the new campus is an ambitious project and a Labour government would keep on investing in MCAST students in order to create more opportunities for them.









FOUNDATION DAY 2011

On Friday 7 October 2011, the College celebrated its Foundation Day. Students and members of staff gathered at the MCAST Main Campus in Paola to participate in a number of events organised by the Students' Council.

The day's events commenced with the celebration of mass by Archbishop Paul Cremona and the MCAST Chaplain Fr. John Curmi. During his homily, Archbishop Cremona recalled his own youth, explaining that back then there were far fewer career opportunities than today. "Nowadays, thanks to institutions like MCAST, the whole concept of learning has changed. Education is based on taking into account your talents, your ambitions and your capabilities, which are then converted into many learning opportunities. These will help you to obtain the necessary tools to succeed. You must be grateful to God for all these opportunities." He expressed his conviction that MCAST students will acquire existing skills and knowledge and build on them, improving themselves in the process.

Following mass, the Students' Council invited students to visit stands set up on campus by several national and non-governmental organisations, as well as by local companies, who gave out information on their products and services. The eventful day, and the first week of the new academic year, ended with a live concert by local bands Airport Impressions and Funk Initiative.

The College celebrates its Foundation Day in October, during the first week of the academic year, as it welcomes new students on campus.

CHAPLAIN'S MESSAGE

CHRISTMAS IN PERÙ AN UNFORGETTABLE EXPERIENCE



Some years ago I was working as a missionary priest in Arequipa, Perù, which is the second largest city of the land. For many years, a good number of Maltese missionary priests of the Missionary Society of St. Paul, left the comfort of their homes and sacrificed their egos to travel to the far distant land of the Incas. They literally gave their lives to the poor people living in the shanty outskirts of Arequipa. They arrived there with nothing to start working with, not even a good knowledge of the language spoken there. But they were brave and generous. They were ready to give their lives to the poor in the name of Jesus they loved so much. They rode horses and mules to far off areas where not even the toughest land rovers could take them. They reached far away villages, forgotten places where no one had ever dared or imagined going before them. Everywhere they went they built churches to make Jesus better known, schools to teach illiterate children and young people, clinics to heal the sick, houses to home the homeless. After all, this is what our church has been doing for ages in so many parts of the world!

A fortnight before Christmas day, I was assigned to celebrate Christmas Mass at Pampa Canyawhas some five hours drive uphill through a roadless desert. Pampa Canyawhas is a tiny desert settlement of about 60 households, 3,000 metres above sea level, resting on the slope of Arequipa's famous volcano – the Misti. In the morning it is sweating hot, at night it is shivering cold. Oxygen is scarce and breathing is not always easy. Don't dare run up there if you are not a local!

With our Grupo de Evangelizacion we were prepared to make the best Christmas celebration possible. It was surely not just going to be a celebration of Christmas Mass but we were intent to celebrate as best we could, even if with all simplicity, the greatest divine and, at the same time, human event of world history – the birth of Jesus, the Son of God; God becoming Man like us, to save us all in His great love!

We knew it was going to be a tough drive but we were determined to make it beautiful and unforgettable. We packed our land rovers with all imaginable useful things: food, fruit, medicine, toys, clothes ... and started our rugged journey. We arrived just a couple of hours before sunset. We were greeted with great hospitality and joy. The children ran to us and wanted us to carry them on our arms. The women left their work to join the merriment. Most of them were weaving Alpacas' wool into beautiful panchos or carpets or blankets which they would then sell at the market of Areguipa. We went to their houses for a local warm tea. Meanwhile the men were returning home from grazing their Alpacas on the little weeds that grow in the distant pastures. They were happy to see us. They had asked for Christmas Mass themselves. Mass was a rarity for them. They had it perhaps twice during a year. They strongly believed in the real presence of Jesus in the Holy Eucharist and what would be Christmas for them without receiving Him in their hearts! That is real faith ... to be admired.

After visiting every household we went to the tiny church of Pampa Canyawhas. Its walls were made of clay and stones, supporting the roof of thick straw and dried weeds. We lit our generator and tuned our guitars. A couple of us were to play semponyas. Everything else was simple. The church had only its bare necessities. The little church bell invited the people to come for mass. They all came, clad in their beautiful panchos. There were no benches. They all sat on the ground with their knees touching their noses. It was their way of keeping their bodies warm from the bitter cold. I had to stand up of course but the simple faith of these poor people of God was enough to warm my heart and all my body. It gave me all the energy I needed. The people participated in the mass with joy and great reverence clapping and joining in the wonderful songs of Latin American church music. They listened heartily to the Gospel story of the birth of Jesus. The mystery of incarnation filled them with great reverence. I could read it in their eyes. And then came Holy Communion. The way they came up and received the Body of Christ still edifies me to this day. They were so poor, yet so rich in faith and reverence for God!

After mass we all went out to the little plaza infront of the church... no benches, no pavements, no buildings... but for them it was their plaza! A two storey high bonfire was lit. it gave light and warmth to us all. We were in pitch darkness, away from civilization, distant from all and forgotten by all. The sky was stark clear and the stars lighting up the night offered a spectacular sight. Up there, 3,000 metres above sea level, they seemed so near! We prepared hot chocolate for all and we had cakes, sweets and biscuits. Such a simple way to celebrate Christmas!... but very heart-filling. We sang songs and carols and even taught them 'Ninni la tibkix izjed'. They enjoyed singing it! Then came the moment when I showed them a statue of baby Jesus. They had never seen one before. I told them that in Malta it is customary to put one on the outer window sill of our homes with Christmas lights around it. It was our way to show to all our faith in Jesus, the Son of God made Man. Of course they did not know that I had a statue of baby Jesus for every household - a spiritual gift from the Missionary Society of St. Paul, And when I told them, they were so thrilled and happy. I was thinking of giving them to a child from every household but it was the mothers who came out for it. They received it with reverence and joy as if it was a real baby, as if it was truly Jesus. The statue of baby Jesus made their Christmas day!

It was so simple yet so genuine. Then we all embraced and went to sleep. That night I could not sleep. I thought of these people and I thought of my dear ones in Malta, I thought of Malta as well and its ways of celebrating Christmas. At four o'clock I woke up from my bed made of alpaca's skin and to my great joy and amazement I saw the statue of baby Jesus on the window sill of every household with lit candles around it! Just like us in Malta! Tears filled my eyes and I thanked God for these simple people who had such a great faith in our loving God!

WHAT DOES CHRISTMAS **MEAN TO YOU?**

COUNSELLING DEPARTMENT

VISIT BY

DANISH COUNSELLORS

During the 4th and 7th October 2011 the Student Support Services staff hosted a group of five Danish guidance counsellors. The counsellors came from different Danish vocational institutions and were interested in learning about the Maltese post-secondary education system as well as the Guidance and Counselling services offered both at MCAST and in Malta.

The programme was structured to include visits to all MCAST Institutes, the Institute of Tourism Studies, the University of Malta, the Employment and Training Corporation, the Malta Qualifications Council and also two industries which host student placements. The idea behind this programme was to provide a clear idea and understanding of post-secondary and tertiary education in Malta.

Such international visits are very beneficial as they encourage the exchange of ideas and experiences which enrich all the participants.



Mr John Bartolo, Director of Information and Student Services and Miss Silvia Galea, Counsellor with Danish Counsellors

STUDENT-2-STUDENT **NETWORK-SCHEME**

For the fourth consecutive year the Counselling Unit has delivered the Basic Helping Skills Course. This course is offered to all interested students at MCAST who choose to attend on a voluntary basis. The aim of this course has always been to disseminate helping skills amongst students and to set up a network wherein trained students can act as mentors to help their peers. This year four students have worked very hard in the planning and launching of this scheme.

Jessica Gravina, Sinclair Brincat, Leonees Bondin and Santelle Farrugia have set up this scheme and introduced themselves to new students who joined MCAST this year and who are following the Introductory Level 1 Course at the Main Campus in Paola. The new mentors can help any student to integrate into college life and can give hands-on tips to facilitate their initial days at the College.

Anyone who would like to contact the student volunteers can do so by sending an email to: student2student@mcast.edu.mt or by leaving a message with the Counsellors or support staff at the Student House.

The Counsellors would like to take this opportunity to thank all students who have completed the course in the past four years and in particular Jessica, Sinclair, Leonees and Santelle who have shown dedication and commitment towards this project.

WHO ARE THE MENTORS?



LEONEES BONDIN

My name is Leonees Bondin and I am following the First Diploma in Health and Social Care at the Institute of Community Services. Last year I completed the Basic Helping Skills Training Course which helped me to understand myself better and learn how to tackle certain problems.

I am now a volunteer in the Student-2-Student Network. This group consists of a number of trained students who are there to help other students in any difficulties they might encounter while at college. If your problems are of great concern, we can help you to contact the MCAST counsellors who are professionally trained. If you would like to speak to us, you can find us at the Student House, or email us on student2student@mcast.edu.mt.

I am Santelle Farrugia and this is my second year at the Institute of Community Services. I completed the Basic Helping Skills Training Course last year as I would like to contribute to life at College and make a difference by helping and caring for others. Once I complete my studies at the Institute I aim to become a manager within the health sector where I can make use of the helping and caring skills acquired while at College.

I like hanging out with my friends and love to make new ones too. My motto in life is 'Caring makes you a better person and the world a better place'. The aim of the Student-2-Student group is to care for other students who need help and support. So do not hesitate to contact us should you encounter any difficulties.

SANTELLE FARRUGIA





JESSICA GRAVINA

I have been attending MCAST for the past four years. At the moment I am following the National Diploma in Health and Social Care (Social Care) and whatever I learn from this course I try to apply during my everyday life. I decided to read for this course because I want to support people and contribute towards making a positive difference in their lives.

I also completed the Student-2-Student Basic Helping Skills Course from which I gained an enormous sense of personal achievement. This course helped me to treat everyone as an individual and to consider their needs and abilities while helping them. Having said that, I am dedicating some of my free time to do voluntary work with MCAST students. Doing voluntary work is one of my hobbies which makes me feel satisfied, not only because I help others but also because through helping others I am giving myself the chance to enhance my personal development.

My message to other students is that each and every one of us has something that we are good at, as well as something to offer.

My name is Sinclair Brincat. I am a student at the Institute of Electrical and Electronics Engineering. My hobbies are fishing, spear-fishing and the computer.

I completed the Basic Helping Skills Training Course because I want to make a difference in the life of others. This course has helped me listen to and understand others as well as learn how to deal with my own difficulties. The Student-2-Student course provides one with the opportunity to be in a group that you can trust, where you are free to speak, say your thoughts, and even help yourself while learning how to help others.

SINCLAIR BRINCAT



INTERNATIONAL **PROGRAMMES** OFFICE 7

ANOINETTE CEFAI

THE INTERNATIONAL PROGRAMMES OFFICE ... MORE OPPORTUNITIES FOR YOU

The MCAST International Programmes Office has been active in consolidating its role and operations since the publication of the last edition of MCASTlink. The main objective of the International Programmes Office is to create an awareness of the EU-funded opportunities available to MCAST students and members of staff.

This article provides an update on the ongoing activities taking place within the International Programmes Office. The International Programmes Office is currently accepting applications for Erasmus exchange opportunities. Lecturers and non-academic members of staff have the opportunity to undergo a period of a one-week training programme abroad, either at a higher educational institution or within industry. Lecturers may also opt for a lecturing/teaching assignment delivering lectures or seminars in a particular area of study related to their lecturing field. These placements are intended to enhance the staff's methods and ways of operation at their workplace as well as expose them to different systems, cultures and languages.

Students may also benefit from these exchange opportunities. They have the opportunity to participate in a three-month exchange programme within a European country either studying or undergoing a work placement programme. These programmes provide one with

the opportunity to experience living independently in a foreign country while working or studying in a different cultural and social environment. This experience will be a very enriching one for the students, on both a professional and personal level.

In September 2011 the International Programmes Office issued a call for In-service Training opportunities under the Comenius and Grundtvig programmes. The selection process is now finalised. Six MCAST members of staff have been awarded grants. An In-service Training experience is a structured course which various stakeholders across Europe offer. These In-service Training courses cater for various branches within the educational system namely:

- Corporate social responsibility in the aera of social marketing
- Entrepreneurial teaching as a motivational tool
- Promoting active learning in Mathematics
- In the language of tuition: English. 1 week course in developing the language skills and creative methodology of overseas teachers
- Environment protection and education for sustainable development using indoor and outdoor activities
- SLAMIT School Libraries as Learning Centres- School Libraries and New Learning.

AN INTERNATIONAL PROGRAMMES OFFICE ... **MORE OPPORTUNITIES FOR YOU**

The next call for In-service Training courses will open soon with the deadline for the submission of applications being the 16 January 2012. The International Programmes Office will be promoting the opening of the call for applications by email through the Communications and PR Office

A number of study visits are organized by various stakeholders around the EU. These study visits, offered in English and in other languages such as French, German and Spanish, aim to address issues related to education within the EU. Such themes include co-operation between the worlds of education, training and work; continuous training of teachers, trainers and institutions' managers; promoting the acquisition of key competences, social inclusion and gender equality in education; and training and developing strategies for lifelong learning.

CEDEFOP, the agency in Greece acting on behalf of the European Commission which runs these study visits, opens the call twice a year. The next call will be in March 2012, with a new list of study visits presented in a catalogue with a wide range of topics for the staff to choose from.

At the time of writing, the selection process at EUPA is underway and the International Programmes Office will soon be receiving the results of the successful applications.

Apart from direct benefits to the staff and students within MCAST, the International Programmes Office has been hosting visits from various educational institutions abroad. MCAST has had a visit from the Instituto de Educacion Secundaria Valle Inclán, in Spain. The College has also discussed opportunities to offer students experiences in

Spain, under the Leonardo da Vinci Programme which hopefully will be running next year. Students will have the opportunity to undergo a work placement for a period of few weeks in the areas of Business and ICT. MCAST has also been hosting students for a three-week period in various establishments in Malta. Four students studying Art and Design in Max Born Berufskolleg in Germany, have been in Malta during the month of October gaining experience in various enterprises. Outlook Coop, Mosta Digital and Architecture Project have hosted these students.

Max Born Berufskolleg is not the only institution sending students to our island. Four students from Lincoln College, studying Health and Social Care, have spent three weeks in childcare enterprises in Malta. Kaell's Childcare Centre and the Foundation for Educational Services have hosted these students.

Another European college which has sent students to Malta is Albeda College. Six students studying Health and Social Care are currently being hosted by Richmond Foundation and Caremalta Ltd for a period of three weeks.

Quite naturally these same colleges can help us locate placements for our MCAST students. I am sure that Germany, the UK and the Netherlands are attractive countries for Maltese students. The International Programmes Office provides a variety of opportunities. Any interested student or member of staff is invited to come over to the International Programmes Office to discuss any exchange opportunities.





LIBRARY AND **LEARNING** RESOURCE CENTRE



■ FROM FOUNDATION TO DEGREE LEVEL

by JoAnne Carabott, Assistant Librarian

Like a living organism the MCAST Library and Learning Resource Centre (MCAST LLRC) grows and thrives on its surroundings. In this case, the surroundings are our students and the vocational disciplines taught at MCAST. Eight years ago the MCAST LLRC was a difficult to access room on campus with limited resources and today it is a popular centre where students, lecturers and staff, regardless of their individual differences, meet to study and learn.

The services the Library offers have been evolving and developing ever since, according to the needs and interests of MCAST LLRC members. This year MCAST has introduced eleven new degrees, and that means that the Library had to augment the collection and provide relevant material to support these new areas of study. We have recently invested in more books, multimedia packs, journals and e-journals to support different topics. In fact, during this year we had an increase of over 2,700 new items

besides the hundreds of individual, weekly and monthly issues of our numerous journals.

This year the Library has introduced a special service offered only to the MCAST students who are following a Degree course. MCAST Degree students may now borrow up to four books for three weeks. Furthermore current Higher National Diploma students may borrow four books during the coming summer holidays (2012) in order to continue with their research and studies. One can also find a number of electronic journals/resources* for students to utilise, such as Weblinks found at http://www.weblinksresearch.co.uk/ login/ and Emerald found at http://www.emeraldinsight.com for which the library pays a subscription fee on your behalf. User names and passwords for these subscriptions can be found in the page "Logins/ Passwords" under the "My Library Account" sections of our library page www.mcast.edu.mt/llrc. Follow the on-line instructions on how to create your personal Library Account to access these login details.

While the Library is one of the best study places for students who prefer to study quietly, it is also a very good place where they can work as a group. Degree students have become inevitably demanding when it comes to opening hours as they find it necessary to stay longer in the library especially as a group. This helps them to learn more effectively as they argue and discuss theories and assignments. That is why the MCAST LLRC has kept last year's, 3 evenings a week, additional opening hours**. This service has become guite popular.

Degree students will also need to research our Projects/Thesis collection. Search through and view the collection using our online catalogue at http://llrc.mcast.edu.mt/searchAdvanced.asp. Tick the collection Projects/Thesis to limit search to just student projects. Upon choosing a project you can read the Table of Contents. To view the whole document kindly ask the reception for further help. The Project/Thesis collection cannot be loaned out to MCAST users, and must be viewed inside the library. At this point we would like to take the opportunity to remind students that we have books on how to compile data for a research project, and how to write a thesis. One can also use internet resources such as www.ipl.org, where one can find useful tips on how to write technical assignments and projects.

The future is a mystery for all of us, however we can assure you that the MCAST LLRC has always tried, and will continue trying, to satisfy its users' needs. One way how the LLRC aims to do this is by increasing the size of its collections. Of course this depends on a lot of factors. Meanwhile we encourage students to send their opinions by sending us an email to Ilrc@mcast.edu.mt.

We look forward to seeing you use our collections and services!

* for more electronic resources check out

http://www.mcast.edu.mt/llrc_aboutus_electronic_resources.asp

** Opening hours at the Main Library in Paola

Monday	8:15 am	6:30pm
Tuesday	8:15am	4:15pm
Wednesday	8:15 am	6:30pm
Thursday	8:15 am	6:30pm
Friday	8:15 am	4:15pm

NB To check the opening hours of our other 5 libraries please go to: http://www.mcast.edu.mt/llrc_openinghours.asp



MCAST LIBRARY AND UNIVERSITY OF MALTA AGREEMENT

The MCAST Library would like to inform all its library users that following discussions with the University of Malta Library, the MCAST Library has reached a mutual agreement that allows MCAST students and staff to freely use University of Malta printed library resources including periodicals on their premises only. Naturally parts of the document can be photocopied provided copyright laws are followed. Likewise University students and lecturers may make use of MCAST libraries under similar conditions.



LEARNING **SUPPORT** UNIT

EDUCATIONAL VISIT TO THE DELIMARA POWER STATION Students studying at the Institute of Mechanical Engineering had



the opportunity to visit the Delimara Power Station. This visit was organised by lecturers from the Institute of Mechanical Engineering and the Learning Support Unit. The lecturers responsible for the Embedded Learning Programme at the Institute of Mechanical Engineering, namely Mr. Joseph Micallef and Mr. Lino Grima together with Learning Support Unit lecturers, Ms. Elaine Mifsud-Scicluna and Ms. Margaret Meilak accompanied the students through the whole process of electricity production at the power plant.

The visit was part of a holistic integrated programme and included excellent explanations by Mr. Testaferrata, the Engineer-in-charge, who patiently explained how electricity is distributed throughout Malta. Mr. Testaferrata also explained that Enemalta is currently consolidating the electricity transmission system whilst upgrading its generation facilities.

The educational visit was successful. In addition to observing the instrumentation and machinery, the students also had the opportunity to practice technical English.

MATHS CORNER



EFFICIENT TILE COVERING

by Alexander Farrugia, Subject Coordinator, Mathematics

In the previous article, we found out that in order to tile an entire flat surface using regular polygons, we must only use either equilateral triangles, squares or regular hexagons. In this article, we are going to take a step further and discuss which of these three shapes would end up having the best perimeter to area ratio when tiled.

A shape's perimeter to area ratio is simply the perimeter of the shape divided by the area of the same shape. Ideally, we want our tiles to have a small perimeter (so that less grout is used) and that cover a large area (so that less tiles are used). Because of this, we want our perimeter to area ratio to be as small as possible.

Thus, we shall investigate the perimeter to area ratio of our three shapes that we can use for tiling. Which of them has the best perimeter to area ratio?







Figure 1: Which of the above shapes has the best perimeter to area ratio?

Let us answer this question. We assume that the area of each of the above shapes is equal to A, so that we are fair in our assessment of their perimeter to area ratio.

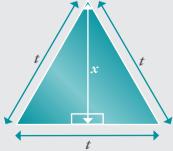


Figure 2: An equilateral triangle consists of two identical right-angled triangles.

PERIMETER TO AREA RATIO OF THE EQUILATERAL TRIANGLE

Let t be the length of each side of the equilateral triangle. The area of the triangle is $A = \frac{1}{2}xt$, where x is the height of the triangle (see Figure 2). Unfortunately, we don't know what \mathcal{X} is, but it can be found using Pythagoras' Theorem. Considering the leftmost (or rightmost) half of the triangle, we note that

$$x^2 + \left(\frac{t}{2}\right)^2 = t^2$$

$$x^2 = t^2 - (\frac{t}{2})^2 = t^2 - \frac{t}{4} = \frac{3t^2}{4}$$

$$x = \frac{\sqrt{3}}{2}t$$

And therefore, the area of the triangle would be

$$A = \frac{1}{2} \left(\frac{\sqrt{3}}{2} t \right) t$$

$$A = \frac{\sqrt{3t^2}}{4}$$

Hence, if we make t the subject of the formula, we would have the length t of each side of the triangle in terms of its area A:

$$4A = \sqrt{3t^2}$$

$$\frac{4A}{\sqrt{3}} = t^2$$

$$t = \frac{2}{4\sqrt{3}}\sqrt{A} = 1.52\sqrt{A}$$

The perimeter P_2 of the triangle is 3t, and hence

$$P_2 = 3 \times 1.52 \sqrt{A} = 4.559 \sqrt{A}$$

Hence, the equilateral triangle's perimeter to area ratio is

Triangle's Perimeter to Area Ratio $=\frac{4.559\sqrt{A}}{A}$

Triangle's Perimeter to Area Ratio $= \frac{4.559}{\sqrt{A}}$

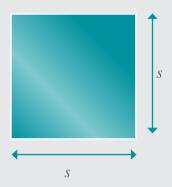


Figure 3: The square's dimensions

PERIMETER TO AREA RATIO OF THE SQUARE

In the case of the square, things are much simpler. Let S be the length of each side of the square. Then its area is S^2 . Thus, we have:

$$A = s^2$$

$$s = \sqrt{A}$$

The perimeter P_2 of the square is 4S, and hence

$$P_2 = 4 \times \sqrt{A} = 4\sqrt{A}$$

Thus the square's perimeter to area ratio is

Square's Perimeter to Area Ratio $=\frac{4\sqrt{A}}{A}$

PERIMETER TO AREA RATIO OF THE REGULAR HEXAGON

Finally, we get to the regular hexagon. To find the area of this shape, we first split it into six identical equilateral triangles as shown in Figure 5. Then, if we call the length of each side of the hexagon h, we already know that the area of one of these six equilateral triangles is $\frac{\sqrt{3}h^2}{4}$ from before. Hence, the area of the hexagon is

$$A = 6 \times \frac{\sqrt{3h^2}}{4} = \frac{3\sqrt{3h^2}}{2}$$



Figure 4: The area of a regular hexagon can be found by splitting it into 6 equilateral triangles.

We proceed to find the length of the side of the hexagon in terms of its area:

$$2A = 3\sqrt{3h^2}$$

$$\frac{2A}{3\sqrt{3}} = h^2$$

The perimeter $P_{\it h}$ of the hexagon is 6h , and thus:

$$P_h = 6 \times 0.62 \sqrt{A} = 3.722 \sqrt{A}$$

Therefore, the regular hexagon's perimeter to area ratio is

Hexagon's Perimeter to Area Ratio
$$=\frac{3.772\sqrt{A}}{A}$$

Hexagon's Perimeter to Area Ratio
$$=\frac{3.772}{\sqrt{A}}$$

COMPARISON OF THE 3 PERIMETER TO AREA RATIOS

Comparing the three perimeter to area ratios found for each shape, we realise that the regular hexagon has the smallest perimeter to area ratio. Therefore, we conclude that hexagonal tiles are the most efficient shape to use for tiling.



HEXAGONAL TILINGS IN NATURE

To store their honey and pollen in their nests, bees build hexagonal cells out of their own wax, which are structured exactly like a regular tiling. The fact that bees use hexagons instead of squares or triangles ensures that they would require the least wax possible to produce the cells, but would still store the maximum amount of honey and pollen inside them. It seems that bees are not only busy creatures, but also clever ones!

Figure 5: The honeycomb produced by bees is an example of a hexagonal tiling found in nature.

STUDENT'S PAGE



by Jurgen Borg

This issue will allow you to get to know one of this year's most successful vocalists. Ladies and gentlemen we will be interviewing none other than Carol Lee, the voice behind "Love is Darkness".

"LOVE IS **DARKNESS**"



Jurgen with Carol Lee

A SNEAK PEAK ABOUT CAROLLEE

Carol Lee was born in Vancouver, Canada but has lived in Amsterdam, the Netherlands. During the late 80's she worked as a live soundmixer, played the guitar and sang in many bands throughout the world. In 2006 Carol was introduced by a mutual friend to Raz Nitzan and Adrian Broekhuyse. Together they embarked on their first collaboration and recorded "No Nobody" which was released by Robbie Rivera. They also recorded the classic - "Beauty Hides in the Deep" by The Doppler Effect as signed by Armada Music and championed Armin's Universal Religion. Since then she has worked together with Raz and Adrian on many tracks. Carol Lee is best known as the voice behind Sander van Doorn's 2011 summer-hit "Love Is Darkness", which has been her biggest hit so far and got her travelling and performing all around the world.

Q: When were you first introduced to music in general?

I started taking music lessons when I was nine years old. But my father played the piano and I remember sitting on his lap when I was five years, trying to 'help' him play. When I was fourteen, I started playing the guitar and later graduated in Classical Music. To me music is like breathing.

Q: "Love is Darkness" has been labeled as sensational within the clubbing community. Tell us a bit about your experience working with Sander Van Doorn...

This might sound a little strange, but to be honest, I have never met Sander van Doorn! But hopefully I will, someday. Some people seem to think that I am the girl in the video clip, but that was a professional model. The track was written and recorded in the studio by Raz Nitzan and Adrian Broekhuyse and that is where they also recorded my vocals. At the time, we were not even sure if Sander was going to use the track, but I am very glad he did, because it is super-catchy and I love singing it!

Q: It is true that Carol Lee is closely associated with the clubbing scene, but you also form part of a band, Bettie Serveert. Tell us a bit about that...

Ah, you discovered my 'other' music!:)

For the past twenty years I have been singing, writing songs and playing the guitar with the Dutch band Bettie Serveert. It is an alternative rock

band and we have recorded nine albums so far, touring throughout America, Canada, Europe and Japan. But I also play in another band in Belgium, which is more 'Americana' kind of music.

Q: How did the transition between rock music and trance music feel?

It is very easy for me: I love music and I love singing and dancing. There's one Bettie Serveert song called 'Versace', which is kind of trippy-trance. We released it in 2006. That is when a mutual friend, who knew that I liked Trance music, introduced me to Raz and Adrian.

Q: Any other collaboration with DJs which we should be looking out for?

These are the tracks that I have done until now:

Robbie Rivera Feat. Carol Lee - "No Nobody"

Richard Durand Feat. Carol Lee - "The City Never Sleeps"

16 Bit Lolitas pres. The Doppler Effect Feat. Carol Lee - "Beauty Hides In The Deep" Ton T.B. Feat. Carol Lee - "Evolve As One"





Q: Travelling the world, tell us about your experiences abroad so far...

I love travelling and touring, performing 'live' and seeing new places and meeting new people. There are still so many countries I have not seen yet, like Italy and Ireland.

Q: You have performed both here in Malta and also on the island of Gozo... how would you describe these experiences?

This was my first visit to Malta and Gozo and I loved it! Great people, great weather, and great food ... you seem to have it all! I really hope to come back some day, either to sing, perform or just hang out and have a good time.

Q: Any future plans?

Raz, Adrian and I have been working on some new tracks, but I am not sure when they will be released.

Oh, and next week I start taking drum-lessons!

Q: And our traditional closer... any advice for aspiring artists?

Always follow your heart and trust your own instinct!!!



We hope you enjoyed our fifth interview and the first for the 2011-2012 academic year. Keep a look out for our next issue which is to include another interesting interview! Stay safe and enjoy life... until next time!

Send suggestions to: jurgen@oldskoolpromo.com

STUDENT COUNCIL



STEVE DIACONO

THE MCAST WHAT?

Dear students,

My name is Steve Diacono. I have been attending the MCAST Institute of Business and Commerce for the past four years. Today I also form part of the MCAST Student Council and I am responsible for the Council's finances. But what is the MCAST Student Council? And what is it that we do?

The MCAST Student Council is a fairly new organisation, yet a vital addition to the College.

Objectives

The MCAST Student Council is a dynamic organisation and, therefore, is open to change and debate. Like other organizations, it finds its roots in a set of fundamental objectives, namely:

- to represent students on both a national and international level
- to serve as an official link between students and the relevant authorities
- to co-ordinate activities with other organisations
- to develop and cultivate an interest in the fields of education, socio-political and cultural issues.





WHAT IS THE MCAST STUDENT COUNCIL DOING AT THE MOMENT?

As you read this, the MCAST Student Council is working on two main operations.

- 1) The Student Council is currently working on the next student council elections which will take place before the Christmas holidays. The purpose of these elections is to increase the number of Student Council members. By adding more members, the Student Council will not only be considered as a fully-fledged organisation by national and international bodies, but will also have more of a voice in MCAST and Malta as a whole.
- 2) In the up-coming months, the Student Council will be organising meetings between students and AIESEC. AIESEC, which is about to set up office on the MCAST campus, is the world's largest student-run organisation. Focused on providing a platform for youth leadership development, AIESEC offers young people the opportunity to be global citizens, to travel across the world and to gain experience and skills that matter today.

The MCAST Student Council has a long way to go, yet with your help and co-operation it will grow and evolve. Your comments and feedback are appreciated, so please do not hesitate to forward any suggestions.

WHERE CAN WE BE FOUND?

The MCAST Student Council office is located at the Administration Block, right behind the Students' House. Do not hesitate to email us on scmcast@gmail.com or follow us on our Facebook page for information on future events.

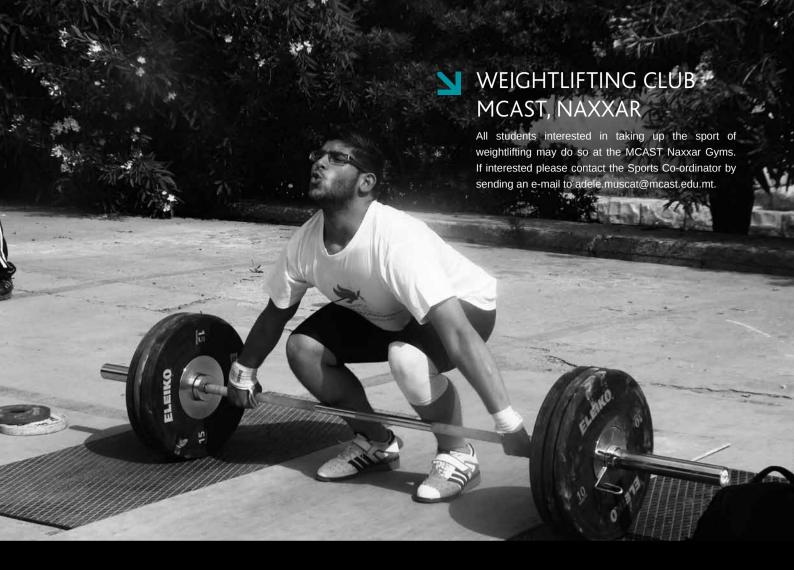


SPORTS DEPARTMENT



On the 26 and the 31 October 2011 two different groups of students attended a Beach Day in Golden Bay organised by the Sports Department. The activities, organised in order to develop team building skills, included beach soccer, baseball, beach volley, dodgeball and triathlon (push-ups, piggy back ride, run and swim). National Diploma Sports students also helped to run the events on both days as part of their course. It was a great day out for all students and staff involved.





TREKKING, CANOEING AND OTHER OUTDOOR SPORTS

Wednesday afternoons at the Sports Department are dedicated to outdoor activities in particular trekking and canoeing. Anyone interested in taking up an outdoor sport should contact the Sports Co-ordinator. The Sports Department is also looking into organising an outdoor sport trip in the Dolomites later on this year. This would include para-gliding, trekking, via ferrata, canoeing, flying fox, white water rafting etc. Interested persons should contact adele.muscat@mcast.edu.mt.









INTERNATIONAL SCHOOL SPORT FEDERATION **CROSS COUNTRY**

After the success of last year's ISF Swimming Championships, the Malta School Sport Federation has once again been entrusted with organising the World Cross-Country Championships. So far twenty countries have registered from places such as China, Australia, Israel and more. Malta too will be participating with post-secondary students in both the male and female events. The MCAST Sports Department has once again been entrusted with providing the manpower to organise such a large scale event. For this reason we are looking for volunteers (both students and staff) who are willing to help run this event during the last week of March. For more information please contact the Sports Co-ordinator.

AGRIBUSINESS



NEW DEGREE COURSE IN ANIMAL MANAGEMENT... SO FAR SO GOOD...

by Giancarlo Borg – reading for a BSc (Hons.) degree in Animal Management



The BSc (Hons) in Animal Management is a new course at the Agribusiness Institute. I am very pleased to be part of this new experience together with five other class-mates.

We kicked off the degree programme with a unit on Ecology delivered by foreign lecturers from the University of Zagreb in Croatia. Local lecturers followed and delivered two weeks of tutorials and presented us with written assignments. I have to say that these lectures were very intensive but they were interesting and left all of us very feeling satisfied. An excellent start to what all of us expected to be a roller-coaster experience.

Furthermore, we had the opportunity to visit some very exciting places. One morning we paid a visit to Evans Laboratories in Valletta where we were given a very detailed tour of the premises. These Laboratories analyse everything, from Vodka to cereals, soils to honey, as well as from water to air.

On another morning, we visited a dairy farm in Rabat where the farmer explained how modern farmers work and what type of feeds the cows are given. This was followed by a brief stop at Buskett, after which the class visited the Xrobb I-Ghagin nature park managed by Nature Trust Malta. Vince Attard, the President of this NGO explained the principles behind the habitat management of the area and the energy conservation efforts which go into this place. The past successes and future plans were discussed throughout the walk around the park.

We also visited Gozo where the Ministry for Gozo representatives accompanied us to an afforestation site at Mgarr, a valley clean-up at Marsalforn and the Government Experimental Farm at Xewkija, where a brief lecture on the Eco-Gozo vision was delivered.

We have now completed the Principles in Ecology unit and commenced the Entrepreneurship unit with Ms R. Curmi.

This Degree programme will give us the opportunity to further our studies and give us a better chance of employment. This also gives the Agribusiness students an identity and perhaps will contribute to a decrease in the stigma that the public has to students specialising in this sector. We can show that agriculture is a science-based subject and a very technical one at that.



At Evans Laboratoies, Valletta



Visit to a dairy farm in Rabat

We live in a world of extremities. While people are sunbathing on their patio in Mississippi, families in Syria are praying their houses will not be shelled overnight. While girls are enjoying a shopping spree in West London, a mother is trying to earn enough money in China by working 23 hours a day.

A NEW PERSPECTIVE ON AGRICULTURE

by Malcolm Borg, Assistant Lecturer, Agribusiness Institute

And even though these polarities stare at us very blatantly, there is still one thing that unites us all. Leaving aside the subjective aspects of morality and social ideology, there is one material aspect we all strive for every day. This commodity is food. Good food. For whether you are enjoying a Big Mac after a shopping spree or trying to fill your daughter's plate with rice in your daily one hour off, we all need it to live.

We have been alienated as to how important food is in our daily life. Going around our busy lives earning more and more money, we think we depend on luxuries which we soon realise are trivialities. But each and every day we go around asking ourselves, 'What am I going to eat?'

And even though we usually find the answer, we rarely understand that the chicken nuggets we thawed or the potato we peeled or the can of mushrooms we just opened all trace themselves back to that one and only sector which has been with us since the dawn of civilisation: agriculture. For whether ploughing the soil with an ox or harvesting wheat with a two-storey machine, whether keeping a couple of rabbits to supply one's family or owning a multi-million milking parlour, agriculture has always been the source of our nourishment.

We now realize that a world without our farmers and growers is a world without food, and a world without food collapses – right away. Agriculture is the cog without which our wheel halts to a stop.

Agriculture should be at the very centre of society - a deserved place for a pivotal sector.

INSTITUTE OF ART AND DESIGN

INSTITUTE OF ART AND DESIGN PARTICIPATES IN **MALTA DESIGN WEEK 2011**

Friday 30 September 2011 marked the inauguration of the first edition of the Malta Design Week. The expo was held at various venues around the island, although the main event featured at the Old University Building, Valletta. The exhibition was open to the public between 1 October and 8 October 2011 where the total number of visitors is believed to have exceeded four thousand.

Design Week was conceived to act as a showcase to local talent but also to promote and celebrate good design, while providing visitors the opportunity to interact and experience work and designs from abroad, international perspective.

The Institute of Art and Design was invited to participate in the event. The fifty square metre MCAST Art and Design stand featured a wide selection of work carried out by not less than thirtyfive students. The exhibits, produced from various media, provided a taste of the disciplines taught, namely Fine Arts, 3D Design, Graphic Design, Interactive Media and Media (Moving Image).

A collection of 2D and 3D Fine Art exhibits included works by Jennings Falzon and Sean Camilleri, B.A. (Hons.) in Fine Arts. The latter made effective use of recycled metal and other materials to conceive his works. An installation by Miriam De Giorgio featured facial portraits in wire that created an interesting interplay of light and shadows. Other Fine Art works included paintings. collages and prints.

The 3D Design works on display featured fine examples of product design. Most noticeably at centre stage were four artistic dresses made out of recycled materials such as found fabrics, plastics and wood. Another outfit by Roberto Tweraser and Kevin Anastasi, B.A. (Hons.) in 3D Design and Interiors, was constructed out of aluminum strips and LED lighting which could be lit in sequence by a series of reed switches. The 3D Design exhibits also featured models of Morphogenetic bus-shelters by Sirach Borg and Gabriel Bezzina, Higher National Diploma in 3D Design, and a selection of designer lamps amongst others.

Graphic Design works included a selection of portfolios and poster designs with emphasis on illustration, photography, typography and the printed media. A series of animations, show reels and video productions by Interactive Media and Media students were also projected throughout the duration of the expo.

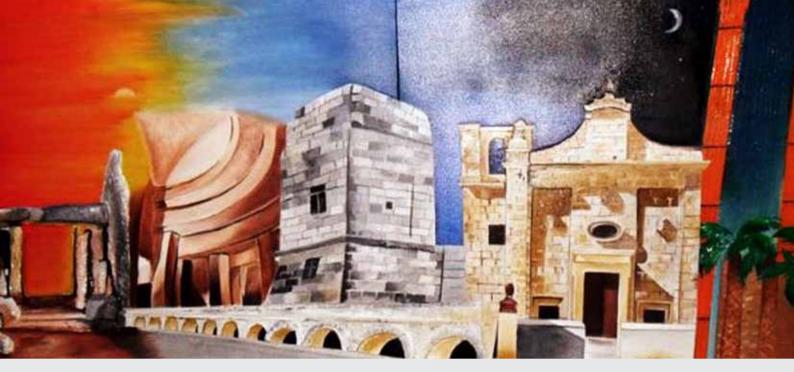
On behalf of MCAST and the Institute of Art and Design, we would like to thank our students for contributing to a successful first edition of Malta Design Week.













Students from the Institute of Art and Design were invited to participate in the exhibition organised and sponsored by the Housing Authority called Heritage in Stone. This exhibition is one of a series of activities set up by the Authority as part of the European Year for Voluntary Work, and had the aim of promoting Maltese Architectural Heritage and the Built Environment. The link to volunteering was brought about through a percentage of proceeds from the sales of the artworks exhibited going to Foundation Inspire. Additionally, another goal of the exhibition was to raise awareness of the value of Maltese historic assets in stone and the need for their preservation and appreciation.

This exhibition was also intended to give art students the opportunity to use their talents towards the setting up of a collective exhibition. One very positive outcome of this exhibition was the bringing together of works by students from different art institutions, namely the Malta School of Art, the Wistin Camilleri Gozo Centre for Art and Crafts, and of course the MCAST Institute of Art and Design. Works were chosen from among a pool of entries by a panel composed of representatives from each art institution, two independent artists and a representative of the Housing Authority.

Interestingly, the underlying theme of the exhibition was presented in an array of media, materials and techniques, ranging from digital artworks, paints, stonework and wood. Equally eclectic were Art and Design students' entries. In fact Yuri Vassallo, a student following the Introductory Certificate (Level 1) programme, displayed a highly atmospheric rendering in his work "Chapel Zabbar, Zongor". Foundation Diploma (Level 4) student, Sara Barnes, by contrast, presented highly effective, and seemingly spontaneous work executed in stitching on canvas depicting "Old Mint Street, Valletta". Finally, Jennings Falzon, who was finalising his top-up degree year (Level 6), submitted abstract interpretations of views of "Hagar Qim".

■ STUDENTS' COMICS HAILED AS GOOD PRACTICE IN FU SAFFR INTERNET CAMPAIGN

The collaboration that started with the Commissioner for Children over a year ago has yielded results beyond the expectations of everyone involved. Internet Safety was the overarching theme that was tackled by students following different courses at the Institute of Art and Design. One particular group was designated with the development, design and production of comic books aimed at young people aged between twelve and fifteen years. The underlying message of these comic books was the potential dangers of an otherwise important and useful tool.

Four comic books out of the sixteen submissions were shortlisted and selected according to their originality, clarity of content and message and fitness for purpose. Selection board members were so impressed by these works, that they proposed them to form part of the Be Smart Online! EU-wide campaign, and forty thousand copies were printed and distributed among secondary school youngsters.

These works are now being further recognised by the international body taking care of the Be Smart Online! project. In fact the comics were featured within the Insafe Annual Report: Promoting Safe and Responsible Use of Online Technology, and were hailed as an example of best practice in terms of peer-to-peer educational awareness campaigns.

"This was great news for our students and for the Institute of Art and Design," said Mr Stephen Vella, Director of the Institute, "especially when one considers that this report is widely distributed amongst our European counterparts as well as within the European Commission. It is extremely positive that our students are starting to get their work exposed outside of the local framework."

YELLOW PAGES COVER DESIGNED

by Art and Design Student

As part of consistent efforts to work more closely with industry, the Institute of Art and Design has forged an alliance with Yellow Pages Malta. The company approached the administration of the Institute of Art and Design to discuss the possibility of having students coming up with concepts for the Yellow Pages 2011-12 edition, with particular emphasis on the front cover.

Following a briefing session with Yellow Pages representatives, students were asked to present original ideas to the client. Three out of the twenty two entries presented to the company were shortlisted. The winning entry was designed and produced by Luca Cauchi, who was then following his first year of the Higher National Diploma in Graphic Design. Luca's design may be seen featured on the new Yellow Pages, which is currently being distributed within all local households. The two runners-up, Keith Brincat and Matthew Spiteri, were awarded a Yellow Pages Merchandise bag.

The selected design was in line with the historical theme currently running on the

Yellow Pages overall advertising campaign. A Yellow Pages representative stated that the collaboration was a success, so much so that they are once again working on yet another project with a different group of

> "Such collaborations give our students the opportunity to showcase their talent within the industrial realms,"

students at the Institute of Art and Design for this academic year. "Such collaborations give our students the opportunity to showcase their talent within the industrial realms," said Mr Stephen Vella, Director of the Institute of Art and Design. "Indeed, through this particular partnership, one of our students has benefited from unprecedented exposure across Malta. Our goal is to maximise this exposure fully through as many cooperations as we can handle."



Luca Cauchi and the two runners-up, Keith Brincat and Matthew Spiteri

INSTITUTE OF BUILDING AND CONSTRUCTION ENGINEERING

- MONTH INTERNSHIPS IN GERMANY AND ITALY.... LECTURING STAFF EXPERIENCES





by Ing. Godwin Caruana, Lecturer



Fraunhöfer Gesellschaft IAO Stuttgart carries out research on innovation for future buildings with particular attention to offices. My research initially consisted of studies on innovative products and services for future buildings and their effects on energy efficiency in buildings. I also carried out simulations using two different softwares on three different buildings. This study led to the discovery of the measures that are the most effective (and cost effective) to reduce energy consumption in buildings and eventually to make them Zero Energy buildings. The results of the different software simulations were compared for validation with very encouraging results.

The internship in Germany with one of the world's leading institutions was an important step in the continuous prosfessional development of my career.







by Christian Brincat Assistant Lecturer

My three-month research placement, as part of the MSc in Building Services, was carried out at Fraunhöfer-Gesellschaft in Italy. The "Fraunhöfer Innovation Engineering Centre IEC" is the first institute domiciled in Bolzano, South Tyrol, Italy. The institute is currently being run by the Fraunhöfer Institute for Industrial Engineering IAO together with the South Tyrol Employers' Association, with the support of the Free University of Bolzano.

The building industry has a long tradition in South Tyrol. One of the latest innovations being carried out is the development of Build4future in close collaboration with small and medium-sized businesses to acquire a sustainable value for the buildings of South Tyrol.

The research that I was assigned to do consisted of study of glass innovation technology from different perspectives, including chemical strength, fire protection, low/high emission, structure, glazing, self-cleaning and electrical heat. During the internship I also had time for ground research for my thesis which will in fact focus on the certification of sustainable school buildings.

Buildings need to be certified as sustainable - as "green". There are in fact various procedures to be followed in the construction phase as well as when renovating old structures to sustainable buildings. Building certification truly shows the efforts in achieving environmental goals for the benefit of individuals themselves, for the economy and the environment at large.

I would like to thank MCAST and everyone involved in the organisation of this internship. This was an unforgettable learning experience - one of a kind. This experience helped me in acquiring more knowledge in relation to European sustainable building perspectives for my thesis and for my career in general.





by Kenneth Psaila, Assistant Lecturer

As part of my Masters thesis which is co-organized by MCAST and Fraunhöfer, I have been assigned a three month internship at Fraunhöfer Innovation Engineering Centre (IEC) in Bolzano, Italy. The type of research carried out in this centre involves research which can be directly applied to the industrial sector, with the aim being to improve our society. During my internship I was assigned various tasks which were all related to new technologies which are being researched in the world.

The main focus/aim of my research project was to develop a sustainable alternative for Maltese dwellings by incorporating the four pillars of sustainable building, which are: switch off, spread out, blow away, cooling and heating. In order to achieve this purpose, energy simulation programmes such as EnergyPlus and WUFI® have been utilized.

On a final note, this experience helped me to develop more, both professionally and personally. For this reason I would like to express my gratitude to all the administrative staff working at MCAST for providing me such a unique opportunity.



INSTITUTE OF COMMUNITY SERVICES

THINK **E**OUAL

EQUALITY IN ARTS COMPETITION AND EXHIBITION

Between the 11 and 15 October 2011 the Institute of Community Services first floor foyer served as a show case for an exhibition entitled 'THINK EQUAL - Equality in Arts'. This exhibition was organised by the National Commission for the Promotion of Equality (NCPE).

The 'THINK EQUAL - Equality in Arts' Competition and Exhibition gave the public an opportunity to produce works of art in a variety of art forms including paintings, photography, sculptures, ceramics, glass work, jewellery, installation art, mosaic and stained glass art. Through their art the artists expressed the concepts of equality and non-discrimination.

Viewers were encouraged to vote for their preferred entry in both the art and photography categories. The students also participated in the voting.



Viewers touring the exhibition

Blowing cotton ball in goal post INSTITUTE OF ELECTRICALAND ELECTRONICS ENGINEERING

EMOTIONAL LITERACY INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERING

by Tania-Jo Buhagiar and Kenny Muscat, Lecturers Institute of Electrical and Electronics Engineering

The relationship that lecturers build with their students can have a large impact on the development of the student. After being introduced to the concept of Emotional Literacy for Vocational Education and Training, VET lecturers at the Institute of Electrical and Electronics Engineering were inspired to utilise this approach with the aim of encouraging better relationships between lecturers and students, leading to a more effective learning environment.

A seminar was held at Paragon Europe in Mosta in June 2011 where the methodology and tools of Emotional Literacy for VET were introduced by Dr Richard Majors and Mr Rob Larkin. Emotional Literacy is defined by Weare (2003) as the ability 'to be aware of, understand and use information about emotional states of ourselves and others with skill and competence. It includes the ability to understand, express and manage our own emotions and respond to the emotions of others in ways that are helpful to ourselves and others.' Dr Richard Majors presented and described ten attributes of Emotional Literacy for VET which include compassion, enthusiasm, forgiveness, optimism, power, social justice, trust, relational, selfconfidence and youth culture. Majors emphasized that using the skills of Emotional Literacy can help lecturers motivate their students to achieve higher results, manage classroom behaviour and ultimately help students develop the soft skills needed for future employment. He stated that the starting point for this would be to develop a sound relationship with their students.

With this concept in mind, the lecturers at the Institute of Electrical and Electronics Engineering began organising activities for the students attending the Foundation Course with the aim of creating a sense of community and enhancing the relationship between the students and themselves.

The first activity was an induction day with a difference which took place on Friday 30 September 2011. The morning started with an interactive induction meeting given by the Director, Mr John Sciberras where students were given a full overview of their course and were encouraged to ask any questions. After a brief break, the students were directed to the MCAST gymnasium where they participated in a variety of activities, emphasising communication skills and teamwork. This was an opportunity for students to get to know each other as well as their lecturers for the first time in a casual environment. Divided into seven teams, the Foundation students rotated around the gym visiting lecturers at seven different stations and worked together to complete a variety of tasks. Some of the activities the students were asked to complete included building the highest freestanding tower using plastic bottles and newspapers, completing a giant puzzle as fast as they could and blowing a cotton ball in a goal post while blindfolded with only the direction of their teammates to guide them. While the activities were taking place, it was evident that both students and lecturers were enjoying themselves as laughter filled the gym.

The second activity, which was organised in collaboration with the MCAST Sports Coordinator Adele Muscat and students attending the Institute of Community Services, was a Beach Games Day. The activity took place on Wednesday 26 October 2011 at Golden Sands Beach. The Foundation students participated in various beach games including beach football, beach volleyball, baseball, dodge ball and triathlon. Although there was a sense of competition between the teams, the students showed great enthusiasm and a sense of team spirit.

Using the skills of Emotional Literacy, the lecturers hope to encourage a sense of belonging and create an environment where students feel engaged in their learning so that they can reach higher levels of achievement.



Students figuring out the puzzle



Building tower using plastic bottles



Beach volley



NEW DIRECTOR - CAPTAIN ANAND DAYAL

Captain Anand Dayal, Master Mariner, MICS, CMILT is the newly appointed Director of the MCAST Maritime Institute, having previously worked as Senior Manger in the Ports Directorate of Transport Malta.

As part of the Ports Directorate's senior management, Capt. Dayal was directly responsible for Port and Vessel Traffic Management. He implemented and managed the vessel traffic management information system required by the EU Directive on maritime traffic. VTMIS, as it is commonly known, is primarily used to monitor and manage nearly 20,000 vessels entering and leaving Malta, thus enhancing safety and efficiency of maritime traffic in the Maltese ports. The VTMIS was complemented by the introduction of electronic port notification and clearance system that operates over the internet. The system, appropriately named PortnetMalta, is operated 24/7 by mariners qualified to international competency set by IMO and IALA. In 2006, Capt. Dayal was awarded Vessel Traffic Service Operators, Supervisor and On-Job-Training Certificate by the UK Maritime Coastguard Agency after following a full-time course at South Tyneside College. He is also qualified in VTS train the trainer course to IALA V-103/4 standards.

After qualifying Masters Foreign Going (Master-Mariner Class 1) certificate of competency from Warsash College of Nautical Studies in

1978, Capt. Dayal has held a number of senior management positions in the port and shipping industry.

In 1982, he was appointed Harbour Master of the ports of Malta. As Harbour Master, he had the privilege to work as marine adviser to the minister responsible for the container terminal development works at Malta Freeport; assisted the Magisterial Courts in the investigation of marine accidents; and conducted examinations for the issue of Masters Harbour Certificate to operate small ships and craft in local waters.

It was in 1985 that he was first introduced to the interesting discipline of maritime transport and logistics chain. This interest grew into a challenge and he proceeded to study to become Chartered Member of the Chartered Institute of Transport, an internationally reputed institution dedicated to the study and promotion of all forms of transport. Capt. Dayal is also a Chartered Shipbroker belonging to the Institute of Chartered Ship Brokers in the UK. Both Institutes were granted 'Royal Charter' which is seen as evidence of quality assurance and protection of professional standards of responsibilities, ethics, commitment and continuous professional development.

In the same year 1985, Capt. Dayal was actively involved in the successful salvage operations of an ocean-going ship stranded and



MARITIME INSTITUTE

abandoned by its captain and crew in extremely harsh wind and sea conditions. It is an unforgettable experience in the life of any mariner. An unusually high demand in the registration of ships in Malta in 1988 led him to join the registry of Shipping and Seamen, later renamed the Merchant Shipping Directorate within the Malta Maritime Authority. In this position, as Head of the technical department, Capt. Dayal implemented policies and procedures in the practical application of ship registration regulations and IMO Convention's safety, marine pollution and technical rules, and certification of Maltese flag ships.

For four years between 1989 and 1992, he once again took command of Sea-Land's container ships trading in the Mediterranean and North Sea ports, and participated in the first Gulf War, transporting vital military related goods to the Persian Gulf region. another notable shipping line that he worked on was CSAV (Chile Line) transporting passengers and goods between the sea-ports of North and South America.

Malta Freeport In 1992, invited Capt. Dayal to join their young and dynamic management team to carry out harbour and vessel traffic management functions including extensive hands-on exercises to identify logistic, organisational and operational problems of the Freeport's container terminal, implementation of a new yard and ship management system, and development and training of Freeport's operational staff. In doing so he compiled a training manual on Ship Stability for the Freeport's ship and yard planners involved in container operations.

Capt. Dayal went on to become Chairman of the Chartered Institute of Logistics and Transport (CILT) Malta in 2008. During his tenure in office as Chairman, together with CILT executive members, he organised the CILT International Convection Meeting in Malta for over 120delegates from 30 countries; CILT International Conference on 'The Calm after the Storm-Global Expectations in Trade. Transportation & Logistics' with internationally renowned guest speakers. Again, with the assistance of fellow members, he held discussions with the University of Malta Rector to run a CILT developed Diploma programme in Transport and Logistics and went on to become its parttime lecturer at the same University.

Capt. Dayal is married with two daughters and resides in Malta.



INSTITUTE OF MECHANICAL ENGINEERING

INTERNATIONAL OPPORTUNITIES FOR STUDENTS AND STAFF

by David Bonello, Deputy Director, Institute of Mechanical Engineering

The Institute of Mechanical Engineering keeps its doors open to any possibility for international exchanges. It is imperative for the Institute to be proactive by sharing knowledge and practices with similar organisations through visits and exchanges for students and staff. As an education institution, the Institute firmly believes that it cannot do without these experiences since these provide better grounds on how one can weigh one's knowledge and capabilities. These experiences also offer an opportunity to better understand how other communities look at and practice education.

During the last academic year there were various opportunities for foreign students and lecturers to visit the Institute of Mechanical Engineering. The Faculté Des Métiers de l'Essonne, France and the Nortelje Teknigymnasium, Sweden have made it an annual appointment to visit the Institute. There were also short visits from various lecturers of different education institutions. Apart from interacting with students and staff, they also visited various local industries. Some of the students have even carried out a short work experience during their stay in Malta. The industries involved were Playmobil, Farsons, ST Thomson Micro Electronics and Seifert MTM System. Enemalta, Medavia and similar industrial organisations have also accepted these students to go for a visit.

Mr David Bonello, Deputy Director Institute of Mechanical Engineering and Ing. Testaferrata, Enemalta with the Swedish students



■ LECTURERS FROM PAMUKKALE UNIVERSITY, TURKEY BENEFITTING FROM AN ERASMUS MOBILITY PROJECT



Mr David Bonello, Dr. Rezcan Sekkercioglu and Dr. Özler Karakaş with lecturers and students

Two lecturers from the Faculty of Engineering within Pamukkale University, Turkey namely Dr. Özler Karakaş and Associate Professor Dr. Rezcan Sekkercioglu, have benefitted from the Erasmus Mobility programme and visited the Institute of Mechanical Engineering. During their visit they delivered lectures in a seminar as well as discussed aspects of mechanical engineering with academic staff. The topics discussed during their lectures included 'The Use of Adhesives in Engineering Processes' and 'Fatigue Behaviour of Welded Joints from Magnesium Alloy AZ31'.

Associate Professor Dr. Rezcan Sekkercioglu and Dr. Özler Karakaş passed very positive comments on the Institute and its high standards and levels of quality.

Professor Trevor Kerry from Leicester University visited MCAST during the beginning of this academic year. His visit included a tour of the Institute of Art and Design, the Institute of Building and Construction Engineering as well as various Departments and Institutes situated at the Main Campus. The main aim of his visit was to discover how vocational education is being delivered in Malta.

Prof Trevor Kerry is Visiting Professor at Bishop Grosseteste University College, UK. Until recently he was Professor of Educational Leadership at the Centre for Educational Research and Development at Lincoln University, UK, and is the university's first Emeritus Professor. He has worked in primary, secondary, further and higher education, as well as teacher education. He has been a Senior General Adviser with a Local Authority and an Ofsted Inspector. He was Professor of Education at the College of Teachers (UK), where he was also Senior Vice-President and Journal Editor.

PROFESSOR TREVOR KERRY'S VISIT TO MCAST

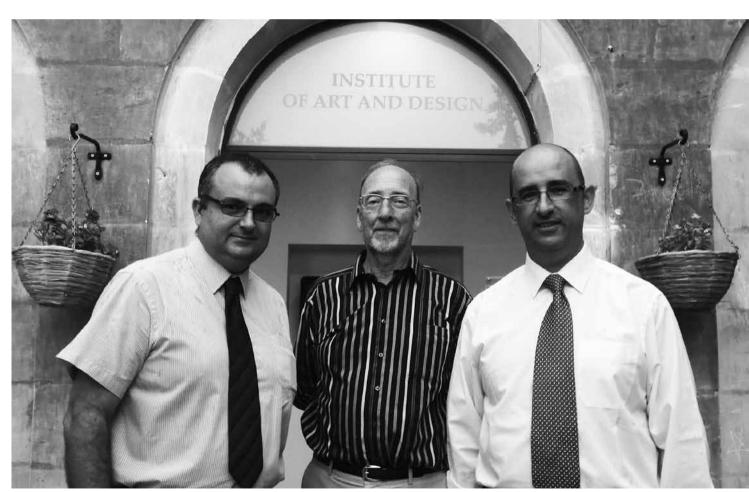
During his visit to Malta he delivered a talk to professional educators in education organisations including the University of Malta. The subject discussed was 'Leading Learning in Schools'.

Professor Kerry was very pleased with the level of the Maltese education system. Focusing on the vocational aspect, his words were very encouraging and he emphasised that vocational education should not be considered as a second route for learning. Investing properly and possibly understanding better what educational leadership entails, would shed light on the local and international context of leading educational institutions. This would gradually provide a change in leaders' behaviour through a transitional and transformational period to the desired aims and objectives.

During his visit to MCAST, Professor Kerry was hosted by Mr David Bonello, Deputy Director at the Institute of Mechanical Engineering.



From left: Mr John Vella, Director Institute of Building and Construction Engineering, Prof Trevor Kerry and Mr David Bonello, Deputy Director Institute of Mechanical Engineering



From left Mr David Bonello, Deputy Director Institute of Mechanical Engineering, Prof Trevor Kerry and Mr Stephen Vella, Director Institute of Art and Design

THE STUDENTS' AIRCRAFT by Ing Leo Scicluna

During the last weekend in September the Institute of Mechanical Engineering participated in the Malta International Airshow.

The Malta International Airshow comprises the display of aircraft. Visitors have the opportunity to view both static displays of aircraft as well as inair displays, some of them aerobatic displays. The aircraft on display included civilian and military types of aircraft. But visitors to this year's Airshow were in for a little surprise. As they mingled around the aircraft from the various countries with different operational functions, they also came across a humble Piper Seneca II with the MCAST colours on its fuselage and tail plane.

MCAST, for the first time, participated in the Malta International Airshow. The idea came up during a casual discussion between Ing. Aurelio Micallef Grimaud, Institute Director and myself. We thought of giving exposure to the Institute of Mechanical Engineering and MCAST. We were both looking forward to the upcoming Airshow, which we both individually attend on an annual basis, when we suddenly stumbled upon the possibility of participating. We thought that it would be great to be participants at the Airshow, flying the MCAST colours, instead of being just spectators.

Having decided that this was the way to go, we started working to bring this idea to life, and through our personal contacts in the aviation sector, we informed the Malta Aviation Society, organisers of the Airshow, that MCAST wished to take part in the upcoming Airshow. Mr. Joe Ciliberti, of the Malta Aviation Society, gave us the go ahead right away. MCAST was now going to contribute to the educational dimension of The Malta International Airshow which is so much at heart with the Malta Aviation Society members and with aviation enthusiasts at large.

The objective of MCAST's participation was to promote the courses that the College offers with a particular focus on the Aircraft Maintenance courses. We also intended to address any queries or misconceptions that prospective students as well as the public at large might have had. The MCAST stand at the Airshow displayed workpieces as well

as projects that the Aviation Maintenance as well as the other Institute of Mechanical Engineering students work upon and construct throughout the duration of their respective courses. Members from the MCAST Guidance and Counselling Services Department were also present throughout the Airshow so as to answer any queries that visitors to the stand had in relation to courses other than those offered by the Institute of Mechanical Engineering.

The centrepiece of MCAST's stand at the Airshow was the Piper Seneca II Maintenance training aircraft. As soon as we were informed that MCAST will be at the show, the students and their Maintenance instructors, at the time working on the aircraft, were immediately advised. In turn they revised the Aircraft's Maintenance schedule so as to prepare it in time for the show.

Aviation Maintenance students, many of whom had worked on the Piper Seneca II Maintenance training aircraft, were also present in full force throughout the Airshow, enthusiastically explaining the work they do and the basics of aircraft maintenance and operation. They also went into the details of explaining to the public the functions of the different parts of an aircraft, such as the ailerons, the rudder, vertical and horizontal stabilizers. The students also deliberately removed the engine cowlings as well as the passenger cabin floor boards so as to expose the engine and various control mechanisms of the aircraft. With immense dedication our the students also gave the opportunity to those who wished, to take up the pilot's seat and operate the various controls of the aircraft at under their close supervision, so as to ensure that no one was injured and no damage was done to the aircraft. As expected this experience was very well received by all, but most notably by the younger generations.

Interest from the general public was also very encouraging and people kept us very busy by asking a myriad of questions which were especially related to the projects and aircraft on display.

It seems that the MCAST will participate on an annual basis in the Malta International Airshow.





CAR DONATED TO MCAST'S MECHANICAL ENGINEERING AUTOMOTIVE WORKSHOPS

On Monday 24 October 2011, Mr Jurgen Sixt donated his private car, a Honda Civic, to the automotive maintenance workshops within the Institute of Mechanical Engineering.

Mr Sixt was welcomed and shown around the automotive maintenance workshops by Prof Maurice Grech, Principal and CEO, Mr Aurelio Micallef Grimaud, Director of Institute, Mr David Bonello and Ing Ray Vassallo, Deputy Directors of Institute. He also met the students and lecturing staff who were very appreciative of his donation.

Such donations are very beneficial to the students, allowing them to put into practice what they learn in class, using different types of vehicles. The Institute also receives several vehicles, which albeit still roadworthy, are taken off the fleets of businesses or government entities.

Mr Sixt was presented with a small token of appreciation towards the end of the visit.





Prof Maurice Grech, Principal presenting Mr.Sixt with a small token of appreciation

WHAT IS ENGINEERING? AND WHAT IS IT THAT ENGINEERS DO?

By Ing Ray Vassallo, Deputy Director, Institute of Mechanical Engineering



I joined the MCAST team a few weeks ago and was asked to prepare a short article for MCASTlink. I thought about an appropriate topic to write about and one that would interest young MCAST engineering students. Probably young engineering students are asking themselves, "What is Engineering, and what is it that Engineers do?" I thought that this would be an appropriate title for my baptismal article. Students can look up a definition on Wikipedia or in some encyclopaedia but I will address these questions from my personal experience.

My first contact with engineers was when I worked with a local construction company at the tender age of 16. The Civil Engineer used to visit the site and the site foreman would describe what has been going on. The engineer would ask questions to ensure that everything that was being done was according to specifications and according to his requirements. The foreman would also ask technical questions and clarifications of certain details on the drawings. A few months later I was working with the local telephony service provider. This corporation was in a transition stage where the telephone network was being expanded and PABXs (telephone hubs or exchanges) were being upgraded. This organisation was highly dependent on technology and the engineers within this corporation were very highly regarded. Needless to say I was very impressed by the knowledge that these engineers imparted to their subordinates.

Destiny had its way and I found myself an apprentice fitter at a Ship Repair Yard and it was there that I became betrothed to engineering. I was fascinated by the large diesel engines 20 metres high and 15 metres long, with piston diameters of 1 metre. Some engine room controls were out of this world. I was fascinated by the ships. the docks, the large rail cranes, 2 metre diameter pipe systems, generators and 11k V switch gear. I grew an irrepressible urge to learn how things work. I read whatever technical literature came my way trying to learn what technical developments were happening in other countries. My ambition then, was to join a shipping line as a Marine Engineer after having obtained my Higher Technicians' Diploma. The Ordinary Technicians' and Higher Technicians' courses, and the great lecturers we had, continued to whet my appetite for learning and I took up the opportunity to read for a Bachelors Degree in Mechanical Engineering and eventually started working as an engineer.

My engineering career was mainly in repairs and maintenance. Reviving and improving machinery and keeping equipment, even that dating back to 1943, in good working order, gave me great personal satisfaction. Introducing new technologies, solving problems and inefficiencies that had been hampering operations for years, made me proud of my achievements. I was also involved in the design and redesign of

engineering systems. Decommissioning systems and health and safety of personnel were a major and very important part of my responsibilities. When accidents did happen, and unfortunately accidents do happen, these were the times when I felt great disappointment. In these instances the most one can do is to investigate the situation and take the necessary control measures to ensure that such instances are not repeated.

As an engineer's career develops, he normally becomes more and more involved in management. My career was no exception. The engineer has to prepare and control budgets, appraise and manage projects, resources and people.

Traditionally the engineer has been looked upon as the professional person who finds solutions to technical problems. I believe that engineers should become more involved in higher decision making, ensuring that certain problems are avoided.

I hope that my brief write-up about engineering and engineers was of interest. I would like to take the opportunity to wish all students who have embarked on an engineering career the best of luck and if you need support please do not hesitate to call on me at the Institute of Mechanical Engineering.



READING THE FUTURE OF HIGHER EDUCATION IN EUROPE

by Anthony Saliba, Deputy Principal



ARRIVING IN SOPOT (POLAND)

Between Sunday 23 and Tuesday 25 October 2011, I was invited to take part in an EU Polish Presidency Conference in Sopot, Poland. Sopot is one of the top touristic areas in Europe and it also has the longest wooden pier in Europe. After landing at Gdansk (or Danzig) airport, we were helped to reach our conference venue – the Sheraton Hotel – after a thirty-minute bus drive. Indeed, Poland is a beautiful country, where we had the privilege of benefitting from excellent hospitality, perfect organisation and the overall outcomes of this conference.

THE CONFERENCE PROCEEDINGS

The major agenda item of this meeting was to discuss the modernisation of Higher Education (HE) in Europe. This was the result of an earlier EU Communication on the same subject. After the welcoming dinner on Sunday evening, I went for a 'very cold walk' on the famous pier, which was only a three-minute walk from our hotel. During dinner, the conference agenda was already well articulated in the mind of the eighty-eight participants: apart from the informal conversations, the subject of the future of HE in Europe was a major concern in terms of astounding demographic changes, funding, human resources, quality and the mobility of researchers. In general, it was felt that the EU has to do much more in this sector.

The conference participants represented the major HE stakeholders in Europe: the European Commission, Institutions involved in the Bologna Process, International Organisations (such as the European University Association), Ministries, Polish Organisations, sixteen conference speakers, Region Authorities and the twelve organisers. In the opening speech, Professor Z Murziack, Minister of Science and Higher Education in Poland, augured all participants a successful experience of sharing their views and recommendations, which were finally going to be presented to the European Commission.

A number of comments and suggestions were presented to the conference in the main key speech delivered by Mr Jan Truszcynski, European Commission Director General for Education, Training, Culture and Youth, and the two main speeches during the Plenary Session, presented by Professor Marek Kwiek, Director, Centre for Public Policy Studies at Poznam University, in Poland. He was followed by the most interesting presentation of Professor Maria Helena Nazaré, on behalf of the European University Association. In all, four workshops were held on (a) European Higher Education on the World Stage, (b) Social Dimension: Making Higher Education more attractive to all and opening up to non-traditional learners, (c) Ensuring Quality: excellence, quality and relevance, and (d) Funding Universities: Diversification and Good Governance.

The Conference came to a close with the workshop reports, which preceded the last debate with stakeholders, experts and policy makers on the Modernisation of Higher Education in Europe. Given the brevity of this report on such a significant meeting, I am picking up some of the main ideas and recommendations made during this Conference.

MAIN IDEAS AND **RECOMMENDATIONS**

Beyond the current crisis: The agenda for the modernisation of HE in Europe cannot be completely determined by the current financial crisis. Tertiary institutions need to think beyond this threatening scenario. It is absolutely important to ensure that HE programmes address the labour market needs. Since most HE students who would have completed their undergraduate and / or postgraduate degree programme successfully will seek to work outside the geographical area of their university, it becomes more significant to enable all concerned to better understand the acquired qualification, while enhancing its transferability. Within this scenario, diversity becomes infallibly critical for the purpose of mobility, which reminds all that there is need for a solid quality assurance system.

The vision of EU on the modernisation of HE in Europe: The European Commission is continually highlighting the urgent need of making the best use of available resources in degree programmes, especially in the field of research and innovation. While being fully aware of the impending financial crisis which is driving Europe to so much social unrest, the European Union is inviting all its Member States to optimise their efforts to help their economies get out of this crisis. The ambitious target of creating more jobs requiring higher level education is a challenge which all Member States are expected to endorse. Graduates need to be equipped with better knwoledge and more transferable skills. The striking difference between the 60% of the student cohort in the HE sector in the USA. China and Australia, compared with the less than 20% HE students in Europe indicates that Europe is facing very tough competition. One possible solution could be the creation of more opportunities for EU students to study abroad, together with the enhancement of inter-universities mobility. This needs to be further supported by better funding systems and accountability: within this context. EU Conference representatives focused on (a) an adequate tuition-fees system. (b) the commercialisation of research and (c) better use of all EU programmes. It was also announced that very shortly the EU shall present the 2013-2014 proposals for HE.

The EU is currently working at the internationalisation of more efficient policy dialogue involving EU and non-EU countries regarding the HE sector. Apart from this initiative, reference was made to two projects, among others, which are yielding positive results: the 'Erasmus Degree Masters Guaranteed Degree' (taking a Master's Degree in an other EU state), and the pilot scheme of 'Knowledge Alliances' (to promote excellence on the basis of partnerships).

Fees, Grants and Supporting Students and Researchers: This hot issue unfolds the great difficulty which most HE institutions are facing. A debate followed on how to support students financially during the degree studies, with the prevailing recommendation of offering a mixed grants-loan system. Here it is most appropriate to highlight the 'unique situation' of students following courses in the Further Education and in the Higher Education sectors, where it results that Malta's financial support to students classifies second best in EU, only after Denmark. The paper presented by Professor Petr Mateju (University of Finance and Administration in Prague), Simona Weidrenova (Institute for Social and Economic Analysis in Prague) and Professor Hans Vossesetyn (University of Twentee Enschede in the Netherlands) on a 'Czech-Dutch comparative study of student finance systems and their effects on the development of inequity in access to higher education' concluded that, "In order to develop more efficient models of higher education financing, incorporating both economic and social dimensions of efficiency and equity, policy debate about the role of tuition fees and student financial support needs stronger empirical underpinning."

Equally interesting in the context of such discourse were the recommendations made by Dr Dominik Antonowicz, from the Nicolaus Copernicus Unversity of Torin. He claimed that all EU Member States and HE Institutions have a social responsibility for Higher Education, implying that the following provisions have to be taken into serious consideration:

- (a) Providing education for an increasingly diverse society;
- (b) Recognising non-traditional financial situations of new students;
- (c) Establishing flexible learning paths in a lifelong learning perspective;
- (d) Widening access to under-represented groups; and
- (e) Better-focused career guidance, dedicated support and counselling, as well as the provision of a gender-sensitive environment.

Some facts and figures: Europe's concerns about the future of HE are better contextualised if one considers the facts and figures presented by Professor Maria Helena Nazaré, as summarised below:

- (a) The EU 2020 Strategy is seriously threatened by the disparity of demographics, which is already impacting negatively on HE Institutions in Europe;
- (b) Within the next decade, the percentage of the population over the age of 60 will grow to over 30% to 40% in the USA, Europe and parts of Asia;
- (c) Global disparities in wealth and economic opportunity are driving population migration, resulting in growing immigrant and minority populations that both diversify and challenge existing cultures, economies and politics;
- (d) Since the gap between the very rich and the poor is widening, better and stronger policies for improvement of social inclusion and cohesion are needed:
- (e) The group of school-leavers from which the HE traditionally recruits is shrinking across Europe (the 20-24 age group will decrease by 23.3% in 2050!);
- (f) One must be careful to avoid the increasing perception of considering mature students as the cash providers to balance the cuts in the public funding. One has to emphasise the point that rankings and league tables (here there is also an issue of transparency) are not the essential issues; and
- (g) HE Institutions and Europe should not ignore the upsetting datum that by 2050, Europe's population will decrease by 42 million citizens, while elsewhere the population will grow by 2.2 billion people.

WHY AND HOW IS THIS RELEVANT TO MCAST?

The urgency of being a stakeholder and a wise interlocutor in what takes place in the sectors of Further and Higher Education cannot bypass the immediate attention and considerations of our College. Apart from the impact of the HE scenario on MCAST's future, the College's strategy and mission need to address the incumbent concerns resulting from the current financial crisis, the need to reevaluate regularly the manner of handling our students' courses and career guidance in terms of the labour market, as well as to be more proactive in dialoguing with local and foreign industry.

A considerable number of MCAST students and lecturers are now engaging in the Level 5-6 courses leading to bachelor degrees (art or science) in vocational sectors. It is high time to explore and exploit opportunities leading to more mobilities and sharing of expertise with similar EU institutions, thus enhancing the inter-EU Member States dialogue for the purpose of enriching our VET experiences. MCAST stakeholders may benefit to no small extent from being open to new ideas (innovation and creativity), and for endorsing a strong quality assurance which will make its Level 6 qualifications better understood and accepted by others (some good work has already started in this regard).

CONCLUSIONS

The Sopot Conference organised by the EU Presidency also brings to mind the enriching experience of being self-critical. Thomas Merton's dictum that 'No man is an island' draws our attention to take a more active part in the wide EU debating society, especially when what happens in such sensitive sectors abroad will definitely hit us, rergardless of our size and geographical position.

MCAST has a great future. In a short ten-year period, MCAST successfully developed itself into Malta's leading VET provider, increased the VET courses available for its students from Level 1 to Level 6, and it has earned a stong reputation for working so remarkably well among non-traditional learners, offering individual support to include as many youngsters as possible within Malta's skilled and competent workforce.

materialisation smart. sustainable and inclusive growth in Europe depends on a better and higher articulation among governments, policies and institutions, promoted and supported by visionary leadership at all levels." Issues of funding, making VET programmes relevant to labour market requirements and continuing to devise a strong quality assurance system also belong to MCAST's present and future agendas.

The most striking statement of Professor Maria Helena Nazaré was that politicians should stop telling us to 'do more with less.' In her opinion, this simply doesn't work. I am concluding these reflections by referring to another of her Conference reflections: "The materialisation of smart, sustainable and inclusive growth in Europe depends on a better and higher articulation among governments, policies and HE institutions, promoted and supported by visionary leadership at all levels."

VOCATIONAL TEACHERS TRAINING UNIT WELCOME SESSION FOR NEW MCAST RECRUITS

On Wednesday 5 October 2011 the College's Vocational Teachers Training Unit held an orientation event to welcome new recruits in the team of MCAST staff. The objectives of the activity were to welcome the new employees, introduce them to MCAST personnel and to provide them with basic information on the function of the different MCAST departments.

The new colleagues met individual MCAST personnel who introduce and briefed them on the different sectors of the college. They were also taken on a tour of various areas of the MCAST campus. The session included a meeting at the Principal's office where he expressed his conviction that the new employees will be adding new strengths to MCAST's talented team of academic and administrative staff.

Prof Maurice Grech, Principal and CEO, encouraged the new employees to continue working to boost the College's achievements. He also outlined the road ahead for the next three years, when the College will be aiming to boost the level of quality of all its programmes and services, while introducing new opportunities to offer more vocational education opportunities for an even wider spectrum of learners.

The Principal wished the new recruits the best of luck for the academic year ahead.



Prof Maurice Grech, Principal and CEO, Ms Joyce Hili, HR Manager and Ms Veronica Sultana, VTTU Co-ordinator with new MCAST recruits

MCAST Gateway to Industry

MCAST Gateway to Industry Ltd. was established in 2008 to enhance the industrial and vocational objectives of MCAST in support of the students' interest and of the academic standing of the College's staff.

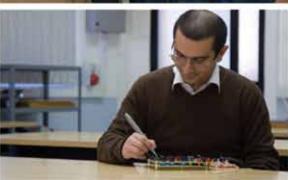
We offer training, research and development services to individuals as well as to local and international commercial organisations.



- Over 300 part-time courses
- Customised training
- Applied research and laboratory services
- Industrial consultancy
- Leasing of events and training facilities
- Services to MCAST foreign students









MCAST Gateway to Industry Ltd. MCAST Main Campus, Corradino Hill, Paola, PLA 9032

T: (+356) 2398 7103, 2398 7116 E: mg2i@mcast.edu.mt W: www.mcast.edu.mt

SEEK HELP

MCAST

SEEK HELP RIGHT FROM THE START IN NEED OF HELP IN MATHS, ENGLISH AND MALTESE UP TO 'O' LEVEL STANDARD?

DON'T WORRY, WE CAN HELP YOU.

CALL MR DAVID MUSCAT, MCAST LEARNING SUPPORT UNIT CO-ORDINATOR ON 23987517/8 OR SEND AN EMAIL TO BASICSKILLS@MCAST.EDU.MT

FITTEX L-GHAJNUNA

MCAST

FITTEX L-GĦAJNUNA MILL-EWWEL

GĦANDEK BŻONN L-GĦAJNUNA FIL-MATEMATIKA, L-INGLIŻ U L-MALTI?

THABBILX RASEK. NISTGHU NGHINUK.

CEMPEL LIS-SUR DAVID MUSCAT, KORDINATUR TAT-TAQSIMA GHAJNUNA FIT-TAGHLIM TAL-MCAST FUQ IN-NUMRU 23987517/8 JEW IBGHAT ITTRA ELETTRONIKA LIL BASICSKILLS@MCAST.EDU.MT

