



Ġ.F. ABELA JUNIOR COLLEGE
UNIVERSITY OF MALTA




connections

ANNUAL
CONFERENCE
2017

18-20 SEPTEMBER
Ġ.F. Abela Junior College
Ġużè Debono Square
Msida, Malta

Connections offers scope for constructing and deconstructing the appreciation of inter-disciplinarity and connections/disconnections that may exist between intersecting areas of study.



Conference Programme

Abstracts & Bio-Notes



The University of Malta Junior College
Multi-Disciplinary Conference:
Research, Practice and Collaboration

‘Connections’

18-20th September 2017

The Principal of the University of Malta Junior College, Mr Paul Xuereb, as well as the members of the Junior College Conference Committee, acknowledge with thanks, the support of the following sponsors:



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UNIVERSITY OF MALTA



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Agendabookshop

Dr Christina Zarb (University of Malta)

Discrete Mathematics in Post-Secondary Education

Abstract

Mathematics is present in several post-secondary courses and is an important pillar in several undergraduate degrees and diplomas. The options offered by the MATSEC Board at Intermediate and Advanced Level currently include Pure Mathematics and Applied Mathematics at both these levels. Pure Mathematics is heavily based on Calculus, which is of course required for courses such as Engineering, Architecture and Economics amongst others, while Applied Mathematics is concerned with the applications of mathematics in the context of Mechanics. There have been very little changes to the syllabi at this level, and no introduction of new areas such as mathematics applied to Economics and Finance, as well as Computer Science. In this presentation, we would like to concentrate on a very important strand of Mathematics – Discrete Mathematics, or Combinatorics. The New Jersey Core Curriculum Content Standards defines it as: “Discrete mathematics is the branch of mathematics that deals with arrangements of distinct objects. It includes a wide variety of topics and techniques that arise in everyday life, such as how to find the best route from one city to another, where the objects are cities arranged on a map. It also includes how to count the number of different combinations of toppings for pizzas, how best to schedule a list of tasks to be done, and how computers store and retrieve arrangements of information on a screen. Discrete mathematics is the mathematics used by decision-makers in our society, from workers in government to those in health care, transportation, and telecommunications. Its various applications help students see the relevance of mathematics in the real world.” Its applications are far reaching in areas such as Computer Science and Logistics, and the reasoning methods and rigour associated with it are important skills required by any STEM subject. The syllabi at both Advanced and Intermediate Level include some elements of Combinatorics, but the scope is very limited. The inclusion of Discrete Mathematics and Combinatorics at this level is discussed and analysed. Different approaches are discussed and the syllabi and implementation in other countries, such as the UK and others, are explored. We look at different topics which can be included in syllabi, and propose different ways in which these changes can be implemented in the current setting. Sample lesson plans and sample exam questions are also considered.

Bio-note

Christina Zarb is a Mathematics lecturer at the Junior College, University of Malta, where she has been teaching for five years. She previously taught in other Higher Education Institutions including MCAST and St. Martin’s Institute. She is also a casual lecturer at the University of Malta. Christina has a Bachelor’s degree in Mathematics and Computer Science, as well as a Masters degree and Ph.D. in Mathematics, all conferred by the University of Malta. Her area of specialisation is Graph Theory and Combinatorics. She has taught mathematics at various levels, starting from secondary school up to post-graduate level, and is very interested in the transition process between the different levels of education, particularly in mathematics.

storico maltese Ignazio Saverio Mifsud (Lecce, 2013); Sbalordimento e godimento in un panegirico di un predicatore maltese del 1735 (Lecce, 2015), L'eloquenza Sacra a Malta tra il secondo Seicento e il primo Ottocento (Malta, 2017) and L'eloquenza domenicana di antico regime in area mediterranea attraverso l'analisi di varie tipologie testuali (Lecce, 2017).

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whose eloquence constitutes a notable synthesis of the best possible model of persuasive communication. The most interesting aspect of this research is that the remarkable example by the outstanding masters of classical eloquence is, nowadays, still very much held in high esteem. As a matter of fact, modern eloquence, better known as Public speaking, continues to regard classical rhetoric as a basic point of reference. In other words, classical eloquence was so much effective to the extent that today, all kinds of oratory, either political or religious or of any other genre, cannot put aside the fundamental teachings of the major exponents of Hellenistic and Roman oratory.

Nota biografica

Stefano Zammit è docente di lingua, letteratura e cultura italiana presso il dipartimento d'Italiano della University of Malta Junior College. Si è laureato in Lettere (Italianistica) e in Scienze della Comunicazione all'Università di Malta. Sempre presso il medesimo ateneo ha conseguito i titoli di *Master of Arts* (specializzandosi nel campo della cronachistica del Settecento) e di Dottore di Ricerca in Italianistica nel campo dell'omiletica, con particolare riferimento all'oratoria sacra italo-maltese tra il secondo Seicento e il primo Ottocento. Durante l'anno accademico 2004/2005, in qualità di dottorando di ricerca Erasmus, ha studiato nelle università di Roma Tre, Roma *La Sapienza* nonché presso la Pontificia Università degli Studi San Tommaso d'Aquino in Roma (*Angelicum*). A partire dallo stesso periodo ha svolto ricerche negli archivi e nelle varie biblioteche di Malta, Roma, Venezia e Napoli. Le sue principali attività di ricerca riguardano l'Italianistica, l'Eloquenza sacra, le Scienze della Comunicazione nonché il Public Speaking. Tra le sue pubblicazioni si annoverano: *Per una storia delle forme devozionali a Malta tra la fine del Seicento e la fine dell'Ordine dei Cavalieri* (Perugia, 2010); *La letteratura popolare religiosa a Malta* (Firenze, 2012); *Immagini sacre nei resoconti in lingua italiana delle missioni a Malta nel primo Settecento* (Roma, 2012); *L'esperienza muratoriana dello storico maltese Ignazio Saverio Mifsud* (Lecce, 2013); *Sbalordimento e godimento in un panegirico di un predicatore maltese del 1735* (Lecce, 2015); *L'eloquenza Sacra a Malta tra il secondo Seicento e il primo Ottocento* (Malta, 2017) e *L'eloquenza domenicana di antico regime in area mediterranea attraverso l'analisi di varie tipologie testuali* (Lecce, 2017).

Bio-note

Dr Stefano Zammit B.A. (Language & Communication studies), M.A. (Italian studies), Ph.D. (Italian homiletics) is Senior Lecturer II in Italian language, literature and culture within the Department of Italian at the University of Malta Junior College. Dr Zammit studied at the Universities of Malta, Perugia, Roma Tre, Roma *La Sapienza* and at the *Angelicum* (Rome). His main research interests are Italian studies, Homiletics, Communication studies and Public speaking. Dr Zammit's recent publications include *Per una storia delle forme devozionali a Malta tra la fine del Seicento e la fine dell'Ordine dei Cavalieri* (Perugia, 2010); *La letteratura popolare religiosa a Malta* (Florence, 2012); *Immagini sacre nei resoconti in lingua italiana delle missioni a Malta nel primo Settecento* (Rome, 2012); *L'esperienza muratoriana dello*

Dr Stefano Zammit (Università di Malta)

Immagine dell'Eloquenza classica attraverso le figure emblematiche di Demostene, Pericle, Eschine e Cicerone

Abstract

Questo studio rappresenta una sorta di viaggio nella genesi e nell'evoluzione dell'eloquenza classica a partire dai principali oratori greci quali fondamentali artefici della retorica, seguiti dagli oratori romani e in particolare dalla straordinaria figura dell'oratore latino Marco Tullio Cicerone. In seguito all'analisi degli albori dell'oratoria classica, il saggio si occupa di una delle tappe più significative della storia della retorica, quella dell'unione tra la filosofia e l'eloquenza. Dopodiché ci si sofferma sui maggiori esponenti dell'eloquenza e più specificamente sulle loro particolari caratteristiche. Apre la carrellata colui che è considerato uno dei più grandi oratori di tutti i tempi nonché uno dei padri dell'eloquenza moderna. Si tratta dell'ateniese Demostene, considerato all'epoca di Cicerone come il reitore per eccellenza. Altre fondamentali fasi della presente esplorazione inquadrano il notevole apporto di oratori quali Pericle ed Eschine. Infine, si focalizza l'attenzione sull'eccezionale e prestigioso contributo di Cicerone, mirabile sintesi di un'eloquenza particolarmente efficace e praticamente scevra della benché minima imperfezione. L'aspetto più interessante di questo saggio è che la notevole lezione di tali artefici dell'oratoria classica non solo non è caduta nel dimenticatoio, ma ci è stata tramandata fino ai nostri tempi. In effetti, l'eloquenza più moderna, oggi più comunemente nota con l'appellativo di Public Speaking, deve necessariamente e inevitabilmente fare i conti con la retorica classica. In altri termini, tale si rivelò l'efficacia dell'eloquenza classica che oggi, qualsiasi genere di oratoria – politica, religiosa o di altro genere ancora – non può prescindere dal fondamentale insegnamento dei massimi rappresentanti della comunicazione ellenistica e romana.

Images of Classical Eloquence through the Emblematic Figures of Demosthenes, Pericles, Aeschines and Cicero

Abstract

The following study analyzes in retrospect the genesis as well as the evolution of classical eloquence starting from the main Greek orators as fathers of rhetoric, followed by Roman orators and in particular by the remarkable figure of Marcus Tullius Cicero. After a detailed analysis of the dawn of classical oratory, the paper deals with one of the most significant stages of the history of rhetoric, namely, the correlation between philosophy and eloquence. Afterwards, the study focuses on the major exponents of eloquence and more specifically on their particular characteristics. Such an overview begins with the Athenian Demosthenes, considered as one of the greatest orators of all times as well as one of the forefathers of modern eloquence and reputed, during the age of Cicero, to be the rhetorician par excellence. Other important masters of classical eloquence included in this analysis are Pericles, a prominent and influential Greek statesman, orator and general of Athens during the Golden Age, and Aeschines, a Greek statesman and one of the ten Attic orators. Finally the study analyzes the outstanding and prestigious contribution by Cicero,

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The Junior College Multi-Disciplinary Conference:

Research, Practice and Collaboration

'Connections' - Programme

18-20th September 2017

Monday 18 th September 2017		
Location	University of Malta Junior College	
08:00-09:00 After 09:00	Registration Ground floor, Block A Reception Desk on the 2 nd floor (Block A)	
Venue	A301 Conference Hall	
09:00-09:05	Official Opening & Institutional Speech The JC Principal, Mr Paul Xuereb	
09:05-09:45	Chair: Mr Niki Young	
09:45-10:00	Keynote Dr David Roden Disconnection, Unbinding and Practice	
10:00 – 10:20	Question time	
10:00 – 10:20	Coffee break A201 Cafeteria & Dining Area	
Venue	A203 Meeting Room 1	A301 Conference Hall
Chairperson	Prof. Joseph M. Brincat	Ms Angele Deguara
10:20 – 10:40	Dr Karl Chircop Rotture nette e recuperi latenti: Joyce e Pirandello nei confronti della tradizione letteraria	Dr Katya De Giovanni – Mr Gottfried Catania The Impact of Technostress on the Work – Family Balance: a Quantitative Measure

Mr Paul Xuereb (University of Malta)

Connecting Authentic Educational Leaders and their Followers

Abstract

The success of organisations, including those of an educational nature, is inextricably intertwined with their leadership. The economic and financial woes which plagued the world in recent years, have triggered the need for a new breed of leaders. There are various leadership models and styles which may be adopted, including authentic leadership. This may be considered as an emerging model which, however, is quickly gathering momentum. It is a style of leadership which can contribute significantly to the success of an organisation, leading to improved work-engagement and performance. One of the reasons for this is that it offers a connection between the leader and the followers, that is, those who are being led. It is not easy to define authentic leadership, very often being described as promoting a positive ethical climate, foster self-awareness, an internalised moral perspective, balanced processing, and relational transparency (Walumbwa et al, 2008). This paper aims to explore and summarise the main characteristics and traits of authentic leadership, as well as providing a short critique to show why this style of leadership promotes the formation of connections.

Bio-note

Mr Paul Xuereb, first graduated from the University of Malta in 1991 with a B.Ed. (Hons.) degree specialising in science, and subsequently obtained his M.Ed. and M.B.A. (Exec.). During his professional career, he has taught science subjects at all levels of the educational system and has also been involved in the training of undergraduate B. Ed. (Hons.) students as well as in the academic formation of conservators and restorers. In 1995, he joined the University of Malta Junior College to lecture in physics where he is engaged as a Junior College Senior Lecturer II. He has participated in various European initiatives including Comenius Multilateral projects, Erasmus+ projects, FuturEnergia: Energy is our Future, U4Energy, and Flick the Switch, amongst others. His research areas include science education, education-business partnerships and educational leadership. In 2003 he was appointed Subject Coordinator for Physics, Vice-Principal in 2009, and Principal of the University of Malta Junior College since 2013.

Bio-note

By profession a Probation and Social Inclusion Officer, Mary Grace Vella currently teaches Systems of Knowledge at the Junior College and is a visiting lecturer at the Department of Social Policy and Social Work, Faculty for Social Well-being. She also lectured the subjects of Sociology and Health and Social Care at the Higher Secondary School and Institute of Community Services, MCAST. She has a long history of activism in civil society organizations dealing with humanitarian, environmental and animal rights issues, and is currently a member of the Observatory for Living with Dignity within the President's Foundation for the Well-being of Society. Her main areas of interest concern issues related to social policy, political science, crime, gender, and sustainable development.

10:40 – 11:00	Dr Stefano Zammit Immagini dell'Eloquenza classica attraverso le figure emblematiche di Demostene, Pericle, Eschine e Cicerone	Dr Olivia Galea Seychell Visual Perception and how it affects our Students
11:00 - 11:20	Dr Christine Borg Farugia Le affinità storiche tra i figli abbandonati nella Ruota a Napoli e a Malta	Mr Janis Balodis Social Innovation as the Borderland Development Impact to Latvia's – Estonia's Borderland: example of Valka / Valga case in an Educational Cross-Border Cooperation
11:20 – 11:40	Ms Simona Esposito Relazioni di coppia e scrittura: uno studio grafologico comparato sulla compatibilità e sulle modalità d'integrazione tra partner	Mr Paul Xuereb Connecting Authentic Educational Leaders and their Followers
11:40 – 12:00	Mr Mario Debono Don Giuseppe Zammit detto "Brighella" – vita, opere e rapporti con la realtà italiana e maltese dell'Ottocento	Dr Ing. Ronald Cuschieri A Holistic Supply Chain Integration Framework to achieve Competitiveness
12:00 – 12:20	Question time	
12:20 – 13:20	Lunch A201 Cafeteria & Dining Area	

Venue	A301 Conference Hall	A203 Meeting Room 1
Chairperson	Dr Karl Chircop	Ms Anna Zammit
13:20-13:40	Prof. Joseph Eynaud Translation and Interpretation: Building Connections for a Changing World	Dr Josette Attard The Connection between Literature and Aesthetics: is it Problematic?
13:40-14:00	Prof. Sergio Portelli The Role of Translators as Cultural Mediators and its Implications in the Training of Prospective Maltese Translators	Mr Luke Joseph Buhaġiar Applying the Toulmin Model of Argumentation in the Social Sciences
14:00-14:20	Ms Christiane Beck Towards a Holistic Approach in Foreign Language Teaching	Ms Gloria Sansò What is a Speculative Bubble?
14:20-14:40	Prof. Monika Kusiak-Pisowacka Intercultural Communicative Competence as a focus of Second Language Acquisition Research in Poland	
14:40-15:00	Question time	

Dr Mary Grace Vella (University of Malta)

Non-Voting: Disconnecting from Politics

Abstract

This paper examines disconnections from politics through the issue of electoral abstention by analysing demobilisation and partisan de-alignment trends in Malta: a country characterised by ‘near universal turnout’, strong party loyalties and an enduring two-party system. Apart from the wider socio-political and cultural milieu and contextual electoral conditions, several demographic, institutional and psychological variables are related to voter turnout. A typology of abstention based on the regularity and rationale of abstention proposes four main types of non-voters: ideological, antagonistic, indifferent and circumstantial. Through their positioning on these categories, the typology differentiates between passive and active non-voters and insiders and outsiders to the political system. Despite their vast heterogeneity, non-voters tend to be younger, better educated and cognitively mobilised. They also tend to be more liberal and ideologically left-leaning. Many non-voters express disillusionment and distrust towards partisan structures and processes, suggesting that non-voting in part occurs due to weakening partisan alignments. Non-voting is largely typified by voluntary, strategic and rational forms of political expression, reflective of alienation and political protest against present modes of governance. There are some signs that, within Maltese society attitudes may be changing, as citizens become more critical and distrustful of political parties and representative forms of democracy. Internal efficacy further reduces external efficacy, explaining non-voting amongst the cognitively mobilised. Apart from abstention, such cognitive mobilisation is reflected in a more rational assessment of parties through increased floating and cross-party voting, as well as increases in non-electoral forms of political participation. Although abstention is not likely to contribute towards any plausible critical realignments, non-voting along with these emerging patterns of behaviour indicates that Maltese society is progressing towards a more dynamic shifting of balance between de-alignment and realignment forces, leading to a more multi-layered and destabilised political culture. Through its multi-faceted capacity, non-voting thus presents both evidence of partisan de-alignment, as well as acts as a deviating course towards secular realignment. Thus, in a context where ‘near universal’ turnout fuelled by patronage bi-partisan driven loyalties is the order of the day, non-voting represents both a rejection of partisan politics, as well as a potential transformation for realignment in terms of new political structures and processes. In its neutral, passive, persistent form, non-voting presents an interlocutor ‘reformist’ symbolic gesture of de-legitimization, a silent refusal of the rules and terms that shape political meanings and identities. Yet in its more active, assertive, empowering, yet transitory form, it carries a loaded revolutionary call for realignment. Counterbalanced by the nature of Malta’s exceptional political culture, through generational replacement, non-voting along with other underlying trends of disconnections and devolution – may presage a progressive and transformative shift towards realigning forces which demand more responsive and accountable democratic systems and processes. Thus, given their repercussions on the political sphere, these de/re-alignment trends may augur well for the quality of Maltese democracy, since they may represent a more active citizenry which critically appraises rather than passively accepts the inadequacy and incongruity of Maltese politics.

ondary education. Rita Van Peteghem collaborated in several European Projects for universities as well as for secondary schools. For the integration of contemporary physics in the existing curriculum of Flanders (Belgium), she developed Pedagogical Content Knowledge and offered trainings to teachers in service, in this way passing on enthusiasm about understanding our world in its physical connections.

Tuesday 19 th September 2017		
Location		
University of Malta Junior College		
Venue		
A301 Conference Hall		
09:00-09:05	Institutional speech Pro-Rector, Dr Carmen Sammut	
	Chair: Dr Sharon Rolé	
09:05-09:45	Keynote Prof Emmanuel Sinagra Every Breath You Take	
09:45-10:00	Question time	
10:00 – 10:20	Coffee break A201 Cafeteria & Dining Area	
Venue	A301 Conference Hall	A203 Meeting Room 1
Chairperson	Mr Simon Caruana	Mr Michael Grech
10:20 – 10:40	Dr Joseph Vancell e-Learning for Older Workers in Small and Medium Sized enterprises in Europe's Smallest State	Mr Chibuzo Nathaniel Nwoko Breaking Linguistic and Communicative Barriers in an ESL Classroom through Non-verbal Communication
10:40 – 11:00	Dr Maria Cutajar Investigating the Experience of using Networked Technologies for Teaching at the University of Malta and the Junior College	Mr Randolph Peresso Maltese classrooms – uncharted territory. A blueprint for classroom observation

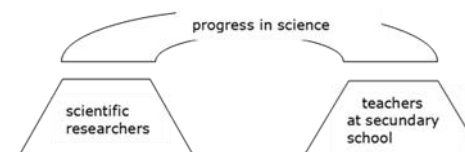
11:00 - 11:20	Ms Mariella Caruana A Pilot Study on e-Learning in Small Online Discussion Groups and Experimental Design in Biology	Ms Suzanne Gatt The Relevance of Systems of Knowledge (SoK) in 2017: Strategies in Challenging the Current Perceptions through Improvement of Lecturing Strategies
11:20 – 11:40	Ing. Jason Debono, Prof Adrian Muscat, Dr Chris Porter Web-Based eTutor for Learning Electrical Circuit Analysis	Dr Sharon Rolé What is in the Blend? - The Implementation of Online Quizzes with Prompt Feedback as an Effective Learner Study-tool Embedding Formative Assessment
11:40 – 12:00	Question time	
12:00 – 12:20	Opening of Art Exhibition by ceramicist Joseph Agius. Venue: 2 nd floor, Block A	
12:20 – 13:20	Lunch A201 Cafeteria & Dining Area	
Venue	A301 Conference Hall	A203 Meeting Room 1
Chairperson	Dr Maria Cutajar	Dr Joseph Gravina
13:20-13:40	Dr J. Christopher Moore Sense-making across Disciplines: Physical models, Theoretical Frameworks, and the Connections between Education in the Humanities and Sciences	Mr David Aloisio Menz f'Narnia: (lil hinn mil) l-ansjetà tal-influenza letterarja fil-qari mill-ġdid tad-dramm 'soċjali-simboliku' ta' Francis Ebejer

Ms Rita Van Peteghem (Antwerp School of Education, University of Antwerp)

Connections between Mass and Energy - Towards more Conceptual Understanding.

Abstract

To get evolution in science, teachers have to pass on contemporary scientific insights to the next generations after a period of development of theories and confirmation by experiments.



Researchers develop different branches of physics, using a specific technical language. Teachers and educators give overviews and create more global conceptual understanding.

- This asks for consistency in the meaning of words used in different areas of research as consistency is essential for more global understanding.
- This sometimes asks for a reformulation of hypotheses after decades of continuous research in different fields as insights get deepened.
- This asks for the creation of simple models to improve concept building and intellectual satisfaction by offering *Pedagogical Content Knowledge*.
- This asks for a combination of transferring theoretical insights and information on technological realisations.

Connections need to be made on different levels!

During this presentation the connection between mass and energy at different velocities and mass and rest-energy will be discussed in a consistent way. A model of “the energy valley of nuclides” will be shown. This model can be made together with students as a minds-on and hands-on activity. This model creates more conceptual understanding about ‘energy out of atoms’ and ‘radiation out of atomic nuclei’. This model gives the intellectual satisfaction of *understanding* what is essentially done in high energy physics with its experimental fundamental research and its technological realisations. Making connections and simplifying things to what is essential creates intellectual satisfaction for both teachers and students.

Bio-note

Rita Van Peteghem is responsible for the in-service training of science teachers at the University of Antwerp. She has 41 years of experience in physics teaching in the scientific sections of secondary school where all the pedagogical projects have been tested year after year. So, innovations came out of experience and were tested in the work field with permanent feedback of the students. She was involved in the ‘High School Teachers Programme’ at CERN for several summers, working on the outreach of contemporary research. For 17 years she also worked part-time as a school coordinator on developing strategies and implementing new developments in sec-

face-to-face classroom. Currently, Dr Vancell is a Senior Research Fellow in the School of Education and Social Sciences of the Faculty of Arts, Cultures and Education at the University of Hull where he is investigating the potential of e-learning for older workers.

13:40-14:00	Prof. Claude Farrugia, Ms Abigail Aquilina, Mr Frederick Lia, Application of Phenolic Profiles of Maltese Olive Leaves (olea europea L.) for Cultivar Identification	Ms Sandra Mifsud Bonnici The Language of Design in Baroque Architecture: finding 'Connections' with other Disciplines with reference to Francesco Borromini and Guarino Guarini's works
14:00-14:20	Dr Mario Fenech Caruana Highlighting the Green Face of Chemistry to Students. The Reaction of Pre-University Students to the Introduction of Green Chemistry	
14:20-14:40	Dr Lourdes Farrugia, Prof. Charles Sammut, Mr Julian Bonello, Ms Irina Alborova Effects of preservative solutions on the dielectric properties of biological tissue.	
14:40-15:00	Question time	

	Wednesday 20 th September 2017	
Location	University of Malta Junior College	
Venue	A301 Conference Hall	
09:00-09:05	Institutional speech Dr Karl Chircop JC Conference Committee Chair	
	Chair: Dr Joan Borg Marks	
09:05-09:45	Keynote Prof. Laurence Viennot Critical Attitude and Conceptual Development in Physics: What Connections?	
09:45-10:00	Question time	
10:00 – 10:20	Coffee break A201 Cafeteria & Dining Area	
Venue	A203 Meeting Room 1	A301 Conference Hall
Chairperson	Dr Ing. Ronald Cuschieri	Ms Suzanne Gatt
10:20 – 10:40	Ms Angele Deguara Disconnected Identities: The Conflicts experienced by Gay Catholics	Dr Michelle Attard Tonna – Mr James Calleja Understanding Teachers' Professional Lives and Careers: a Maltese Case Study
10:40 – 11:00	Dr Joseph Gravina Reconceptualising Human Rights. Working at the Disconnections	Mr Simon Caruana Use / Misuse of Learning Outcomes in Higher Education. Are we Threading on a Similar Path?

Dr Joseph Vancell (University of Malta)

e-Learning for Older Workers in Small and Medium Sized Enterprises in Europe's Smallest State.

Abstract

Europe has an ageing population. A healthier lifestyle together with policies (such as tax incentives) intended to delay retirement to sustain social security and pension systems have contributed to an increase in the proportion of older workers in European labour markets. However, statistics from the OECD's Survey of Adult Skills, Eurostat's Labour Force (EU-LFS) and Adult Education Surveys (EU-AES), confirm that, while the overall participation of older workers in lifelong learning is increasing, there is still a consistent gap in participation between younger and older workers. Studies also indicate that the formal training of older employees is often less effective than that of younger ones. This, the studies report, is not because older workers have a lower learning potential, but rather because there is a mismatch between the training content and forms, and the needs and aspirations of older employees. Studies in the European context are thereby indicating that older workers must have access to innovative forms of learning and training programmes, such as those offered online, rather than those offered in formal settings. In Malta, there are almost 30,000 small and medium sized enterprises (SMEs). These account to 99.9% share of all enterprises in the country (the EU-27 share stands at 99.8%). Microenterprises (which employ fewer than 10 persons) represent 95% of the Maltese SMEs. This paper presents the findings of a qualitative case study about the perceptions of manager-owners and older employees in Maltese micro-enterprises about technology, learning and training in their companies. This case study is part of a three-year project (co-financed by European Structural Cohesion funds) which is investigating the possibilities of digital learning for older workers from all sectors of the Maltese labour force. The findings indicate that the attitudes of managers and employees seem to form potential drawbacks to e-learning initiatives in Maltese SMEs. Owner-managers generally do not show positive attitudes towards technology, learning and training in these companies. These attitudes are strongly related to technology infrastructure in the company and vary among companies of different size and from different economic sectors.

Bio-note

Joseph Vancell is a lecturer in Systems of Knowledge at the University of Malta Junior College. He was awarded a PhD from the University of Hull (UK) for a grounded theory investigation of online efforts at the University of Malta. He also holds a Master Degree in Education from the University of Malta specializing in adult education, a Master Degree in e-Learning from the University of Hull and a Master of Online Teaching Certificate from the University of Illinois (US). His main research interests are adult education and technology-enhanced learning. He strongly believes that, for adult learners, the online dimension is a very valid alternative to the

Access. Ryan was also working in a team to develop an Open Access Policy for the University of Malta. Ryan has an educational background in library and information science and is currently reading for a masters of science in management of library and information services with the University of Aberystwyth. His main fields of interest include marketing and outreach, open access publishing and digital repositories. Recently, he has published an overview of OAR@UoM, reflecting on the repository's growth and challenges, 2 years after its launch. The article can be access through openscience.com. Ryan is a native speaker of Maltese and English and has also proficiency in Italian. Ryan is also the chairperson of the NGO Graphic Novels Library Malta, an organization dedicated to promote education through pop culture and the implementation and management of a Graphic Novels Collection at the Public Library in Floriana.

11:00 - 11:20	Dr Mary Grace Vella Non-Voting: Disconnecting from Politics	Ms Rita Van Peteghem Connections Between Mass and Energy – towards a more Conceptual Understanding
11:20 – 11:40	Mr Aeden Chetcuti The Private Enterprise – State Interface: a Social Network Analysis of the Board of Directors of Malta Enterprise and its Predecessors	Dr Joan Borg Marks Striving for excellence: the challenge of educating highly able/gifted students
11:40-12:05	Venue: A301 Conference Hall Chair: Dr Mary Grace Vella Keynote Prof. Godfrey Baldacchino Connectivity, Mobility and Island Life: Looking at Malta and Lesvos	
12:05-12:20	Question time	
12:20 – 13:20	Lunch A201 Cafeteria & Dining Area	
Venue	A301 Conference Hall	A203 Meeting Room 1
Chairperson	Dr Mario Fenech Caruana	Dr Josette Attard
13:20-13:40	Dr Alexander Farrugia The Connections of Connections: New Results on the Centrality and Communicability of Networks	Mr Ryan Scicluna Marketing and Promotion of OAR @ UoM: the Open Access Institutional Repository of the University of Malta

13:40-14:00	Dr Emmanuel Attard Cassar In search of the fastest sorting Algorithm	Ms Agata Derkowska Changing the Image of the University of Malta Library: New Roles, Challenges, and Services
14:00-14:20	Dr Christina Zarb Discrete Mathematics in Post-Secondary Education	Dr George Cremona The Eurovision Song Contest within Formal Educational Learning Contexts: A Critical Multimodal Interpretation of Possible Inter-disciplinary Connections
14:20-14:40	Question time	
19:30	Social Meal in Valletta Venue: <i>Ristorante La Giara</i> 75-76, Casa Rocca Piccola, Republic Street, Valletta	

Mr Ryan Scicluna (University of Malta)

Marketing and Promotion of OAR@UoM: the Open Access Institutional Repository of the University of Malta

Abstract

In 2014, the University of Malta Library launched its Open Access Institutional Repository - OAR@UoM. Since OAR@UoM is the first and only online institutional repository on the Maltese Islands, it also plays a major role to promote OA nationally, and to form partnerships with other stakeholders who lack the infrastructure but are interested to deposit in OA. This pushes the boundaries of traditional IRs and creates a new set of challenges. The Outreach department of the University of Malta Library, was tasked with promoting OAR@UoM and also develop training workshops to instruct academics on how to upload their research on the IR, whilst also provide some background information on Open Access and the benefits associated with it. A quantity of promotional material was created and disseminated on campus to help increase the awareness of Open Access and OAR@UoM. During the yearly Open Access week (October) the Library organizes a number of Open Access related activities and talks on campus. In 2015, in collaboration with FOSTER, the library organized a conference to address the misconceptions regarding Open Access brought forward by a number of academics. The one-day conference was entitled "Open Access and its impact on research and scholarship". Discussions on the impact of Open Access on the Maltese research/academic community, and training on how to upload on OAR@UoM were the focus points. This paper will look into the effectiveness of the promotion and marketing strategy followed by the Outreach department in relation to the Open Access repository since its launch. The research will also look into the increase in submission done willingly by academics and how their perception of Open Access has changed. By using a mixed approach of both qualitative and quantitative data this study can show important trends in marketing Open Access and how this data was useful in setting up an Open Access policy for the University of Malta. This study will also investigate the creation of an Open Science department to help promote and assist academics with Open Access related queries. Will the creation of a department exclusively responsible for Open Access have a big impact on the academic community? How can the Open Science department collaborate with the Outreach department, to create a more effective marketing strategy to promote open access publishing and submission of research papers on OAR@UoM? This paper will come up with answers for such questions by looking specifically at the case at the University of Malta but will also compare this with other scenarios of how Open Access was promoted in different institutions.

Bio-note

Mr Ryan Scicluna is an Assistant Librarian at the University of Malta Library. He has 6 years of professional experience in the academic library environment. He is involved in the implementation and dissemination of an Open Access Institutional Repository at the University of Malta – OAR@UoM. Ryan is one of the administrators of the repository and he gives regular training and awareness sessions, trying to engage the academic community in Malta to pursue publishing in Open

What is a Speculative Bubble?

Abstract

The recent financial crisis showed us how complex social reality may be. In order to understand this type of event, it has become urgent to study, from a metaphysical point of view, entities such as contracts and speculative bubbles. In my investigation, I try to understand how Documentality, the theory about social reality elaborated by Maurizio Ferraris, can explain speculative bubbles. According to this approach, documents play a crucial role in social reality: a social object consists in an inscribed act. This represents an important improvement on John Searle's theory. However, there is reason to question whether Ferraris' theory may really account for the metaphysics of social objects. In this paper, I argue that there are two main categories of social objects: on one hand, there are objects that we create intentionally (e.g. sale/purchase contracts and degree certifications), on the other hand, there are objects that we do not create intentionally and that exist even though we do not know that they exist (e.g. speculative bubbles and unemployment rates). I would say that, in order to provide an explanation of the relation between the former and the latter, it may be interesting to consider the concept of emergence. Speculative bubbles emerge not from documents, but from social and economic properties represented by documents. Therefore, for example, the housing bubble emerged from the properties represented by sale/purchase contracts (the property to have a certain price, for instance). According to Ferraris, what emerges is four-dimensional, yet I believe that speculative bubbles are not four-dimensional: it is likely to think that bubbles are what Barry Smith calls "quasi-abstract entities".

Bio-note

Gloria Sansò is an Italian M.A. student at the University of Turin. Her main interest is Social Ontology, and she especially focuses on the role played by Documents in Economics. In 2016, she graduated with full marks in Philosophy. She wrote her thesis "Inscriptions or intentions? Self-fulfilling prophecy and financial crisis" under the supervision of Maurizio Ferraris. In this work, she provides an argument against John Searle's Collective Intentionality and argues the priority of inscriptions (objects) over intentions (subjects) during a panic selling. She is currently working on speculative bubbles and aspires to read a Ph.D. in a competitive and challenging environment.

Keynote speakers

Prof. Godfrey Baldacchino (Pro-Rector, University of Malta)

Connectivity, Mobility and Island Life: Looking at Malta and Lesbos

Abstract

Modernity is increasingly about movement, with people navigating through different spaces and places throughout their lives and careers, probably all the more so when we deal with islanders, who combine home and away in strategic ways - for adventure, education, work, career development. Islanders are not insular! This presentation will offer a contrast between the dominant narratives of mobility and immobility of the 21st century. On one hand, there is the 'kinetic elite', including professionals who commute regularly between countries as part of their work and career development - think university academics, corporate managers, software technicians, European Commission staff. Along with these is a growing number of HNWIs - high net worth individuals - who exploit multiple residence and citizenship schemes (and various tax code loopholes) to only park themselves, and their assets, temporarily in any particular jurisdiction. At the other end are the millions of desperate families vying for a better life, seeking to escape famine, drought, civil war and political persecution, mainly in Africa and the Middle East. These face multiple barriers, including barbed wire and fences, that prevent, brake or seek to manage their movements. Islands (and islanders and their governments) face these contradictory pressures and often label and stereotype the subjects of these divergent mobility patterns in dramatically different ways, often corroborated by equally stereotypical notions of race, ethnicity and religion. I propose to flesh out these ideas by reflecting on two Mediterranean islands:

Malta (population: 420,000) is a sovereign archipelagic state that straddles the passage from Libya to Italy being followed by many undocumented migrants; it is one of various countries offering citizenship by investment schemes; and has a contemporary labour market with a large and still growing number of immigrant workers (around 30,000), while some 3,000 Maltese work in Brussels, Strasbourg and Luxembourg, as part of the European Commission.

Lesvos (population: 86,000) is a Greek island located just six kilometres away from the Turkish mainland and the transit point of hundreds of thousands of immigrants entering the European Union; it is a beneficiary of clients who have applied for ether residence or citizenship; and increasingly tolerant of Turkish tourists and investors to boost the local island economy, still suffering from the effects of the global financial crisis.

Bio-note

Godfrey Baldacchino (PhD Warwick, UK) is Full Professor of Sociology and Pro-Rector for International Development and Quality Assurance at the University of Malta. He is also UNESCO Co-Chair in Island Studies and Sustainability at the Uni-

versity of Prince Edward Island, Canada; Editor Emeritus of the open access *Island Studies Journal*; and President of the International Small Islands Studies Association. He is the (co)author or (co)editor of over 40 books, and has authored some 130 peer reviewed articles and book chapters in his academic career. He has managed close to 1 million euros in research funding, and served as visiting lecturer or researcher in various universities including in Australia, Canada, Japan, Sweden and Taiwan. He also sits on the international advisory board of half a dozen specialised journals and has served as a peer reviewer to some 40 different journals.

Dr Sharon Rolé (University of Malta)

What is in the Blend? - The Implementation of Online Quizzes with Prompt Feedback as an Effective Learner Study-tool embedding Formative Assessment.

Abstract

Several students consider chemistry to be a difficult and complex subject. This presentation discusses an ongoing practitioner/action research investigating the use of online automated quizzes with prompt and adequate feedback as a study tool to support students in coping with their study of the subject. The online quizzes in the college Moodle virtual learning environment were used as tools in the implementation of an instructional and formative assessment strategy. This provided a weekly practice and assessment easy-to-use study-tool for a class of twenty-three first year sixth-form students studying chemistry. The use of the online quizzes, each of which focused on a very small section of a particular topic, resulted in a multitude of benefits. This fostered an increase in learner motivation, confidence, classroom preparedness and improved classroom engagement. Some learners developed effective learning strategies as they became empowered to assess their learning and to plan their study according to their needs. Formative assessment was embedded in the instructional process. This proved to be effective not only as self-assessment for students but also for the tutor to monitor the students' learning and understanding. It led to the identification of problems and the modification of the following lectures in class, hence informing further learning. Interactivity between learners, learners and content, as well as learners and tutor increased. The students considered this use of online quizzes as a positive experience and expressed a desire to extend this practice to the next year.

Bio-note

Sharon Rolé is a BSc graduate (University of Malta), and holds an M.Ed in networked learning (University of Sheffield) and a PhD degree in digital pedagogies (University of Nottingham). She has been teaching at secondary and tertiary levels of education for several years. She is currently a University of Malta lecturer of chemistry at the Junior College and of technology-enhanced learning in B.Ed/M.Ed/MiTEL courses at the Faculty of Education. She is involved in adult education, and has conducted face-to-face, online and blended courses for adults at work. She has participated in various e-learning projects and conferences and is the author of some papers, articles and a book on online learning. Since the late 1990s, she has been using virtual learning environments to complement the face-to-face lectures in class. Her research interests include professional development, formative assessment and innovative modes of learning which result in effective, efficient and enjoyable learning.

Prof. Sergio Portelli (University of Malta)

The Role of Translators as Cultural Mediators and its Implications in the Training of Prospective Maltese Translators.

Abstract

The last decades have seen a significant change in the perception of the role of translators. The increased complexity of communication networks brought about by globalization and the exponential increase in the use of the internet have resulted in a stronger awareness of cultural differences that may hinder effective communication. Since the cultural turn in Translation Studies of the 1980s, cultural mediation (as defined by Stephen Bochner in his book *The Mediating Person: Bridges between Cultures*, 1981) has become the major focus of attention in the analysis of the relationship between source and target texts. Translation is nowadays considered much more than the practice of linguistic transposition. The translator is not just a linguist who knows more than one language, but a specialist in both the source and the target culture, a bi-cultural expert whose task it is to translate both the written and the non-written. On their part, translation-training courses often tend to overlook the cultural aspect of translation, taking the students' competence in both cultures as a given, in order to focus on translation strategies and linguistic correspondence. The paper aims to investigate the role of the translator as a mediator and the importance of cultural awareness, with specific reference to the training of prospective Maltese translators. It will discuss effective cultural competence and students' self-evaluation, attitudes towards highly culturally specific texts, research issues, and the translation strategies required to bridge the cultural gap between texts. It also suggests ways how to include cultural awareness in translation training programs, to ensure that future translators are not only aware of the importance of their role as cultural mediators, but also well equipped to take on such a responsibility. The issues discussed and the examples provided are based on the author's experience as a translator trainer responsible for the Italian-Maltese practical translation course at the University of Malta. Examples: *Va a Milano e Palermo la maglia nera della sicurezza stradale*; *È fumata bianca tra avvocati e Procura della Repubblica dopo un vertice ai massimi livelli che si è tenuto negli uffici giudiziari giovedì mattina* (Public prosecutor's office); *Altri invece si fanno prendere dalla poca informazione storica che hanno del ventennio, del perché sia nato, dei motivi che hanno spinto Mussolini ad allearsi con i tedeschi*; *Ladro scambia i carabinieri per corteggiatori della moglie che faceva il "palo"*; *Beppe Grillo sembra un sessantottino*.

Bio-note

Sergio Portelli is Associate Professor of Translation Studies at the Department of Translation, Terminology & Interpreting Studies of the Faculty of Arts, University of Malta. He teaches Translation Technology, Institutional Translation, Terminology, and Translation Practice (Italian to Maltese). He has published extensively on Italian-Maltese and Anglo-Italian Comparative Literature, Cultural History, Terminology and Translation. His latest book is titled *Traduttori come mediatori culturali* (Firenze, Cesati, 2016), co-edited with B. Van den Bossche and S. Cardella.

Dr David Roden (Honorary Associate, The Open University, UK)

Disconnection, Unbinding and Practice

Abstract

Academic Critical Posthumanism (CP) and Speculative Posthumanism (SP) offer complementary analyses of the posthuman. As a critical practice, CP questions the consistency and coherence of the human conceived as a rational, autonomous subject, which CP sets out to “decentre” or deconstruct. SP, by contrast, is a metaphysical theory that conceives posthumans as agents made “inhuman” by a technological disconnection or “withdrawal” from human social systems (The Disconnection Thesis, see Roden 2014 Ch5; 2012). However, CP and SP in their purest forms reject any kind of transcendental privilege for subjects or organically bounded agents (bounded bodies). I call this operation “Unbinding” because it involves relinquishing subjective constraints in ontology, epistemology and ethics. This immediately generates problems for SP since the disconnection thesis (DT) understands becoming nonhuman in terms of agential independence. For example, an artefact such as a robot is a “wide human” so long as it depends on its human-related functions to exist. It becomes posthuman if it loses these functions but acquires other functional relationships. Thus, DT characterises the posthuman as a technically constituted agent. But what is an agent? Unbinding disqualifies a purely conceptual answer to this question because it rejects transcendental accounts of subjectivity or rationality founded in human experience or social practice. It implies that the question is unanswerable as posed because it precludes defining criteria for agency. It follows that distinctions such as those between agents and non-agents must be empirical and responsive to changing historical conditions in ways that are not determined by our current understanding. The concept of agency is thus an open system whose possibilities are not accessible to armchair reflection but must be perpetually reproduced. The first corollary of that is that not only does DT not tell us what posthumans are like (as I have already argued in Roden 2014), it has no criteria for determining when disconnection occurs. It follows that any understanding of posthuman agency must proceed through empirical, aesthetic and technical inflexions or iterations, multiplying it beyond any unifying concept. The content of unbounded posthumanism is produced *in and by* disconnection rather than by the schematic conceptual content of DT. I will argue that this implies an intimate relationship between the understanding and practice in posthumanism. It implies a standing possibility of theoretical crisis, but also an opportunity for reappraising the relationship between posthumanism, the arts and technology (Roden 2016).

References

Roden, David (2012) ‘The Disconnection Thesis’, in Amnon Eden, Johnny Søraker, Jim Moor, and Eric Steinhart (eds.), *The Singularity Hypothesis: A Scientific and Technological Assessment* (2012), Springer-Verlag: 281-298

____ (2014) *Posthuman Life: Philosophy at the Edge of the Human*. New York: Routledge.

Publication date: October 2014, 220 pp.

_____ (2016) 'Letters from the Ocean Terminus'. In *The PostContemporary Time Complex*, edited by Suhail Malik and Armen Avenessian. <http://dismagazine.com/discussion/81950/letters-from-the-ocean-terminus-david-roden/>

Bio-note

Dr David Roden has worked for the Open University as a lecturer and associate lecturer. His published work has addressed the relationship between deconstruction and analytic philosophy, philosophical naturalism, the metaphysics of sound and posthumanism. He contributed the essay "The Disconnection Thesis" to the Springer Frontiers volume *The Singularity Hypothesis: A Scientific and Philosophical Assessment*. His book *Posthuman Life: Philosophy at the Edge of the Human* (Routledge 2014) considers the metaphysical, epistemological and ethical implications of the existence of posthumans: powerful nonhuman agents produced by human-instigated technological processes.

Bio-note

Randolph Peresso has been a primary class teacher for 11 years and an assistant head in a primary state school for the past four years. After completing his B.Ed (Hons.) in 2002 he has obtained an MA in Comparative Euro-Mediterranean Education Studies. His main academic interest is pedagogy in the primary classroom. He has performed an empirical study in local primary schools – *PIPS (2013)*. Its main objective was to describe and critically analyse the pedagogical culture in Maltese primary classrooms. He has presented a paper on the methodology and main findings of this study during a conference at the University of Leipzig, published a chapter in an edited book and published a paper in a peer-to-peer journal.

Mr Randolph Peresso (University of Malta)

Maltese Classrooms – Uncharted Territory. A Blueprint for Classroom Observation

Abstract

Maltese primary classrooms are by and large uncharted territory. Very few Maltese researchers have taken the plunge to enter into primary classrooms, observe and analyse the teaching that occurs there. Assuming that this lacuna is not due to a lack of interest in the subject matter, but rather to the methodological challenges such studies involve, in this paper I propose a tried and tested framework for pedagogy – the study of pedagogy. This framework was developed by Robin Alexander for his seminal study *Culture and Pedagogy* (2001). It seeks to analyse: a. The *form* of the lesson; b. The *frame* of lesson through the analysis of space, pupil organisation, time, curriculum, routine, rule and ritual; c. The *act* of the lesson through the analysis of tasks and activities given together with that of interactions and judgements made. Each component of this model is critically explained in detail. Moreover, insights gained from the employment of this model in a recent empirical study in three local primary schools are given. Maltese primary classrooms are by and large uncharted territory. Condensing it into one sentence, one can say that it is predominantly *teacher-centred*, solidly underpinned by *segmented-collectivism* and one which encourages *uniformity* at all levels. Its teacher-centeredness is evident from the fact that the explanation part of the lesson is invariably done with the teacher standing at the front. The very common class setup of having the desks in either a U-shape form or in rows is a further testimonial of such an approach to teaching. But more significantly, a deeper analysis of the lessons showed the teachers as being the agenda-setters, the main fountain of knowledge and the chief agents of assessment. Also unsurprisingly, they were the ones doing the most talking and their mean utterance length of 7 seconds with a range of 1-80s was far greater than that of the pupils – 2.6s with a range of 1-40s. But the main pillar on which pedagogy in Malta rests is collectivism. Reforms spear-headed by members of the local academic community point towards a more differentiated approach to teaching. But the majority of teachers espouse a collective ideology and thus minimise differentiation as much as they possibly can. They are, however, aware that their pupils have different abilities and level of achievement. In their view, this should be tackled by segmenting pupils by abilities – in different groups within the same classroom or, preferably, in different classes (streaming). We can therefore say that pedagogy in Malta is solidly underpinned on an ideology of segmented-collectivism. It is therefore not surprising that uniformity features as one of the defining traits of pedagogy in Malta. Teachers seek to achieve uniformity in the classroom by aiming for all pupils to master the same concept at the same time. But uniformity is also sought by the local education directorate through the employment of centrally selected textbooks (which assume a very central role in lesson planning and delivery), a centralised syllabus and annual examinations for pupils from 8-9 years of age up, which are also set by the directorate.

Prof. Emmanuel Sinagra (University of Malta)

Every Breath You Take

Abstract

The connection between environmental pollution and poor health has long been established. One major concern regarding this connection, especially in our country, is the issue of air pollution. There are a number of key pollutants that as a member-state of the European Union, Malta is obliged to monitor. These are listed in Directive 2008/50/ec of the European Parliament and of the Council. The pollutants of concern are regularly monitored by the Environment and Resources Authority and these include: sulphur dioxide, nitrogen monoxide, carbon monoxide, ozone, airborne particulate matter and aromatic hydrocarbons including the carcinogen benzene. Monitoring the state of our air quality has given us insight to some contrasting trends. There has been a significant decrease of sulphur dioxide concentration, attributed to the phasing out of heavy sulphur fuels. Benzene levels have also been reduced and this is can be attributed to a reduction in the permissible level of the compound in our petrol. Nitrogen oxide concentrations in our environment, particularly our urban environment, have been rising with increasing traffic. This may eventually pose significant problems in dense urban areas. Malta's most significant pollutants are particulates and ozone; both of which exceed EU limits. Traffic congestion, power generation, mineral extraction and construction dust have been main sources of particulate matter in our air. Power generation has seen some significant changes over the last few years, with the Marsa power station being on standby (and eventually being closed down) as well as a change in fuel for the power plants at Delimara. This should result in lower particulate emissions. The high levels of airborne particulate matter are not all produced locally. Evidence suggests that a large proportion of the problematic particulate matter originates from Sahara dust. This mitigates the exceedances over the EU regulations but does nothing to alleviate health concerns in afflicted areas. This paper will discuss data in the public domain such as the above, as well as data gathered in the Faculty of Science at the University of Malta, and give a picture of possible health effects with every breath you take.

Bio-note

Professor Emmanuel Sinagra graduated from the University of Kent at Canterbury (United Kingdom) in 1986 with a B.Sc. (Hons) degree in Chemistry with Environmental Science. In the same year he was awarded a Science and Engineering Research Council grant to enable him to do a M.Sc. course in Surfaces and Colloids at the University of Bristol (United Kingdom) where he also studied for his PhD and had postdoctoral experience. In 1993, Professor Sinagra joined the Department of Chemistry at the University of Malta as Lecturer, and was promoted to Senior Lecturer in 1998 and to Associate Professor in 2010. His teaching interests have been in the areas of physical chemistry, polymer chemistry and environmental chemistry. Professor Sinagra has tutored a number of students doing research at undergraduate and postgraduate level in the fields of polymers, colloids and interfaces. He has been head of the Department of Chemistry since 2008 and deputy dean of the Faculty of

Science since 2009. Professor Sinagra is also Chairman of the Faculty of Science M.Sc. Committee as well as the Faculty's Doctoral Committee, Chairman of the Institute for Sustainable Energy, and more recently Chairman of the Junior College Board. Professor Sinagra has a number of appointments on governmental boards as well as international bodies notably the COST Scientific Committee and the Board of Governors of the Joint Research Centre.

Mr Chibuzo Nathaniel Nwoko (NorthWest University, Kano, Nigeria)

Breaking Linguistic and Communicative Barriers in an ESL Classroom through Non-verbal Communication

Abstract

Communication has always been a problem between interlocutors, especially in a setting where a second or foreign language is the medium of instruction. Consequent upon this, this work identifies the mode of non-verbal communication in an English as a Second Language (ESL) classroom as one strategy that can overcome communication barriers between the language teacher and his students. In this paper, it is observed that nonverbal mode, being multicultural hence transcends cultural and linguistic boundaries, resolves the quagmire of comprehension and clarity by reinforcing messages that words are incapable of delivering successfully to the language learner, as a popular maxim has it that actions speak louder and even clearer than words. Therefore, our presentation principally examines the roles such non-verbal cues as body language and paralinguistic accompaniments play in an English Language teaching and learning environment in Nigeria. To justify the use of non-verbal form of communication to bridge linguistic and communication gaps in a Second Language (L2) class, this delivery is premised on the theoretical frameworks of Owen (2011), Oster, et al (1992) and Kibrik (1992) who unanimously uphold that non-verbal communication makes the art effective. In conclusion, it is suggested to language teachers and instructors to perfect the use of gestures and extra-linguistic modes as alternatives to communicate meaning to their non-English audience.

Bio-note

Chibuzo Nathaniel Nwoko, who comes from Abia state, Nigeria, was born in 1974. He holds a Bachelor of Arts and a Master of Arts degrees in English Language from Abia State University, Uturu and Bayero University, Kano, respectively. Mr Nwoko is on the academic staff of North West University, Kano, Nigeria where he teaches the following English Language courses: Introduction to English Grammar, Use of English, Sociolinguistics, Applied Linguistics, Advanced English Composition, Syntax and Morphology, among others, in the English Unit, Department of Languages of the University. In his position as Lecturer2, he has over ten scholarly publications in peer-reviewed journals to his credit, and he is, as well, the author of *A Simplified Introduction to English Grammar*. As part of his Community Development Services, he facilitates "Communication Skills for Managers" workshops on week end basis for the National Youth Service Corps Members.

Bio-notes

Prof. Adrian Muscat is an Associate Professor at the University of Malta, within the Faculty of Information and Communications Technology. His studies are in computing and electronics with a specialization in computational modelling and simulation. His research interests are in the development and application of machine learning models, discrete event simulation and optimization, mainly in the areas of combined vision and language, computer aided design and learning, communications and transport.

Dr Chris Porter is a Lecturer with the Computer Information Systems department at the University of Malta's ICT Faculty. In 2015 he completed his PhD at University College London, following an MSc and BSc in 2008 and 2005 respectively from the University of Malta. His research interests include human-computer interaction in software engineering processes as well as web application architectures and design patterns.

Ing. Jason Debono is a Senior Lecturer at the Malta College of Arts Science and Technology (MCAST), within the department of Electrical and Electronics Engineering where he has been lecturing for the last nine years. He completed an MSc in Engineering, following a B.Eng.(Hons) in electrical engineering in 2010 and 2000 respectively from the University of Malta. Previously Jason worked for seven years at ST Microelectronics, Malta, and one year at ST Microelectronics, Grenoble, France, first as a Test and Product Engineer and later as a technical expert specialising in the electrical modelling of IC packages for high frequency signals. Jason is presently reading for a PhD in ICT at the University of Malta. His research interests include applications of Digital Signal Processing (DSP), pedagogy and computer aided learning in electrical engineering.

Prof. Laurence Viennot (Denis Diderot University, Paris)

Critical Attitude and Conceptual Development in Physics: What Connections?

Abstract

In a changing world, several competences are universally advocated as educational objectives. One of the expected benefits of this choice is transferability across domains, as in the case of critical thinking. But developing various competences in this way may entail some limitations on other planes—for instance, in relation to disciplinary conceptual knowledge. The question therefore arises of the possible links between development of a critical attitude and conceptual progress in a given domain. To document this question, I present a series of investigations involving future physics teachers at the end of their formation. Reporting their evolution during in-depth interviews on various topics in physics, I focus in particular on the extent to which they critiqued incomplete or incoherent explanations. The findings are discussed in terms of “intellectual dynamics” — that is, differences in the coevolution of their conceptual understanding and critical attitude. In this context, the most frequently observed intellectual dynamics was “delayed critique”: waiting to reach a certain threshold of conceptual comprehension beyond mere logical necessity before expressing a critique of a given text. I will discuss the process by which the transition from critical passivity to the liberation of critical attitude is triggered in this population, discussing how we might help future teachers (and students more generally) to reduce the duration and effects of their critical passivity when they struggle to master the domain in question. More generally, I will argue that much more can be learned from students' responses to an educational setting if analysis of their comments is not confined exclusively to conceptual aspects but attends more to the possible *interconnections* between conceptual and metacognitive-critical-affective awareness.

Bio-note

Laurence Viennot is an emeritus professor at Denis Diderot University. After five years of research in astrophysics, she moved to didactics of physics in 1971. Since then, she has taught physics, and - after her thesis in this new field (1977) - didactics of physics. She has been a member of the national committee in charge of preparing new curricula in physics for secondary schools in France (1995-2000), and a member of the first executive board of the European Science Education Research Association. She founded and headed a master in Didactics of Scientific Disciplines, while teaching physics in the physics department. Her professional interest is in the quality of the teaching learning process, and has led her into research on common ways of reasoning in physics, design and evaluation of sequences and teachers' reaction to innovative interventions. This topic gave rise to a collaboration with Roser Pinto, Jon Ogborn, Elena Sassi within the European project Science Teacher Training in an Information Society (STTIS 1997-2001, resp. R. Pinto). In 2008, she launched, with Gorazd Planinsic, Elena Sassi and Christian Ucke, the MUSE project (More Understanding with Simple Experiments) under the auspices of the Physics Education Division of European Physical Society. A large part of Laurence Viennot's research is synthesised in two books, *Reasoning in Physics* (Kluwer 2001, now Springer, also in

Spanish: *Razonar en fisica*, 2002, Antonio Machado) and *Teaching Physics* (Kluwer 2003, now Springer). More recently, the links between conceptual understanding, critical reasoning and intellectual satisfaction became her main topic of research. Her present work is an original combination of the exposure of confusing or false explanations common in much everyday physics teaching, an acute analysis of their origins and causes, together with practical tested proposals for doing better and real evidence that these can work to give students and their teachers genuine intellectual satisfaction from their study of physics. Her last books, *Thinking in Physics The pleasure of Reasoning and Understanding* (Springer 2014, in French: 2011 *En physique pour comprendre*, Grenoble Sciences), are widely inspired by this concern. Laurence Viennot was awarded the medal of International Commission of Physics Education in 2003 and the GIREP medal in 2016. Publications at: <http://www.lar.univ-paris-diderot.fr/page/Viennot>

Prof. Adrian Muscat (University of Malta), Dr Chris Porter (University of Malta), Ing. Jason Debono (University of Malta)

Web-Based eTutor for Learning Electrical Circuit Analysis

Abstract

The unprecedented pervasiveness of electrical and electronic devices and systems in residential, office, commercial, public and industrial spaces, demands the employment of an increasing number of technicians and engineers trained in Electrical Engineering and related areas. This growth is guaranteed to be sustained and accelerated with the deployment of novel systems, such as the proliferation of electrical vehicles and the necessity of developing energy efficient systems. This calls for not only an increase in the number of teachers, but also a change in the relationship between the teacher and the student in order to reach a wider spectrum of student abilities. Past studies [2, 3] have shown that one-to-one tutoring is very effective in increasing the learning rate of students and helps students achieve significantly higher assessment scores. A school system based on personal human tutors is however unsustainable and unrealizable due to the financial cost of the project as well as the lack of availability of human tutors. Intelligent Tutoring Systems promise to deliver a personal mentor or a tutor to each student in class. The quest is to model the human tutor using artificial intelligence techniques. In this paper we report our experience in developing a novel web-based eTutor system for junior students in electrical circuit analysis techniques. We describe the web-based eTutor system components, mainly the user-interface, domain expert model and probabilistic assessment model and show how the system architecture developed provides a framework to support interactive sessions between the human and the machine for both cases when the human is a student and the machine a tutor and also when the machine is the student and the human is the tutor. To motivate the usefulness of the data accumulated, we give some examples of interactive sessions. We discuss the suitability of circuit analysis techniques to test declarative statements and generate full solutions to the problem in hand, and discuss assessment models that capture both declarative and procedural knowledge. Our discussion on domain and assessment models is based on earlier work we carried out in [1], including results from experiments carried out in the classroom. We describe the implemented models and discuss the limitations in our system and experiments. We finally discuss how the system is expected to scale as additional domain knowledge is accumulated and as the number of students using the system increases, and how input from the human teacher in charge of the class can influence the assessment model.

- [1] A. Muscat and J. Debono, "Assessment Models and Qualitative and Symbolic Analysis Techniques for an Electrical Circuits eTutor", *International Journal on Advances in Intelligent Systems*, vol 5 no 3 & 4, year 2012.
- [2] B. S. Bloom, "The 2 sigma problem: The search for methods of group instruction as effective as one-to- one tutoring.," *Educational Researcher*, vol. 13, pp. 4–16, 1984.
- [3] P. A. Cohen, J. A. Kulik, and C. C. Kulik, "Educational outcomes of tutoring: A metaanalysis of findings.," *American Educational Research Journal*, vol. 19, pp. 237

tion. His education research focuses on the development of scientific reasoning and science practice abilities, with emphasis on the practices that cross disciplines. He was the recent recipient of a Fulbright Scholar grant to develop pre- and in-service teacher training on science process at Charles University in Prague, Czech Republic. He has also worked with the Benemérita Universidad Autónoma de Puebla in Puebla, Mexico on teacher training workshops for Mexican physics teachers, as well as work as a consultant for school districts across the USA.

Conference participants

Mr David Aloisio (Università ta' Malta)

Menz f'Narnia:(lil hinn mil)l-ansjetà tal-influwenza letterarja fil-qari mill-ġdid tad-dramm 'soċjali-simboliku' ta' Francis Ebejer

Abstract

Fl-istorja relattivament qasira tal-letteratura Maltija u tal-kritika tagħha kienu rari l-mumentu li fihom l-influwenza letterarja nftiehemet bhala opportunità għall-kritiku biex jespjora r-relazzjoni, xi drabi inkonxja u elusiva, ta' testi Maltin ma' xogħlijiet barranin. Dan l-istudju se jgedded din it-tradizzjoni sporadika mistharrġa minn kritiċi lokali, ngħidu aħna, bħal Gużè Diacono li qarreb *Il-Fidwa tal-Bdiewa* ta' Ninu Cremona, drammi poetiku b'valur storiku għoli fil-kuntest tat-teatru Malti, ma' *I Promessi Sposi* ta' Alessandro Manzoni. Diacono jistharreġ kif, fost l-oħrajn, hemm korrelazzjoni ċara bejn il-karatterizzazzjoni ta' Renzo, Lucia u Don Rodrigo ta' Manzoni u dik ta' Pietru, Rożi u Don Carlos ta' Cremona. L-istudju ta' Diacono jservi ta' mudell analitiku ta' kif tingħaraf l-influwenza letterarja li xogħol letterarju barrani halla fuq xogħol Malti. Madankollu, f'din l-analizi komparattiva, ma naqbilx ma' Diacono meta jiddeskrivi l-influwenza letterarja f'termini ta' "dejn" (*Studju 8*). Fil-fehma tiegħi, u dan se nsostnih fl-istudju, l-influwenza letterarja hija fenomenu li ebda awtur ma għandu jistmell jew iħossu obligat iħallas xi prezz hati għaliha. Huwa minn ewl id-dinja li l-kittieba tal-lum jiġu influwenzati mill-kittieba tal-bieraħ. U din l-influwenza ma għandha tammar wiċċ hadd. Hija naturali fil-proċess tal-kitba tal-letteratura daqskemm huwa naturali li l-ulied jinfluwenzaw irwiegħom, konxjament u inkonxjament, mill-ġenituri tagħhom. Għaldaqstant il-metafora, b'konnotazzjonijiet negattivi, tad-"dejn" nixtieq nimmodifikaha fil-metafora tal-"wirt," il-metafora li tevoka sens ta' kontinwità, harsien u tiġdid; hija l-idea li l-ġid letterarju ma jintilifx fil-kotba miksija trab u minsija fuq l-ixkaf imma jibqa' dinamiku għax jintiret minn xogħol għall-ieħor. Il-kittieba jibqgħu intrinsikament marbutin, bħal holoq f'katina, ma' dak li nkiteb qabilhom. Xi drabi, anke jekk il-kittieba tal-lum jirreagġixxu kontra l-kittieba tal-bieraħ, ikunu mingħajr ma jridu qegħdin jintrabtu, għalkemm b'sens reazzjonarju u ta' oppożizzjoni, max-xogħlijiet ta' qabilhom. Dun Karm, li lokalment hafna jqisuh bhala l-mudell per eċellenza tar-Romantiċi kollha Maltin li segwewh, ukoll ġie influwenzat minn xogħlijiet barranin. Oliver Friggieri, fl-istharriġ fil-fond tal-influwenza Romantika Taljana fuq il-kittieba Maltin, studja, fost l-oħrajn kif l-aqwa xogħol tal-poeta nazzjonali tagħna, *Il-Jien u Lil Hinn Minnu*, iħaddan fih influwenzi qawwija mill-poema *I Sepolcri* ta' Ugo Foscolo li Dun Karm stess qeleb għall-Malti. Fil-poema Dunkarmjana, il-motiv eżistenzjali ta' Foscolo jiġi mistharreġ mill-ġdid fid-dawl tal-perspettiva Nisranija tal-poeta Malti. Harold Bloom huwa pjuttost estremist fl-interpretazzjoni tal-idea tal-influwenza letterarja. Skontu, kull min ġie wara Shakespeare, ġie influwenzat minnu. Hija din sfortuna jew benedizzjoni? F'dan l-istudju se naddotta l-idea li l-influwenza letterarja, li ma għandhiex limiti spazjali, temporali u lanqas ma hi ristretta għall-istess forma artistika, hija aktar barka milli forma ta' saħta inevitabbli. Hija, qabelxejn, sors ta' ispirazzjoni. Xogħol artistiku jista' jispira il-kreazzjoni ta' xogħol artistiku ieħor. Għal-

daqstant, se nibda l-istudju tiegħi billi nitlaq mill-premessa li meta Ebejer kiteb id-dramm *Menz* kien diġà ġie espost għan-narrattiva popolari *The Lion, the Witch and the Wardrobe* ta' C. S. Lewis. *Menz* ġie mtella' fuq il-palk tat-Teatru Manoel, madwar għaxar snin wara l-pubblikazzjoni tax-xogħol ta' Lewis. Peress li Ebejer kien għalliem tal-Ingliż u kien konxju mill-pubblikazzjonijiet riċenti fi hdan il-letteratura Ingliża, huwa plawsibbli li d-drammaturgu Malti, kien qara l-ġrajja fittizja ambjentata f'Narnia. L-istudju preżenti huwa msejjes fuq is-similaritajiet fundamentali bejn dawn iż-żewġ xogħlijiet letterarji – xebh li fil-fehma tiegħi huwa manifestazzjoni ċara tal-influwenza letterarja li qanqlet lil Ebejer biex jispira ruħu u jipproduci xogħol, xorta wahda, originali. Se nuri kif għal Ebejer, in-narrattiva ta' Lewis serviet biss bhala punt ta' tluq. Bla ebda mod dan l-istudju mhu qed jasserixxi li Ebejer ġie influwenzat necessarjament u esklussivament minn Lewis waqt il-proċess tal-kitba ta' *Menz*. L-istharrig tiegħi se jipprezenta tezi plawsibbli li l-għan aħhari tagħha huwa li tesplora l-analogiji u fl-istess waqt tagħmel apprezzament letterarju ta' dawn il-kapulavuri letterarji li essenzjalment huma distinti minn xulxin u li jhaddnu mertu letterarji rispettivament.

Menz in Narnia: (beyond) the anxiety of influence in the rereading of Francis Ebejer's 'socio-symbolic' play

Abstract

In the relatively short history of Maltese literature and its critique, literary influence was hardly ever understood as an opportunity for critics to explore the relationship, at times unconscious and elusive, between Maltese texts and works written overseas. This study renews the sporadic tradition employed by local critics like Ġużè Diacono who drew closer *Il-Fidwa tal-Bdiwa* by Ninu Cremona, a poetic play of high historical value in the Maltese theatre context, with *I Promessi Sposi* by Alessandro Manzoni. Diacono investigates, among other aspects, the clear correlation between the characterisation of Renzo, Lucia and Don Rodrigo of Manzoni with Cremona's Peter, Rozi and Don Carlos. In fact, Diacono's study can serve as an analytical model of how to recognise the literary influence by a foreign literary work on a Maltese work. However, I tend to disagree with Diacono when, in his comparative analysis, he describes the literary influence in terms of "debt" (*Studju* 8). In my view, and this will be emphasised in my study, literary influence is a phenomenon that no author has to despise or feel obliged to pay any guilty price for it. It is only natural that today's writers are influenced by yesterday's writers. This influence should not embarrass anyone. It is natural in the process of writing literature, as much as it is natural that children are influenced, consciously and unconsciously, by their parents. Thus, I would like to modify Diacono's metaphor of "debt" and its negative connotations, to the more positive metaphor of "inheritance," that evokes a sense of continuity, safeguarding and renewal; it promulgates the idea that the literary wealth is not meant to be lost in the dust-covered books forgotten on shelves but has a dynamic nature as it is inherited from one literary work to another. Writers will remain intrinsically connected, like links in a chain, with what was written before them. Sometimes, even if today's writers react against yesterday's, they will unconsciously get linked, although in a reactionary or oppositional sense, with works written before them. Dun Karm, locally viewed as a model par excellence to all Maltese Romantics

Dr J. Christopher Moore (Dr George F. Haddix Community Chair in Physical Science, University of Nebraska Omaha)

Sense-Making across Disciplines: Physical Models, Theoretical Frameworks, and the Connections between Education in the Humanities and Sciences

Abstract

Across disciplines, the fundamental goal of authentic learning is sense-making: making sense of the world around us, our interactions, and art. Sense-making goes beyond content knowledge. For example, when studying history, knowing when and where something happened is necessary but insufficient to the understanding of why and how. Knowing science facts, like the shape and location of the mitochondria is necessary but insufficient to the understanding of its role in the cell. Knowing and identifying plot structures is necessary but insufficient to the understanding of the author's message or the work's place in culture. Knowing in general is necessary but insufficient to understanding. As education shifts from a discipline focused on propagating knowledge as "stuff" to a focus on propagating understanding and teaching the means towards understanding, the learning of sense making practice across the disciplines is becoming more important. In the recent past, education at nearly all levels focused on the teaching of facts. The practices of experts within disciplines were taught rarely, if at all, and almost exclusively at the level of domain-specific skills. However, sense-making practices are surprisingly universal, and not just across the sciences. In this talk, I will discuss the parallels between the sciences and humanities with respect to the practice of sense-making: mental/physical models in the sciences and the theoretical frameworks deployed in the social sciences and the humanities. In particular, I will discuss my groups work on teaching science practice with respect to modelling, and how integrating practice with context/content leads to understanding *and* knowing. I will also discuss how the education system in the USA is moving towards standards focused on student sense-making abilities in concert with content knowledge, with cross-cutting concepts that connect the science disciplines. Furthermore, we will look at how modelling and testing in science parallels building and using frameworks in other disciplines, and how the sharing of effective teaching strategies across the arts/science divide could be beneficial for everyone. When focusing on the practices of science that are universal, the learner begins to make the connections between disciplines and see investigation as a universal process for truth-seeking as opposed to a context-dependent means to "learning" facts within a tiny domain. Their entire epistemology changes, which we have found is fundamental for students making the novice-expert transition. I will make the case that we should go one step further, and begin addressing in our classrooms the cross-cutting nature of the practices of all learners, so that the student can see how what they are doing when analyzing literature is not epistemologically dissimilar to their chemistry class.

Bio-note

Dr Christopher Moore was recently appointed as the Dr George F. Haddix Community Chair in Physical Science at the University of Nebraska Omaha, and is author of the forthcoming book *Creating Scientists: Teaching and Assessing Science Practice for the NGSS* (Routledge 2018). Dr Moore is a former secondary-school physical science teacher in the USA and is currently an associate professor of physics educa-

Bio-note

Sandra Mifsud Bonnici is a Senior Lecturer in Systems of Knowledge at the Junior College, University of Malta, and also a Visiting Lecturer at the Department of Pharmacy, in the Faculty of Medicine and Surgery, at the same University. She obtained a B.Pharm (Hons) in Pharmacy in 1986 and BA Socio-legal Studies in 1990. Recently her ever-growing thirst for knowledge led her to read for the Masters in Baroque Studies offered by the International Institute of Baroque Studies in the Faculty for the Built Environment at the University of Malta, where she graduated in November 2015 with her dissertation entitled 'Women in Eighteenth Century Malta, Legal and Social Aspects', presently her main focus of interest. Ms Mifsud Bonnici's wide-ranging qualifications and background has given her an inter-disciplinary outlook reflected in her writing and lecturing.

who followed him, was also influenced by foreign works. For instance, Oliver Frigieri, in his in-depth study of the Italian Romantic influence on Maltese writers, studied how the best work of our national poet, *Il-Jien u Lil Hinn Minnu*, encompasses strong influences from *I Sepolcri* by Ugo Foscolo, translated by Dun Karm himself to Maltese – in his long poem, Dun Karm re-examines Foscolo's existential motive from a Christian perspective. On the other hand, Harold Bloom is quite extremist in interpreting the notion of literary influence. He argues that anyone who came after Shakespeare was influenced by him. Is this a misfortune or a blessing? In my study, I adopt the idea that literary influence, which has no spatial or temporal limits and is not restricted to one artistic form, is more of an advantage than a form of inevitable curse. It is, above all, a source of inspiration. An artwork can inspire the creation of another artwork. I will therefore begin my study with the premise that when Ebejer wrote *Menz* he had already been exposed to the popular narrative *The Lion, The Witch and the Wardrobe* by C. S. Lewis. *Menz* was performed at the Manoel Theatre, more than a decade after the publication of the work of Lewis. As Ebejer lived and studied in England and was a teacher of English, he was surely au courant of the recent publications within English literature. Hence, it is highly plausible that the Maltese playwright, has read the fictitious narrative set in Narnia. This study is based on the fundamental similarities between these two literary works – a correspondence that in my opinion is a clear manifestation of the literary influence that stimulated Ebejer to produce an original piece of literature. It will show how for Ebejer, the narrative of Lewis served only as an inspirational starting point. In no way does this study assert that Ebejer was necessarily and exclusively influenced by Lewis during the writing process of *Menz*. My concise investigation will present a tenable argument that its ultimate goal is, apart from exploring the analogies, to partake in the literary appreciation of these two masterpieces which, nonetheless, are substantially different from each other and have distinct literary merits.

Nota fuqi

L-interess ewlieni tiegħi fl-istudju tal-letteratura Maltija huwa dwar ir-relazzjoni, spiss anzjuża, ta' bejn ix-xogħlijiet letterarji u kif dawn jiġu organizzati, konxjament u/jew inkonxjament, mill-psike kollettiv f'listi jew kanoni letterarji. Fil-fatt it-titlu tat-teżi tal-PhD li qiegħed nagħmel huwa proprju "Id-Djalettika tal-Kanonu: il-Kuntest Letterarju Malti." Dan it-titlu jirrifletti l-analiżi tiegħi tat-teorija letterarja li tittratta d-diskors dwar il-kanoniċità fil-qasam letterarju u l-applikazzjoni tagħha fil-kuntest lokali. It-teżi se tistharreg mill-qrib l-iżvilupp tal-idea tal-kanonu Malti fid-dawl tad-diskussjoni internazzjonali dwar l-eżistenza u l-validità ta' kanonu letterarju sabiex tikkontribwixxi fl-identifikazzjoni ta' liema hi l-aqwa letteratura u liema kriterji jwasslu għall-proċess mentali li jagħzel bejn xogħol u iehor. Bħalissa jien nghanlem il-Malti fil-Junior College u fl-Università ta' Malta. Ili nghanlem 15-il sena u ggradwat fil-Malti bil-Bachelorat u bil-Masters.

Bio-note

One of my areas of interest in studying Maltese literature is the relationship, often anxious, between literary works and how they are organised, consciously and/or unconsciously, by the collective psyche in unofficial lists or else in literary canons. In

fact, this is related to the PhD that I am currently reading "Dialectic of the Canon: the Maltese Literary Context," in which I analyse the literary theory dealing with canonicity in the literary field and its application to the local context. My study will examine closely the development of the idea of a Maltese canon in the light of international debate on the existence and validity of literary canons in identifying the finest literature and what criteria lead to the mental process that can possibly distinguish the degree of literariness in works of literature. I have been teaching for 15 years after graduating from the University of Malta. I currently lecture Maltese literature and language at the Junior College and the University of Malta.

Ms Sandra Mifsud Bonnici (University of Malta)

The Language of Design in Baroque Architecture: finding 'Connections' with other Disciplines with Reference to Francesco Borromini and Guarino Guarini's Works.

Abstract

This paper attempts to illustrate the various 'connections' that exist between the different facets of Baroque architecture and how the aesthetic qualities enjoyed by those who view it, are not only determined by the design of the buildings but also on various underlying interrelated factors that include mathematical and scientific knowledge, as well as philosophical and theological ideas. The works of the two architects, Francesco Borromini and later Guarino Guarini will be studied to demonstrate these 'connections'. The ultimate designs of these two architects took the form of a language in its own right, a language that was not immediately understood as all innovative ideas are. Borromini used a new methodology based on experimentation that evolved when he re-evaluated old techniques and amalgamated them with the new philosophical ideas of Rene Descartes and Euclid, whereas Guarini's principle source of inspiration was Borromini's works. One of the elements to be discussed will be how Borromini used spaces as concrete materials that he shaped and manipulated in an original way, even creating the illusion of greater spaces. He used different geometric forms, intersecting them to create other more complicated designs that had better flow and movement between the elements inside the buildings that continued with the façade and the other surrounding buildings in the urban space outside. He was capable of creating a pulsating force even between spaces that were mutually interdependent, a new complimentary approach to different spaces. Other elements that Borromini utilized to communicate were the use of original and ingenious ornamentation, the installation of which involved great technical difficulty and his use of perfect proportions to scale. His eye for detail was manifest in each and every element, be it a base, an angle or a bend. He worked around a centre and integrated the uniform vertical walls with it. His greatest admirer, Guarino Guarini, the Theatine priest, on visiting Rome was mesmerized by Borromini's works. He went on to borrow his stylistic freedom of to create even more symbolic and extremely complex architecture. Borromini's principle of pulsating juxtaposition was applied to his so-called 'cells' to create structures that seemed to dilate and contrast spontaneously. These 'cells' seem to fuse so that it becomes difficult to distinguish where one stops and the other begins, a phenomenon he labelled as the 'grouping of spatial cells'. Guarini believed that this phenomenon existed in nature and that every human being experiences it. He went a step further and applied it to the Catholic Church and the buildings he designed, hence the connection with theology and scientific knowledge. Thus, whilst Borromini synthesized existing schemes such as the Greek cross, the circle, the octagon and the Latin cross to come up with innovative complex spaces, Guarini combines his 'cells' using interpenetrations and pulsating juxtapositions basing his work not only on his mathematical knowledge but on his philosophical beliefs, synthesizing Borromini's ideas. The results of these interconnecting ideas may be appreciated in the extraordinary buildings these two Baroque architects designed that speak volumes in a language understood by all.

Prof. Monika Kusiak-Pisowacka (Jagiellonian University of Cracow)

Intercultural Communicative Competence as a Focus of Second Language Acquisition Research in Poland

Abstract

Since Poland entered the European Union in 2004, developing intercultural communicative competence (ICC) has become an important goal of foreign language education. The role of school instruction is not only to equip foreign language learners with appropriate language competence, but also to prepare them to understand foreign language cultures and successfully communicate with their representatives. Clear aims concerning this aspect of education are explained in formal documents such as the Core Curriculum recommended by the Ministry of Polish Education, based on the internationally acknowledged guidelines stated in *Common European Framework of Reference for Languages*, as well as in teaching syllabi and course-books used in Polish primary and secondary schools. Intercultural communicative competence has become a focus of a number of studies conducted within the area of second language acquisition, those theoretically oriented and those aiming to approach this subject area in a more practical manner. The research seems to reflect research interests of Polish Academia and to show foreign language teachers' endeavours to implement the principles of the intercultural approach in the classroom. The presentation will look at a selection of recent studies exploring issues related to ICC, conducted by Polish researchers and published in academic journals. The aim of this overview is to demonstrate how the concept of ICC is investigated in second language acquisition studies and what intercultural topics are most up-to-date in a Polish research context. The analysis will also highlight the areas that in the opinion of the presenter need more academic attention. It is hoped that the presentation will be of interest to researchers exploring second language issues as well as practitioners responsible for education.

Bio-note

Monika Kusiak-Pisowacka is Associate Professor of English in the Institute of English Studies at the Jagiellonian University of Cracow, Poland. She is Head of the Applied Linguistics and English Language Teaching Section. She teaches courses in methodology and psycholinguistics. She is interested in analysing classroom discourse and the process of becoming a foreign language teacher. Her research interests include reading in a foreign language and the role of a first language in foreign language learning, which is the focus of her recent publication *Reading comprehension in Polish and English: Evidence from an introspective study* (2013). She has written numerous articles in scholarly journals, co-authored three course-books for Polish EFL learners and has written two handbooks for foreign language teacher trainees.

Dr Josette Attard (University of Malta)

The Connection between Literature and Aesthetics: is it problematic?

Abstract

Most literary critics are reluctant to accept the relevance of aesthetics to literature. The aim of this paper is to show how aesthetics can be related to literature in terms of values, among other concepts. The aesthetic experience and the aesthetic value of literature have been discussed for long and, as a result, there have been many divergent theories from philosophers in general and aestheticians in particular. In this paper I revisit Peter Lamarque's objections to the connection between aesthetics and literature. I argue for and against these objections, referring to accounts written by several philosophers, amongst whom Monroe C. Beardsley, Robert Stecker, Noël Carroll, and Kendall Walton. I claim that the connection between aesthetics and literature is possible if any literary genre is transformed into an experience which is mostly subjective, and generates aesthetic values which, on the other hand, are more objective and universal. As Lamarque claims, literary critics seem to emphasize more the instrumental values of literature than its more purely intrinsic values. Moreover, they are keeping away as much as possible from value judgements of any kind. All this seems to separate literature from aesthetics. There are common factors however, such as aesthetic pleasure and aesthetic vocabulary, which are used by both aestheticians and literary critics. This is proof enough that literature holds a strong place in contemporary aesthetics. Most aestheticians regard literature, especially poetry, as one of the arts. However the most common issues that philosophers write about are the cognitive and ethical values of literature. Such debates lack the literary and hence the aesthetic aspect of literature. In fact, it is not so obvious that when philosophers write about literature, they are really engaged in aesthetics. This is the focus of this paper: does the concept of aesthetics of literature really connect aesthetics to literature? More precisely, which criteria make literary works suitable for aesthetic evaluation? The key to these questions lies in the aesthetic experience of pleasure.

Bio-note

Josette Attard is a senior lecturer at the Junior College and the University of Malta. She studied literature and literary theory at the University of Malta where she specialized in Maltese literary aesthetics in which she was awarded the degree of Doctor of Philosophy. Her research interests are the philosophy of literature and literary aesthetics besides Maltese literature. Her publications in this field include *L-Estetika Maltija – Antoloġija Kritika* (1997), and *Storja tal-Estetika Letterarja Maltija* (2011). She is a member of *The British Society of Aesthetics*, the *Società italiana di estetica*, the *European Society of Aesthetics* and the *American Society of Aesthetics*. She also took part in various literary programmes on local radio and TV stations and presented several papers in conferences held locally and abroad.

Dr Emmanuel Attard Cassar (University of Malta)

In Search of the Fastest Sorting Algorithm

Abstract

In computer science data is connected by means a relationship. One common relationship is ‘order’, the most common being ascending or descending order in the case of numbers and alphabetical order in the case of text. Sorting algorithms do just that: they take in an unordered sequence of values and order them according to a given relationship. There are many sorting algorithms; some are slow and some are fast. One indication of the efficiency of an algorithm is the mathematical calculation of an asymptotic upper bound expressed by means of the big-O notation. $O(n^2)$ is slow, $O(n \log n)$ is fast and $O(n)$ would be extremely fast. The author of this paper tries his hand on devising a fast algorithm and comes up with two designs: the PICOP and DITREC algorithms. PICOP stands for Place In CORrect Position and DITREC stands for Divide in Two RECURsively. The motivation of these two designs comes from the following two known characteristics: (i) fast algorithms carry a value quickly to its correct place (or its vicinity) in the sorted sequence (slow algorithms take more steps to move a value to its right place) and (ii) divide-and-conquer principle i.e. it is faster to sort two halves and then join them rather than sort the whole sequence. The PICOP algorithm is presented in two versions, the second being faster than the first but pays the price of using a lot of memory. The author produces empirical results of timings by these two algorithms (and their variations) and compares them with the timings of both the classic sorting-algorithms found in most text-books and other extremely good algorithms found in papers. All programs are written in Java.

Bio-note

Emmanuel Attard Cassar graduated BA (Ed.)(Hons) at the University of Malta and Dottore in Scienze dell’Informazione at the University of Pisa. He has taught both Mathematics and Computer Science. His main interests are Algorithms and the History of Mathematics and Computing. In 2016 he published the paper “Converting a binary tree expression to infix notation using the BAIT algorithm” (Symposia Melitensia 12). He also practises literary writing. In 2013 he published “Vacanze romane 2012” and in 2016 “Fuq Din l-Art Helwa” – a book of satirical poems. He is also the founder of EspRimi, a multi-disciplinary group interested in the expression of various forms of art and sciences.

Malta Labour Party’s cultural politics during the 1970s and 1980s. Furthermore, he has written Gramscian analyses on the social, political and economic contexts of Don Lorenzo Milani’s work, and adopted the Sardinian’s elaboration of the concept of passive revolution for its contribution to the study of peace from the Italian Risorgimento state formation to the European Union integration; and in another work, he has also written on interpreting economic development and education in the history of a unified Italy. He has contributed to the *Journal of Mediterranean Educational Research* and the *Malta Review of Educational Research*.

Dr Joseph Gravina (University of Malta)

Reconceptualising Human Rights. Working at the Disconnections

Abstract

Following the tragedy of World War II, the newly set up United Nations organisation was pre-eminently intended to guarantee peace and promote and protect human rights. In 1948, its members at the time endorsed the Universal Declaration of Human Rights (UDHR). This added new social and economic rights to the political and civil rights' tradition of the Rights of Man. The Declaration recognised that rampant economic and social inequality, living in want and fear, were as much, if not more, an attack on human dignity as abuse of assembly rights or freedom of expression. Political and civil, economic and social rights were addressed as indivisible, homogeneous and interdependent. Connections were sealed. That was the moral supremacy of UDHR over other rights traditions. However, concrete implementation was to disconnect these two sets of human rights. Whilst it can be agreed that their concrete implementation is different, it is added that their disconnection downsized one set – social and economic rights – and privileged the other – political and civil – in terms of status. The paper will draw on historical sources of political and philosophic traditions in order to make sense of how specific moral, social, national and other identities are constructed. Such identities mean that those embracing them qualify for membership and are empowered with rights; the rest are de-rooted. A more critical observation of the disconnection is methodologically developed by means of the analytical instrument of the base and superstructure theoretical framework from within the Marxist tradition. Whilst this contributes to the loss in ostensible homogeneity of a discourse based exclusively on political and civil rights, conversely it assists in gaining comprehensive breadth and critical depth. This is a fundamental reason for the choice of the base-superstructure as a theoretical and methodological framework; it connects and aligns economic relations with political and ideological relations, where, it is explained, articulating connections is central. This framework, it is argued, exposes the distinction of social relations in civil society from those in the economic structure as it also suggests the need to reconstruct connections between the two as laid out in the Universal Declaration. This requires struggle and exposition of institutional strategies meant to normalise the social formation. It underlines the close connections between economics, political state and civil society as developed by Gramsci. Working within the base-superstructure theoretical framework, one begins to understand the misleading implications reflected in the disconnection between economic rights and political-civil rights. At the same time, one is warned of the dangers of economic reductionism and determinism on one side, culturalism on the other.

Bio-note

Joseph Gravina is a lecturer currently employed within the Systems of Knowledge department at the Junior College, University of Malta. In May 2014, he successfully defended his PhD research *Industrialisation, social reproduction and education. The experience of Italy's northeast and Malta in the second half of the twentieth century*. Prof. C. Borg was tutor and Dr. M. Vella advisor. His B.Ed (Hons.) thesis was on the educational relevance of Antonio Gramsci writings and his M.Ed thesis was on human rights education. He has contributed to edited works including writing about the

Dr Michelle Attard Tonna (University of Malta), Mr James Calleja (University of Malta)

Understanding Teachers' Professional Lives and Careers: A Maltese Case Study

Abstract

Introduction. Teachers, as professionals, are often compared to other groups in terms of the responsibilities they carry with their role, and their status in society. However, research is systematically failing to record their voices and investigating why they make decisions to move on in their careers, and the motivations which spur these decisions (Ball and Goodson, 1985; Kelchtermans, 2009; Eren, 2012). The rationale for this educational research is to study Maltese teachers' professional lives and career progression. It aims to create a platform for teachers' voices to be heard and represented, both individually and collectively. The research questions which inform this research will focus on understanding how teachers see themselves as achieving mastery of different pedagogical competencies at various moments in their careers. The authors would also like to investigate whether teachers' aspirations are being fulfilled through the role and responsibilities they currently hold, and the reasons for them choosing to move out of the classroom into a new position.

Methods. Data has been collected through an empirical research consisting of an online questionnaire with open-ended questions with a number of educators who were currently teaching or holding a higher role of responsibility within the profession. Social media was used to gather a random sample of educators who were willing to contribute to the data.

Results. Understanding how teachers think, act, develop professionally and change during their careers has provided new insights as to how one might approach the reform, change and improvements in education, within a context that is rapidly altering the nature of teachers' work.

Conclusion. It is important to have more analytic and systematic studies of teachers' lives and careers (Smith et. al, 1992), and locating teachers' lives within a wider contextual understanding (Goodson, 1992; Day, 2012). This research helped the authors to explore and better understand the relationship between teachers' individual biographies, historical events, and the constraints imposed on their personal choices by broader power relations.

Bio-notes

Michelle Attard Tonna is an academic member of staff at the Faculty of Education, University of Malta, coordinating school-based mentoring on a national level. Her primary research interests include the professional development of teachers and comparative studies of the way teachers learn. She has contributed to various European-wide studies in the area of teacher learning and also participated in various conferences and European networks in which she has presented her research. She has completed a PhD with the University of Aberdeen, UK, focusing her research on professional teacher learning in Malta.

James Calleja is an assistant lecturer in Professional Learning and Development at the Faculty of Education, University of Malta. He is currently doing his PhD research, with the University of Nottingham (UK), focusing on the continuing professional development (CPD) of teachers as they engage in learning to teach mathematics through inquiry. His research interests include the design of CPD programmes, professional learning communities, inquiry-based learning and mathematics education. James presented his CPD designs and research in a number of conferences on teacher learning. He also works closely with teachers on projects and supports schools in cultivating teacher professional learning. At present, he is promoting collaborative professional learning through lesson study.

teacher and as a member of the Senior Management Team in the role of Deputy Head. Teaching is also central in my role as a fully qualified and licenced football coach.

Ms Suzanne Gatt (University of Malta)

The Relevance of Systems of Knowledge (SOK) in 2017: Strategies in Challenging the Current Perceptions through Improvement of Lecturing Strategies

Abstract

This paper is the result of a practitioner research into the current teaching and learning of Systems of Knowledge. It is a challenge to the current perceptions of the subject through effective lecturing strategies. I choose to put the onus on me. Students are lumped with this compulsory subject, and it is no secret that they treat it as such – as an added burden. They *have to* learn the content, study it, carry out a project and then sit for an exam. It is consequently understandable that SOK is often deemed as a negative experience and a subject which steals time from other chosen subjects. In such a context, the problem lies with SOK's role in the course of their studies. The solutions lie in challenging this role. Rather than an inconvenience, SOK should be perceived as *complementary* to the students' post-secondary educational experience. SOK, through its many skills, attitudes and values needs to be *connected* to everything else. It is also a tool for lifelong learning and its interdisciplinary nature supports this role. The vast syllabus is what it is, however this should not be used as an excuse not to seek improvement in effective teaching methods. Consequently, the main objective of this research is to discover students' perceptions and expectations of the subject and then devise lecturing strategies accordingly. The needs of the students should dictate the role, rather than the other way round. In this process of discovery, I am reflecting on my practice and tweaking my lecture plans to suit these needs. Together with my students, I am researching and implementing strategies. Skills-based lectures is one strategy implemented so far. Content remains important, however it is based on the skills that students usually need to tackle most subjects. Hence, the connection. Analysis, critical-thinking, evaluation and other such skills are put in the forefront of the aims in every lecture. Moreover, this approach endorses the skills highlighted in the framework for 21st century learning. In the imminent post-secondary reform these skills are crucial and SOK has the potential to be an effective tool to promote such skills. SOK becomes a useful connection in a holistic learning experience. This present research is an introductory step of a long process, however students' perceptions and feedback so far are very indicative of the way forward. It is extremely evident that students are especially responsive when we adapt to their needs and give them a reason for learning. When students understand the aims of any subject and its relevance to their studies and their life, they own it, appreciate it, feel engaged and show willingness to learn. Otherwise, SOK or any other subject, remains another burden to bear until the exam is over. The buck should never stop there.

Bio note

Currently Senior Lecturer in Systems of Knowledge at Junior College. Areas of expertise vary from Education to History and Art. First Degree was Bachelor of Arts with Honours in History. This was followed by a PGCE. My first Master's Degree was in Baroque Studies, while the second one was an MSc in Educational Leadership. A teacher at heart, I spent most of my career in the secondary sector, both as a

Mr Janis Balodis (Corvinus University of Budapest)

Social Innovation as the Borderland Development Impact to Latvia's – Estonia's Borderland: the example of Valka/Valga case in an Educational Cross-Border Cooperation

Abstract

The European Union, with the elimination of internal economic and political boundaries and the creation a new policy for social innovation, has made possible that an innovation policy of interstate convergence could replace previous policies of interstate divergence in Europe. Innovation is an important factor in realizing the potential of the Lisbon agenda. "The knowledge captured in new technologies and processes can drive competitiveness and create new jobs", argue Fukuda – Parr and Shiva Kumar (2003). Social innovation with the linkage of borderlands, by their way of development, can be divided into an alienated, co-existent, interdependent and integrated borderlands (Xheneti, Smallbone & Welter, 2012). In border regions between Latvia and Estonia, the regional aspect of the study is the peripheral zone, the development and convergence of the central region compared to the areas with lower potential and opportunities for development. Valka (Latvia) and Valga (Estonia) are border cities between Latvia and Estonia, where the city *Walk* was divided between Latvia and Estonia after the First World War. Culture and new urban mentality got a new stage for Valka – Valkas development. Cross – border cooperation between Valka and Valga as a part of the social innovation is organized in following forms – 1) economic development, 2) tourism, 3) environmental protection, 4) learning regions, 5) transport and 6) education. Social innovation plays a huge role in educational cross-border cooperation. Between Valka and Valga are existing professional technical schools, where the language of instruction is in Latvian and Estonian. Valga County Vocational Training Centre is the example of a 'cross border educational centre', which is supported by the ESTLATRUS cross border cooperation program. The main outcome of this research is, that social innovation as the borderland development impact is related to three processes – 1) connectivity, 2) integrity and 3) trans – nationality. The research question is: How does social innovation strengthen an educational cross-border cooperation between Latvia and Estonia, as in the case of Valka/Valga border towns?

Bio-note

Mr Janis Balodis is from Sigulda, Latvia, where he was born in 1988. He is the holder of three MA degrees in Geography (University of Latvia), Comparative Local Development (University of Trento, Italy) and European studies (the College of Europe). Mr Balodis has working experience with the European Commission (Brussels), the Union for the Mediterranean (Barcelona) and the University of North Carolina at Chapel Hill (USA). Currently he is a trainee at the European University Institute in Florence. In 2015 he founded the non-governmental organization of regional development and social initiatives 'The Perspective'. Mr Balodis has been selected as one of the first participants for the volunteership by the European Solidarity Corps. During his active academic career, he wrote more than 25 scientific publications about cross border cooperation, regional development, minority rights and innovative organizations. In 2017 he won the Darmasiswa Indonesia Scholarship grant.

Ms Christiane Beck (University of Malta)

Towards a Holistic Approach in Foreign Language Teaching

Abstract

Languages are generally taught and assessed in terms of the ‘four skills’: listening, speaking, reading, and writing. In modern foreign language teaching the communicative approach is the most widely used method when it comes to classroom-based teaching. It is assumed that students acquire communicative competence through communicating in the (foreign) language rather than by analysing it. But what exactly does it mean to communicate? And how can a teacher foster the students’ communicative competence? Focusing on the aural and oral communicative skills of listening and speaking I would like to introduce the interdisciplinary framework of speech science and point out why, especially against the background of the Common European Framework of References for Languages (CEFR), an interdisciplinary perspective is important when teaching a foreign language. Interdisciplinarity as the very basis of a scientific discipline may appear as a paradoxical conceptual weakness rather than an asset which provides new insights. The interdisciplinary nature of speech science, however, results from its holistic perspective on human beings speaking with each other, which is its unique feature. As a result, speech science finds its place within the canon of other neighbouring disciplines both in the humanities and social sciences and builds connections to disciplines such as rhetoric, ethics, linguistics, psychology and sociology. Furthermore, speech science is also linked to speech training (and vice versa). Its German name “Sprechwissenschaft und Sprecherziehung” reveals this dual character between theory and applied science, which shows how closely it is also connected to educational sciences. The interdisciplinary framework of speech science can serve as a guiding concept for fostering speaking skills in foreign language teaching because it is in accordance with an essential characteristic of the communicative approach in foreign language teaching: the communicative approach has shifted the theoretical focus from grammaticality towards communicativeness, and from correctness to the intelligibility of linguistic utterances. Thus, detailed error correction is de-emphasized, “right” and “wrong” as categories of evaluation are partially displaced by categories such as “appropriate” and “inappropriate” with regards to the communicative situation. Along with this, foreign language teachers face new challenges. It is increasingly expected that they have a clear understanding of the concept of “communicative competence” and its implications – ideally beyond the can-do descriptors of the CEFR. Speech science offers a theoretical framework which helps to understand aural and oral skills not only as an individual performance but as a social action and a mutual action of understanding, which includes the ability to be cooperative, to deal with conflicts or to give and receive feedback and many other skills. To understand the desired objective of “communicative competence” in its complexity and to be aware of the variety of linguistic as well as social skills involved, is a highly fruitful – interdisciplinary – tool for teaching and developing practical foreign language skills. It can also enhance the learning experience in the classroom by emphasizing the social dimension of speech, thus, going beyond a schematic training in “listening” and “speaking” towards a holistic approach.

syndrome’s assessment and will shortly be certified as one of the first Irlen Screeners in the Maltese Islands.

Dr Olivia Galea-Seychell (University of Malta)

Visual Perception and how it affects our Students

Abstract

The right of every student is to learn in an education system. This in itself implies that the education system needs to be open and inclusive of all students. For this to happen, the education system has to uphold the underlying principle that in all classes students compose a heterogeneous group. A heterogeneous group implies a student population made up of students with diverse needs and ways of learning. Their diverse needs do not make them either better or worse, rather their differences help to enrich the learning environment. In response, the learning environment should be enjoyable, positive and stimulating for all students. The educator has to go in class with an open mind, aiming to understand the students' needs. These needs are multi-varied and can be any one, some or all of the following: social, emotional, physical, cognitive and sensory processing. Ignoring one aspect or hammering on one at the expense of the other leads to a short-sighted system refusing to understand the realities of our students. In 2014, the European Agency for Special Needs and Inclusive Education carried out an external audit of the Maltese education system. It underlined a rights based approach referring to the "right of all children to quality education and effective support to maximise their learning and participation and achievement of valued outcomes" (p.85). The question arising is the following: How can this materialise? The answer to this question is multifaceted. However, in this presentation the aim is to focus on students who are struggling to achieve and have visual perception difficulties. Depending on the visual perception difficulties, namely whether they are severe, moderate or mild, the students will go up the ladder of the education system. There is a common agreement that learning relies on our senses and more. It relies on our senses but also on our sensory processing, which is perception. Sensory processing is beyond our senses but it involves the brain and how the latter processes information it receives. This presentation will focus on how visual information is processed by the brain and how it can aid or hinder the abilities of students to learn. It will underline how visual perception is at the heart of our effective learning. Effective visual processing can lead the students to achieve in their studies and feel confident in their learning abilities. When there are difficulties with visual processing, the students doubt their abilities, struggle in the learning process and can easily give up and quit their studies.

Bio-note

Olivia Galea-Seychell, B.Psy.(Hons.), (Melit.), M.Sc. (LSE), Ph.D. (OU) is Senior Lecturer in Psychology at the University of Malta, Junior College. She trained locally and in the United Kingdom. For a number of years, she has lectured at the University of Malta, Department of Psychology and was senior manager at the Foundation for Social Welfare Services. She has also been involved in training and service consultancy. Her studies covered psychology, social psychology, and social work. She has conducted research in different areas of psychology, social work and social policy. Her doctoral research addressed Maltese fostered children's contact experiences with the families of origin. She has also been actively involved in publishing parts of her research. Furthermore, Olivia introduced to the Maltese Islands the Irlen

Bio-note

Christiane Beck holds a Master's degree in German Linguistics (University of Erlangen-Nuremberg) and a Master's degree in Speech Communication and Rhetoric (University of Regensburg). She worked as an assistant lecturer at the Department of German at the University of Erlangen-Nuremberg offering courses in German Linguistics. Furthermore, she worked at the Service Centre for Innovation in Teaching and Learning at University of Würzburg where she delivered courses in rhetoric for conversation and speech. Following her keen interest in language, oral communication and teaching, she also attended courses at the University of Bamberg and participated in a training program of the Goethe Institute on teaching German as a Foreign Language. Christiane Beck taught German as a Foreign Language as a DAAD language assistant and DAAD lecturer at the Department of German at the University of Malta. Her research interests are pragmatics, communication theory, speech communication and rhetoric, and the teaching of German as a Foreign Language.

Dr Christine Borg Farrugia (Università di Malta)

Le affinità storiche tra i figli abbandonati nella Ruota a Napoli e a Malta

Abstract

Nella maggior parte dei paesi europei, i bambini non erano ritenuti che adulti in miniatura: visto che vivevano per la strada avevano perso l'innocenza tipica dell'infanzia, vivevano in condizioni indescrivibili e alcuni erano già pregiudicati e mandati in carcere. Molti genitori mostravano poco affetto nei confronti dei figli e, in parecchi casi, li consideravano una seccatura, specialmente se la loro nascita aggravava la condizione economica della famiglia. Visto che i costumi sessuali erano molto liberi, c'erano tanti bambini abbandonati registrati come "ex parentibus ignotis", nati a causa dell'ignoranza nei confronti dei metodi contraccettivi naturali. Questo era il motivo principale dietro all'abbandono di questi figli indesiderati. Tra i muri ormai silenziosi degli antichi brefotrofi, si celano alcune storie terribili di neonati e bambini buttati nella Ruota. Ogni pietra di quei luoghi di abbandono ha una storia da raccontare, tanto che portare alla luce tali esperienze significa entrare nel dolore di quelle vittime. Nella Napoli dell'Ottocento, l'Annunziata aveva la reputazione di essere la peggiore di queste istituzioni, come testimonia chiaramente il romanzo-documento di Antonio Ranieri *Ginevra o l'orfana della Nunziata*. In quest'opera, lo scrittore rileva quel mondo crudele dell'abbandono di questi bambini: dai motivi dietro all'abbandono alle speranze di riprendersi i figli in futuro, dal rito della torchiatura al cognome che avrebbe marchiato per sempre sia l'esistenza degli esposti sia delle loro generazioni future, dalla descrizione delle balie demoniache che le accoglievano alla crudeltà delle loro azioni. Anche Francesco Mastriani ne *La Medea di Porta Medina* e *I vermi* rappresenta il dolore dell'abbandono di questi "bastardi" per cui la sporcizia e l'incuria erano l'ordine del giorno. A Malta, l'abbandono dei figli indesiderati nella Ruota avveniva prima nell'Ospedale di Santo Spirito a Rabat, poi nella Sacra Infermeria della Valletta. Sfogliando i documenti antichi gelosamente custoditi negli Archivi Nazionali di Santo Spirito a Rabat, si può osservare legami molto ovvi tra i brefotrofi maltesi e la Nunziata di Napoli, come rappresentata dagli scrittori ottocentisti partenopei, tra cui Ranieri e Mastriani. Nei documenti trovati a Malta, alcuni scritti in italiano, altri in inglese, si dà particolare attenzione alle caratteristiche delle balie, a come dovevano trattare i bambini affidatigli, ai pagamenti che avrebbero dovuto ricevere per allattare e crescere questi "gettatelli". Sia a Malta che a Napoli, l'età di sette anni segnava una svolta in quanto i maschi venivano trasferiti a Forte Ricasoli nel caso di Malta e nel Serraglio nel caso di Napoli per ricevere un addestramento o per lavorare. Come nel caso dei maschi, anche per le femmine l'età di sette anni era cruciale perché, quelle rimaste vive, ricevevano la loro istruzione finché raggiungevano l'età per essere date in matrimonio, ricevendo dalle autorità oppure dal brefotrofo una piccola dote. Oggi le Ruote esistono ancora, simboli di abbandono e sintetizzano vicende dolorose di violenza e solidarietà, miseria e pietà. Rimangono un pezzo di storia che non va dimenticato, un monumento indelebile come le pagine letterarie di chi le ha rappresentate, un ammonimento affinché quell'esperienza di orrore non si ripeta.

Bio-note

Dr Mario Fenech Caruana, B.Pharm.Tech.(Hons.) (Melit), P.G.C.E. (Melit), M.Sc. (Env.Health) (Melit), Ph.D.(York), M.R.S.C. is a Senior Lecturer II at the Department of Chemistry of the University Junior College. He has been lecturing A-level chemistry since 1999 and was involved in research activity both at the former Institute of Health Care, University of Malta, and at the Department of Educational Studies at the University of York (UK), from where he was awarded a Ph.D. for his research on the introduction of green and sustainable chemistry in pre-university chemistry curricula. He had also lectured for a number of years at the Institute of Health Care and the Faculty of Health Sciences of the University of Malta and had brief stints as a government Laboratory Analyst and as a quality control manager in the local food industry. A former teacher of chemistry and lecturer in environmental health, he was involved in several science examination boards over the past 20 years and was recently awarded full membership of the Royal Society of Chemistry.

Highlighting the Green Face of Chemistry to Students: the Reaction of Pre-University Students to the Introduction of Green Chemistry

Abstract

Green chemistry is based on a set of radical ideas that overlap with the principles of sustainability and propose a modern version of chemistry that is less toxic, less hazardous, highly efficient and non-polluting. In other words, it is a smarter way of doing chemistry, aiming at preventing pollution and health problems by designing safer non-toxic and non-hazardous chemical substances and chemical processes. It is also known as 'sustainable chemistry' as it protects human health and the environment and is also economically viable. Literature suggests that green chemistry started being taught in universities in the early 1990s but was later adapted to lower levels of education. It appears that little research has been done on the impact of green chemistry on students studying chemistry at post-sixteen, even though some educational resources are already available for use by educators and students learning chemistry at a young age. This research project is a case study investigating the reaction of a group of Maltese sixth form students to the introduction of green chemistry. It involved the design and implementation of an intervention package to introduce some basic ideas of green chemistry in the classroom and school laboratory. Data were gathered from the participants before and after the intervention through the use of questionnaires, focus groups, research diary and other documents. Similar data were also collected from a second group of students from the same cohort which did not experience the same intervention. A conceptual framework was developed to analyse the attitudinal data while an evaluation scheme was used to analyse the knowledge and understanding data. The effectiveness of the intervention package was assessed using one of the models of educational evaluation. Results of the analysis show that green chemistry managed to raise the students' environmental awareness and their interest in the subject, and influenced also their motivation to follow a chemistry-related career. With green chemistry, students also developed a more positive perspective of the subject learnt at school. The same students thought that green chemistry had the potential to close the gap between a traditional curriculum and one that emphasized the impact of chemistry on society. Students were particularly interested in the practical side of green chemistry. In fact the project found that green chemistry would be taught more effectively through the use of laboratory experiments. Students who participated in this research investigation strongly supported the inclusion of green chemistry in future A-level chemistry curricula as it empowered them with a new frame of mind that allowed them to think more critically and evaluate better the sustainability of chemical products and chemical reactions and their impact on their lives. The project attempted also to meet some of the goals of the UN Decade of Education for Sustainable Development (2005-2016).

Historical Connections between the Foundlings in Naples and in Malta

Abstract

In most European countries children were considered "miniature adults": they lived in the streets and had lost their innocence, while some had already been sent to jail. Parents rarely showed affection towards their children and, in most cases, they considered them a burden, especially if their birth contributed towards worse economic conditions. Since sex was quite open and people were unaware of natural contraceptive methods, many abandoned children were registered as "ex parentibus ignotis". The hushed walls of the orphanages conceal terrible stories of newborns and children left in the Foundling Wheel. Each stone of those buildings has a story to narrate and, the revelation of these experiences, inevitably leads to pain. In 19th century Naples, l'Annunziata was considered the worst of these institutions, as stated in the novel *Ginevra o l'orfana della Nunziata* by Antonio Ranieri. The author reveals the cruelty of abandonment: the reasons that drove parents to abandon their children to the hope of reclaiming them back in the future; from the ceremony during which children were branded to the surname that stigmatized their existence and that of their future generations; from the description of the fiendish nannies to the cruelty of their actions. Even Francesco Mastriani in *La Medea di Porta Medina* and *I vermi* portrays the pain of these children who habitually had to experience filth and neglect. In Malta, the abandonment of unwanted children in the Foundling Wheel took place in the Ospedale di Santo Spirito in Rabat, then in the Sacra Infermeria in Valletta. While leafing through the old documents found in the National Archives of Santo Spirito at Rabat, we can observe obvious connections between the orphanages for foundlings in Malta and the Nunziata of Naples, as narrated by the 19th century Neapolitan authors, such as Ranieri and Mastriani. In the documents found in Malta, some of which written in Italian, others in English, attention is given to the nannies, their treatment of children, the payments received for nursing and raising them. Both in Malta and Naples, the age of seven marked a threshold: in Malta the males were transferred to Forte Ricasoli, and in Naples to the Serraglio to be given training or start working. Even for the girls, this age was crucial because, those still alive, obtained their education until they reached the age of marriage, when they received a small dowry from the authorities. Today the Foundling Wheels are still there to remind us about these children and remain symbols of violence and solidarity, misery and compassion. They form part of that history we should never forget, an ineffaceable monument like the literary masterpieces that have portrayed them, a warning so that such horrific experiences will never be repeated.

Nota biografica

Dr Christine Borg Farrugia è capo dipartimento d'italiano e responsabile di lingue al Junior College dell'Università di Malta. Ha conseguito il suo dottorato in italiano con una tesi intitolata "La rappresentazione dell'infanzia nella narrativa italiana del secondo Ottocento". Insegna italiano da oltre vent'anni durante i quali ha anche insegnato il francese e lo spagnolo a livello Sec. Per tanti anni ha lavorato come traduttrice adottando una combinazione di varie lingue che includono il maltese, l'inglese, l'italiano, il francese e lo spagnolo. Durante questi anni ha partecipato a diversi seminari legati ai suoi studi organizzati dal Consiglio d'Europa e altre università straniere. Ha pubblicato degli studi nella sua area di ricerca che includono

temi legati all'infanzia nel secondo Ottocento, la psicanalisi e il Verismo a Napoli.

Bio-note

Dr Christine Borg Farrugia is Subject Coordinator of Italian and Area Coordinator for Languages at the University Junior College. She has obtained her Ph.D. in Italian with a thesis entitled "La rappresentazione dell'infanzia nella narrativa italiana del secondo Ottocento". She has been teaching Italian for the past twenty years during which she has also taught French and Spanish at Sec level. For many years she has worked as a freelance translator with different language combinations that include Maltese, English, Italian, French and Spanish. During these years, she has participated in various workshops linked to her line of study organised by the Council of Europe and other foreign universities. She has published papers related to her main areas of interest which include themes related to Childhood in the late 19th century, Psychoanalysis and the Verismo movement in Naples.

(C.I.S.) from the University of Malta and an MSc in Physics. Currently, he is reading a PhD in Bioelectromagnetics, with the Physics department at the University of Malta. Julian has recently joined the Physics department as a Systems Engineer within the Electromagnetics laboratory. His research interests are occupational and general public exposure to non-ionising electromagnetic fields, dielectric properties of biological tissues, and computational electromagnetics.

Ms Irina Alborova was born in Russia in 1991. She received the M.Sc. degree from Bauman Moscow State Technical University, Moscow, Russia, in 2014. She is currently postgraduate student of Biomedical Engineering Department, Bauman Moscow State Technical University. Her work involves the design, implementation and testing of a microwave breast imaging system. This includes UWB sensors, RF measurement and antenna positioning systems.

Dr Lourdes Farrugia (University of Malta), Prof. Charles Sammut (University of Malta), Mr Julian Bonello (University of Malta), Ms Irina Alborova (Bauman Moscow State Technical University)

Effects of Preservative Solutions on the Dielectric Properties of Biological Tissue.

Abstract

Theranostic applications of microwaves in medicine depend on reliable knowledge of tissue dielectric properties. In-vivo measurements on human tissue are difficult to conduct and consequently, validated dielectric data is scarce, thus necessitating use of ex-vivo tissue. The variation of tissue permittivity following excision has been the subject of some studies, and it is generally accepted that measurements have to be conducted within a short time following excision. The present study investigates the effect of tissue preserving solutions on the permittivity of bovine muscle and fat from 0.5 to 20 GHz. Our data indicates a significant difference in permittivity of the preserved tissue that is similar to the behaviour of the preserving solution. The ultimate goal of this investigation is to obtain a link between the measured permittivity of preserved tissue and that which would be measured in vivo.

Bio-notes

Dr Lourdes Farrugia received a B.Sc. (Hons.) in Mathematics and Physics and a MSc in Physics from the University of Malta in 2008 and 2009, respectively. She joined the Physics department in 2011 as a Research Officer working in an Electromagnetics laboratory funded by the European Regional Development Fund (ERDF). She obtained a PhD from the University of Malta in 2016 and is currently working as a lecturer and researcher within the Department of Physics at the University of Malta. Her research interests are mainly focused on aspects of instrumentation and measurement of physical quantities, especially sensor design, applied electromagnetics (in particular, dielectric properties of biological tissue), electromagnetic compatibility, and biological effects of electromagnetic radiation. She is actively involved and serves as national representative in European COST Actions BM1309 and TD1309, both related to the use of electromagnetic fields for biomedical applications.

Prof. Charles Sammut holds a BA in Education from the University of Malta (1980), a BSc in Physics with Physical Electronics (First Class Honours) (1987) and a PhD in the field of microwave semiconductor devices (1992) from the University of Bath, UK. He joined the University of Malta in 1987 and was awarded a Commonwealth Academic Staff Scholarship to read for the PhD degree, for which he was awarded the Deryck Chesterman Medal from Bath University. He is currently full Professor and Head of the Department of Physics, Dean of the Faculty of Science and leads the Electromagnetics Research Group (EMRG). His current research interests include: dielectric spectroscopy of biological tissues for medical applications; computational electromagnetics; antenna design; exposure of workers and the general public to non-ionising electromagnetic fields; biological effects of non-ionising electromagnetic fields. Professor Sammut is also a Management Committee Member of five COST Actions: MP 1204, TD 1301, BM 1205, BM 1309 and IC 1407.

Mr Julian Bonello read for a BSc in Physics and Computer Information Systems

Dr Joan Borg Marks (University of Malta)

Striving for Excellence: the Challenge of Educating Highly Able/Gifted Students

Abstract

In the classroom, many a teacher recognises that some students are more academically able than others. On the other hand, some teachers believe that the academically able/gifted students can easily make it on their own. More often, emphasis in the literature is directed at how educators can help the students of lower academic ability, rather than pointing towards methods of teaching which can be used to motivate able learners. Research has indeed shown the existence of gifted underachievers. This paper looks briefly into a study which was conducted with the aim of establishing who the gifted students are and what qualitative differences exist between the gifted and their average same age peers studying physics. The need to give a different but not elitist education to the gifted is highlighted, to give an opportunity to gifted learners to reach their full potential. Recommendations will be put forward to emphasise the importance of improving awareness of the special needs of the gifted, promoting ways to best cater for these students at school and at home.

Bio-note

Joan Borg Marks holds the position of lecturer at the University of Malta. She lectures in Physics at the University of Malta Junior College. Having obtained a B.Sc. (Hons.) (Melit.) degree in Physics and Chemistry from the University of Malta in 1974, she started her teaching career and has taught in both private and state owned educational institutions, both at the secondary and postsecondary sectors. Having completed the Diploma in Educational Administration and Management in 1998, Joan Borg Marks became interested in Science Education and furthered her studies at Loughborough University in the UK obtaining an M.A. in Education Studies. She has taught Physics at the University of Malta Junior College since its inception in 1995. Her M.A. studies increased her motivation towards doing more research in the physics education field. This led her to obtain a Ph.D. from the University of York. During her career, Joan Borg Marks has had the opportunity to work and conduct research with academics from various physics departments at universities from around Europe. She has taken part in a number of ERASMUS+ projects and teacher mobilities. She has also had the opportunity to work as an expert in the scientific/physics field with the Directorate of Quality and Standards in Education, and also with the European Commission. Moreover, she has published some of her work and attended and presented her research at various conferences in Malta and abroad.

Mr Luke Joseph Buhagiar (University of Malta)

Applying the Toulmin Model of Argumentation in the Social Sciences

Abstract

Argumentation has been traditionally studied within the discipline of philosophy, the focus being mainly on formalised and idealized treatments of the argument. An instance of such idealization can be mostly appreciated in formal logical accounts of argumentation, as these tend to posit standards much higher than those most social agents are capable of reaching in daily interaction. In psychology, argumentation has been dealt with in separate research programmes, e.g., in rhetorical psychology or in the application of argumentation models at the data analysis stage. However, there has been a conspicuous absence of argumentation featuring explicitly at the data gathering stage. To this end, an interviewing protocol – argumentation interviewing – was devised based on the Toulmin Model of argumentation, and applied in social research within the local context. Despite its origin in analytic philosophy, the Toulmin Model lends itself to empirical work in the social sciences by virtue of its focus on lay argumentation. In this model, an argument is advanced by means of one or more Claims, which in turn are supported by various other categories within an argument structure, i.e., Data, Warrants, Backings, Qualifiers and Rebuttals. Argumentation interviewing aims precisely at eliciting data that can then be subsequently coded into these categories during analysis. The research conducted looked at arguments circulating in Maltese society concerning the presence of Arabs in Malta and involved twenty-one in-depth interviews using argumentation interviewing. Results pointed towards six argumentative themes, namely cultural, psychological, socio-political, economic, stigma-related and religious themes. In turn, nested within the themes were positive, neutral and negative arguments concerning the presence of Arabs in Malta. Positive and neutral arguments did not feature across all themes. However, negative arguments did. This method also allowed the unearthing of a pressing concern vis-a-vis Arabs in Malta, namely the prevalence and potency of arguments from cultural essentialism within the public sphere. Such arguments posited an underlying cultural essence that led to the related notions of reductionism, determinism and inalterability being attributed to Arabs specifically because of Arabic culture or cultural upbringing. Arguments from cultural essentialism served to support views against Arabs and their integration in Malta. The main benefit of this novel method lies in the fact that it can elicit the arguments made by participants in a structured manner, while at the same time avoiding direct confrontation with participants. Taking a multi-disciplinary stance allows better conceptualisation, ensuring that the fruits of advances within analytic philosophy also lead to empirical work in the social sciences. More specifically, argumentation interviewing, by proceeding inductively, helps to minimise the post-hoc interpretation that is commonplace in various qualitative methods being employed in the social sciences today.

Bio-note

Luke Joseph Buhagiar is a doctoral candidate in social psychology at the University of Malta. His research interests focus on methodology, philosophical psychology,

Bio-notes

Prof. Claude Farrugia is an Associate Professor in Applied and Biological Chemistry at the University of Malta. He holds a degree in Pharmacy from the University of Malta and a PhD in Pharmaceutics from the University of Illinois at Chicago. He has research interests in the fields of the physical chemistry of gelatin, gelatin-surfactant interactions and gelatin nanoparticle production. He is also active in the field of applied chemistry in the pharmaceutical industry, particularly the stability and analysis of medicinal products and their ingredients, powder surface properties and flow behaviour, and hydrophobic dispersions of pharmaceutical powders. Moreover, through collaboration with other researchers at the University of Malta, he has an ongoing research interest in the method development and chemometric analysis of natural products. He is closely associated with the pharmaceutical industry both locally and on a European level, and is currently the President of the European Industrial Pharmacists Group.

Ms Abigail Aquilina is a fourth year student reading for a degree in Biology and Chemistry at the University of Malta. Throughout her years in University, she has attended different Science Communication workshops and participated in Science in the City, with the main aim to encourage and engage the common public into science. Her final year research project dealt with the analysis of the Maltese olive tree, specifically the phenolic profiles of Maltese olive leaves, with the objective of establishing analytical methods for cultivar identification.

Mr Frederick Lia is in his final year reading for a Ph.D in Chemistry at the University of Malta, where he also graduated B.Sc.(Hons.) in Chemistry and Biology in 2012 and M.Sc in Biology in 2014. He worked for ten years as quality assurance laboratory technician in a local winery. His research involves the development of new analytical methods for secondary plant metabolites, particularly phenolic compounds, together with the application of statistical and mathematical modelling of chemical data. He also has an interest in the biological implications of secondary plant metabolites through *in vivo* and *in vitro* assays and the application of genetic analysis to plant cultivar identification.

Prof. Claude Farrugia (University of Malta), Ms Abigail Aquilina (University of Malta), Mr Frederick Lia (University of Malta)

Application of Phenolic Profiles of Maltese Olive Leaves (*Olea europaea* L.) for Cultivar Identification

Abstract

Olea europaea subsp. *europaea* is indigenous to the Mediterranean basin and also other countries which have a similar climate. This species has a high biodiversity and hence new cultivars have originated over time. The main indigenous olive cultivars include the Maltese Olive (*żebbuġ Malti*), the 'Bidnija' Olive (*żebbuġ Bidni*) and the White Olive (*żebbuġ abjad*). The wild indigenous olive cultivar or oleaster is known as *Olea europaea* subsp. *europaea* var. *sylvestris* and is morphologically very different from the cultivated cultivars. The aim of the study was to identify the chemical parameters which enable the discrimination of Maltese olive leaves, and determine which technique from Fourier transform infrared spectroscopy (FT-IR), fluorescence spectroscopy and high-performance liquid chromatography (HPLC) permits cluster analysis based on the geographical locations, both on a species level and even on a cultivar level. A total of 23 olive leaf samples were collected from ten different localities within the Maltese islands. These samples were dried, pulverised and subjected to a defatting process via Soxhlet extraction. The lipophilic fraction extracted was analysed using fluorescence spectroscopy. The defatted leaves were then subjected to a solid-liquid extraction, where the phenolic compounds were extracted, and then subjected to HPLC analysis. FT-IR spectroscopy was carried out on the dried, pulverised leaves, followed by application of different spectral transformations. Principal component analysis and Hierarchical cluster analysis were used to discriminate between the different cultivars based on the data obtained using the different methods. The distinction between the wild-type and the cultivated cultivars suggested by the preliminary study on the morphology of the olive leaves was confirmed by all the analytical techniques used. FT-IR spectroscopy, fluorescence spectroscopy and HPLC supported the evidence that the wild-type and the cultivated cultivars are members of different species, *Olea oleaster* and *Olea europaea* respectively. Although further work needs to be carried out for complete clustering according to the cultivar, chemical phenolic profiling is promising. The chromatographic data obtained at 280 nm was highly informative, and principle component analysis based on the full chromatogram allowed the spatial clustering of the samples collected from Bidnija, Dingli, San Anton Gardens, Rabat, Żebbuġ and Lija. On the other hand, fluorescence spectroscopy was the weakest technique, as it did not show efficient clustering according to the geographical location, but managed to confirm the separation between the wild-type and the cultivated cultivars. Moreover, when different spectral transformations were applied on the results obtained from FT-IR spectroscopy, spatial clustering depending on the geographical location was obtained.

argumentation, the theory of social representations and coalitional psychology. Specifically, his main interest lies in developing better methods for studying argumentation in social psychology, as this could be used in the service of studying social representations within localised contexts. His PhD work focuses on the social representations of Arabs circulating within the Maltese public sphere and involves the use of both qualitative and quantitative methods.

Ms Mariella Caruana (University of Malta)

A Pilot Study on e-Learning in Small Online Discussion Groups and Experimental Design in Biology

Abstract

The following pilot study focuses on assessing the effectiveness of discussion in small student groups. More effective learning may be promoted through properly designed discussion tasks. These can be effective learning tools to promote creativity, student-student and student-teacher interactions, as well as promoting understanding for the learner.

Approach and Results: A two-week online course was designed for Advanced level biology students. The aim of the course was to establish an online learning community among students to encourage discussion of experimental procedures in small groups of 5-9 students. The study was carried out during a 2-week slot in 2016 and again in 2017 with 28 and 38 student participants respectively. In the first part of the course, students participated in an ice-breaker activity with the aim of establishing an online learning community as well as to learn to navigate online using the online discussion forum on a Moodle (VLE) interface. In the second part of the course, three main tasks were: 1. Students booked an experimental design question from a list of questions so each student had to work on a particular problem; 2. Students posted their first response to the question and gave feedback to at least two of their peers within the small group; 3. A final revised answer was eventually posted by each student. The third part of the course consisted of a reflection activity where students were asked to give feedback on: 1. Their biggest take-away from the course; 2. The most useful resource or activity during the course; 3. The least useful resource or activity; and 4. Other comments or reflections. Results based on average scores for the various assigned activities were in the region of 79%. The results from the reflection activity showed that most students gave as their biggest take-away the acquiring of skills and confidence in participating in future online courses. The most useful resource listed was the use of discussion forums in giving and receiving feedback on their work. The Module 1 activity was considered the least useful activity. In the 'Other Comments' section, students mentioned difficulties with meeting deadlines and that the internet or computers were not always available or reliable.

Conclusions and recommendations: The present course needs some tweaking to facilitate further students' participation and further collection of data. The general outcome of the course was a positive one. Students initially needed guidance in the use of the discussion forum and this was provided in a face-to-face environment. It was important as facilitator to overview the discussions and guide or give feedback where appropriate. This was a time-consuming activity. It would be ideal if the various educational institutions were to promote effective online courses of high standard also by providing adequate time slots for facilitators of such courses.

Bio-note

Mariella Caruana is a senior lecturer in the Biology Department at the Junior College and has taught Biology for over 35 years. She is currently interested in the develop-

Dr Alexander Farrugia (University of Malta)

The Connections of Connections: New Results on the Centrality and Communicability of Networks

Abstract

During the past decade, the study of the interactions existing in networks associated with the natural, social and technological sciences gave rise to the field of network science. In this area of study, the centrality of a node in a network quantifies how well that node is connected to all others. On the other hand, the communicability between two distinct nodes in the network assigns a value according to how well those two nodes can communicate with each other. Mathematics allows networks from different fields of study, like telecommunication, epidemiology and social science, to be unified into one abstract concept called a graph. The area of graph theory in mathematics can thus answer the common questions being asked in these and other areas of study about their respective networks. A way to describe centrality and communicability of nodes in a network, or graph, is through graph walks. Walks on graphs are closely linked to two-dimensional arrays of numbers in mathematics, called matrices, associated with the graphs in question. The centrality and communicability measures of a graph can also be neatly placed in such a matrix in quite a natural way. Thus, Estrada and Higham proposed in [Network Properties Revealed Through Matrix Functions, SIAM Rev., 2010] to define centrality and communicability in terms of walk counts, where short walks in the network are deemed more important than long ones. The way in which walk lengths are weighted according to this importance provides different measures of centrality and communicability. Here, we discuss two such weightings: exponential weighting, which gives rise to a very important overall measure of the well-connectedness of the graph called the Estrada index, and resolvent weighting, which was introduced in the paper mentioned in this paragraph. In our paper, we focus on the resolvent measure of centrality and communicability of networks, and present a relationship between the network centrality of a node and the communicability measures between this node and its surrounding nodes. We also discuss the change in centrality and communicability in certain nodes after a new connection is introduced to the network. During this discussion, we show that quantifying this change is a surprisingly difficult and non-trivial task.

Bio-note

Alexander Farrugia (<https://www.um.edu.mt/profile/alexfarrugia>) is a mathematician and mathematics lecturer at the University of Malta Junior College and a part-time lecturer at the University of Malta. He obtained his PhD in 2016, studying at the University of Malta, after successfully defending his thesis titled 'On the Spectra and Walks of Molecular and Controllable Graphs'. His area of expertise includes algebraic and spectral graph theory, with applications in molecular chemistry and graph energies, and has several publications in renowned journals. In his free time, he writes about mathematics on Quora, a website where users share their knowledge with the world, with his writings garnering more than 3.7 million views. Alexander believes that many people in the world have gross misconceptions about what mathematics is and what mathematicians do. Attempting to rectify these false impressions is one of his personal life missions.

EU financial aid. The department offers post-graduate Diploma and Master courses in Translation and Interpreting and participates actively in the programmes of the European Masters in Translation and the European Masters in Conference Interpreting. It has also established links with Lessius College in Antwerp, Westminster University in London, Marie Haps Institute in Brussels, the European Commission and the European Parliament. Prof. Eynaud has been President of the International Association of Italian Professors and has organized international congresses in Malta, Italy, Poland and Spain. He was awarded the title of Cavaliere della Repubblica Italiana by the President of the Italian Republic, H.E. Azeglio Ciampi.

ment of Blended Learning and Effective Online Courses for Biology students after following a Master Online Course with the University of Illinois, USA. Mariella earned her B.Sc. (Biology and Chemistry) and M.Sc. (Marine Biology) from the University of Malta. In the course of her career she has attended various post-graduate courses ranging from Protein Chemistry techniques (Ion-exchange Chromatography, Gel Electrophoresis, Iso-electric Focusing in Malta and Cranfield (-U.K.) to Environmental Monitoring Course techniques (in Tairno -Sweden) and Aspects of Waste Management in Small Island States (Venice- Italy). Mariella participated on the Matsec Syllabus Panel for revision of Intermediate and Advanced Level Biology syllabi for a number of years.

Mr Aeden Chetcuti (University of Malta)

The Private Enterprise – State Interface: A Social Network Analysis of the Board of Directors of Malta Enterprise and its Predecessors

Abstract

Historically, the boards of the Industrial Development Commission (pre-Independence), the Malta Development Corporation (1967 - 2004) and Malta Enterprise (2004 - present) have always included representatives of private enterprise. The Malta Enterprise Act (2003) requires the Minister responsible for the Corporation to appoint “persons (amongst others, AC) who appear to the Minister to have experience and show ability in matters relating to (amongst others, AC) industry, trade, finance (and, AC) organizations of employers...” Almost identical provisions may be found in the Malta Development Corporation Act (1967). Such organizations play an important role in Malta’s economic development, mainly through policy and practice. They also provide an ‘interface’ between private enterprise and the state, between private interests and the public interest. They provide the terrain where these two apparently opposed interests interact. This paper proposes a Social Network Analysis (SNA) of the board of directors of Malta Enterprise and its predecessors, including that of the Malta Chamber of Commerce and Federation of Industries. Further data could also be gathered, especially from Employers and Workers associations, private entities such as Banks or directorships of private enterprises, particularly those who had formed partnerships with other noted entrepreneurs who were on the boards of the studied entities. The aforementioned proposal could contribute to a better understanding of the evolution and the limitations of the national bourgeoisie and of the concrete manners in which networks contributed to this evolution and to its relationship with the state. More importantly it could also shed light on how such networks impacted on Malta’s economic development and its limitations. Furthermore, such data could then be correlated with a statistical analysis of the performance of the different economic sectors, industries and even individual private enterprises. To further understand the potential impact on the economy of Malta of social networks provided, one should also add the political dimension. A study is required of the possible impact of the strong and weak ties generated by the SNA on the genesis of the Aids to Industries Ordinance, of the establishment of the MDC, of the decision to replace the ordinance with the Industrial Development Act and finally the latter with the Business Promotion Act. Equally important is a study of the impact of these networks on the decision to replace the MDC with Malta Enterprise, and on attitudes of industry towards European Union membership.

Bio-note

Mr Aeden Chetcuti is currently reading for a Postgraduate degree in Sociology at the University of Malta. His main research and academic interests are in Economic Sociology and the Political Economy of Development, specifically, in relation to interlocking directorships on boards of entities that act as an interface between the state and private enterprise. He is also a Marketing Coordinator at the Malta University Language School focusing on business development and the diversification of the school’s services through research and the fostering of networks and partnerships.

Prof. Joseph Eynaud (University of Malta)

Translation and Interpretation: Building Connections for a Changing World

Abstract

Translation and Interpreting Studies is a discipline which has witnessed unparalleled changes over the course of the last ten years. One reason for this is the fact that the world market in translation/interpreting barely satisfies a fraction of the demand created by a global economy. New technologies are rapidly transforming the profession and localisation is becoming essential. Another equally valid reason is that Translation/Interpreting Studies has pioneered a number of key ideas and concepts, which have proved to be invaluable with regard to the study of cultural exchange in areas as diverse as social sciences, science, literature, drama, history, media, law, comparative religion and philosophy. For this reason, Multilingualism goes beyond its dictionary definition of “speaking or using many languages”. It is a fundamental principle with the additional meaning of “equal rights for all official languages”. Equal status for the official languages goes to the heart of what the European Union is all about. Language is a part of national and personal identity. The languages of Europe are part of its immense and diverse heritage and they should be cherished. Translators in the EU institutions must not expect excitement or drama; almost every day, they will have some jobs that are repetitive and boring. But if they can keep an enquiring mind and a positive attitude, they will realise the bigger picture of EU activity and enjoy being part of it. For translators interested in learning languages, understanding other nationalities and immersing themselves in new and sometimes abstruse areas, the EU institutions provide unparalleled opportunities. Translators working in the EU, whether as in-house or freelance, are members of a team made up of revisers, legal revisers and of course politicians, officials and others who will have their say on both style and substance in the course of the co-decision process. The accession of Malta to the European Union was a watershed for the Maltese language, which suddenly became one of the languages of a major international community. It was now possible to speak Maltese at the meetings of this community, and its most important documents were also translated into Maltese. Such extensive use of the Maltese language in the international arena was unprecedented, as was the fact that Maltese officials were now involved in preparing Community statutes drafted in many languages. As actively involved parties, these officials know what the document seeks to achieve, whereas the translator often only has the text to work with. This would therefore seem to offer scope for closer co-operation. The way forward in this particular case of Translation Studies I believe is to build connections between different stakeholders such as Language Providers, Media Professionals, Cognitive Scientists, Communication Technology and Digital Experts.

Bio-note

Prof. Joseph Eynaud is Head of Department of Translation, Terminology and Interpreting Studies at the University of Malta. In 2003 he founded the department and set up the first Interpreters’ Laboratory and Terminology Centre with the help of

si articoli su riviste scientifiche sia italiane che maltesi. Simona Esposito, inoltre, ha di recente ricevuto l'incarico di docente di Grafologia dell'età evolutiva nei corsi di alta formazione presso l'Università di Urbino.

Bio-note

After graduating in Classical Philology and in Philosophy at “La Sapienza” University in Rome, Simona Esposito is a teacher of Italian and Latin Languages and Literature in a high school in Rome. As a graphologist and registered member of the “Associazione Grafologi Professionisti”, she has participated in numerous ongoing-formation courses and has offered talks and presentations regarding her area of expertise. In recent years Ms Esposito has taught graphology in Rome, Naples, Perugia and Cagliari. She is also School Advisor and a forensic handwriting expert with a long experience in analysing the handwriting of children and teenagers. She is also a handwriting retraining expert and is actively involved in school projects regarding the professional development of teachers and the application of graphological tools to teaching. She has published several papers about these topics in Italian and Maltese scientific magazines or reviews. Ms Esposito has lately been entrusted with the task of teaching graphology for post-graduates' modules on teenagers' handwriting at Urbino University.

Dr Karl Chircop (Università di Malta)

Rotture nette e recuperi latenti: Joyce e Pirandello nei confronti della tradizione letteraria

Abstract

La mia indagine si propone come ipotesi di lavoro due tendenze letterarie analoghe, le quali mi permettono di specificare il contributo innovativo delle opere di James Joyce e Luigi Pirandello al modernismo. Queste due tendenze comportano sia la tendenza di segnare delle forti rotture con la tradizione letteraria sia l'altra tendenza di recuperare aspetti precedenti della tradizione. Le mie comparazioni tra Joyce e Pirandello sul piano metaforico, nel senso di usare l'uno come reagente per leggere l'altro e viceversa, conferiscono uno spazio dialettico di connessioni e sconessioni dalla tradizione letteraria senza le quali lo studio dell'evoluzione del romanzo e del teatro moderno sarebbe incompleto. James Joyce e Luigi Pirandello furono motivati da un atteggiamento estetico comune che li spinse a rivisitare e trasformare i generi del romanzo e del teatro rispettivamente. Però con la loro revisione del genere, Joyce e Pirandello non si limitano solo ad un superamento o ad una sovversione, ma giungono anche alla conservazione e alla riconnessione problematica ad alcune strutture letterarie operanti in precedenza alla loro scrittura. Anche se si continua a considerare Joyce e Pirandello come gli scardinatori del romanzo e del teatro rispettivamente, sarebbe incompleto presentarli unicamente in questo modo. Un modo per concettualizzare meglio queste rotture radicali di Joyce e Pirandello dalle forme teatrali e romanzesche, può essere di vederle tramite quello che Jean-François Lyotard, ricorrendo al concetto del sublime, individua come il desiderio di presentare l'impresentabile e che chiama il postmoderno (o definisce come discrimine tra modernismo e postmodernismo).

Connecting and Disconnecting from Literary Tradition: Joyce and Pirandello

Abstract

This paper shall be looking into two analogous literary tendencies which highlight the innovative contribution of James Joyce and Luigi Pirandello to Modernism. I perceive these two tendencies as simultaneously disconnecting from, as well as connecting to, literary tradition. My metaphorical comparison of Joyce and Pirandello, by using one to cast light on the other, confers an analysis of their (dis)connections vis-a-vis literary tradition; hence I postulate that this reading is fundamental to understand the evolution of the modernist novel and theatre. Joyce and Pirandello were motivated by a common aesthetic attitude that made them indulge in the transformation of the genre of the novel and theatre respectively. However, one must note that, by such a confrontation of the genre, these writers did not limit themselves to a superseding act or a deconstruction, but also arrived to a problematic conservation of certain literary structures antecedent to their own innovations. Hence, portraying Joyce and Pirandello solely as revolutionary confrontations to the genre would be incomplete. A possible way of differentiating their sense of (dis)connections from tradition would be by filtering them through Jean-François Lyotard's concept of the sublime, which had the purpose of defining

the nature of the unrepresentable in the post-modern domain (and hence distinguishing between the modernist and the post-modern tendencies in modern contemporary thought).

Nota biografica

Karl Chircop è docente di lingua e letteratura italiana presso il Junior College dell'Università di Malta. Ha conseguito il dottorato di ricerca in italianistica nel 2010 congiuntamente presso le università di Malta e di Roma 'Tor Vergata'. Ha partecipato a convegni internazionali a Praga, Dublino, Belfast, Londra, Bari, Salisburgo, Napoli, Roma e pubblica regolarmente i suoi interventi nei loro atti e in alcune riviste specializzate. Di recente pubblicazione è il suo volume *Maschere della Modernità: Joyce e Pirandello* pubblicato presso Franco Cesati Editore, Firenze (2015), il quale è stato presentato all'Istituto Italiano di Cultura di Malta lo scorso febbraio (2016). Collabora con il comitato scientifico della sezione 'Mediterraneità Europea' della rivista *Sinestesiaonline*, per la quale ha organizzato un convegno internazionale tenutosi a Malta. È anche co-redattore di una nuova collana di studi intitolata *In between spaces: le scritture migranti e la scrittura come migrazione*, il primo volume della quale è appena stato stampato in formato ebook presso Edizioni Sinestesia (2017) con il titolo *In between spaces: percorsi interculturali e transdisciplinari della migrazione tra lingua, identità e memoria*. È attivo nella Facoltà di Scienze dell'Educazione e nel Centre for Liberal Arts and Sciences (CLAS) dell'Università di Malta. Si interessa principalmente di Dante, Cervantes, Pirandello, Joyce, Kafka, Tabucchi e il Modernismo.

Bio-note

Karl Chircop is senior lecturer of Italian language and literature at the University of Malta Junior College. In 2010 he read a PhD in co-tutelle with the universities of Malta and Tor Vergata (Rome). He has participated in international conferences in Prague, Dublin, Belfast, London, Bari, Salzburg, Rome and Naples and he regularly publishes his papers in the conference proceedings or in periodicals. In 2015 he published his monograph *Maschere della Modernità: Joyce e Pirandello* (Franco Cesati, Firenze) which was launched at the Istituto Italiano di Cultura in 2016. He is active in the editorial board of the *Mediterraneità Europea* section in the periodical *Sinestesiaonline*, for which he has organised an international conference in Malta in April 2016. He is also co-editor of a new series of critical studies on the literature of migration entitled *In between spaces: le scritture migranti e la scrittura come migrazione*. The first volume of the series which has been published in ebook format in 2017 by Edizioni Sinestesia is entitled *In between spaces: percorsi interculturali e transdisciplinari della migrazione tra lingua, identità e memoria*. He is active in Faculty of Education and in the Centre for Liberal Arts and Sciences (CLAS) of the University of Malta. His research interests are Dante, Cervantes, Pirandello, Joyce, Kafka, Tabucchi and Modernism.

Partner Handwriting: a Graphological Comparative Study about Compatibility and Integration modalities

Abstract

Graphology is a science that, through the analysis of technical features of people's handwriting, can evaluate their personality and develop a psychological portrait. It is a very useful tool to highlight aspects of the writers' nature, not only their rational, but also their inner and deep aspects, they are not always aware of. This is possible because the expert graphologist examines handwriting by using circa 300 features and their mutual interactions. Among the many areas Graphology can be applied to, this paper will focus on a graphological comparative study of partner handwritings, in order to understand their compatibility and integration modalities. After observing the handwriting of both partners and developing the individual portrait, the graphologist can consider the compatibility level of their partnership, in order to point out what strong and weak elements shape a couple's relation. In fact, sometimes after the phase of falling in love, when the intimacy level grows and both partners show the way they are, it happens that they discover they approach life with different behaviours or aims. These relationship modes can be recognized in their handwriting through graphological techniques and it is possible to help a couple cope with and integrate into their diversities. For having a view as complete as possible and lighting up on a lot of features and details that otherwise would be unknown, it is also necessary to attentively consider the unconscious element which is involved in choosing partners. In a comparative graphological analysis this can be clearly seen. In fact, partners in a rather unaware way, sometimes choose one another in order to compose some inner conflict still unsolved. In that case, their written texts will show how the integration modalities lay on this kind of choice. In this study, two kinds of these particular relationships, based on a complementary bond, will be analyzed. The first one resembles a mother-child interaction, providing comfort and protection to a partner by means of an unconditional love from the other partner that does not want anything back. The second kind of relationship belongs to the couples with a partner who looks for and somehow requests gratification or admiration from the other person. Therefore, they will choose as a partner someone with an insecure personality who can show abnegation in return. This study will also provide examples of handwritten texts with appropriate notes in order to explain some graphological practices, contents and describe what kind of bond really connects partners.

Nota biografica

Laureata in Filologia Classica ed in Filosofia presso l'Università degli Studi di Roma "La Sapienza", Simona Esposito è docente di Lingua e Letteratura Italiana e Latina in un Liceo di Roma. Diplomata in Grafologia e membro dell' "Associazione Grafologi Professionisti" ha partecipato in qualità di relatore a numerosi corsi di formazione e convegni. Negli ultimi anni Simona Esposito ha insegnato Grafologia a Roma, Napoli, Perugia e Cagliari. È anche counselor scolastico con una lunga esperienza nell'analisi delle scritture di bambini ed adolescenti e referente di progetti relativi alla formazione dei docenti e all'applicazione degli strumenti grafologici in ambito pedagogico. È grafologo forense ed educatore del gesto grafico. Ha pubblicato diver-

Relazioni di coppia e scrittura: uno studio grafologico comparato sulla compatibilità e sulle modalità d'integrazione tra partner

Abstract

La grafologia è una scienza che, prendendo in esame le caratteristiche tecniche della scrittura a mano di un individuo, può ricostruirne la personalità e tracciarne il ritratto psicologico. Essa è uno strumento particolarmente utile, perché non soltanto è in grado di mettere in luce gli aspetti razionali del carattere di colui che scrive, ma anche quelli più profondi e intimi di cui egli spesso non è consapevole. Ciò è possibile grazie alla tecnica grafologica che per l'analisi di ogni singola scrittura prevede l'utilizzo di circa 300 parametri nelle loro reciproche interazioni. Questo articolo si occuperà di uno degli ambiti più interessanti in cui viene applicata la Grafologia, la Grafologia comparata, e presenterà uno studio relativo a scritture appartenenti ad individui che hanno una relazione di coppia per comprenderne la compatibilità e le reciproche modalità d'integrazione. Dopo l'osservazione delle caratteristiche tecniche della scrittura di entrambi i partner e la redazione del ritratto psicologico di ciascuno, il grafologo, attraverso la comparazione delle scritture, passa ad esaminare il loro livello di compatibilità, mettendo in evidenza gli elementi di coesione o, al contrario, di fragilità che la loro relazione presenta. Spesso, infatti, dopo la fase dell'innamoramento, quando l'intimità aumenta ed entrambi i partner si mostrano in modo più autentico, accade che essi scoprano di avere differenti modi di intendere la vita e differenti obiettivi. Poiché tali elementi possono essere facilmente riscontrati nelle scritture, il grafologo può utilizzare le proprie competenze per aiutare una coppia ad affrontare le proprie diversità. Inoltre, per avere una visione più completa di una dinamica relazionale e metterne in luce sia le caratteristiche salienti sia quei dettagli che altrimenti rimarrebbero inediti, è necessario considerare anche gli elementi inconsci che hanno un importante ruolo nella scelta di un compagno di vita. Infatti i partner, senza esserne realmente consapevoli, spesso si scelgono per comporre i loro conflitti interiori rimasti irrisolti. In tal caso le loro scritture mostreranno come le loro modalità di integrazione si fondino su questo tipo di scelta. In questo studio verranno analizzate due tipologie di legami di tal genere. La prima è quella che si presenta simile ad una relazione madre-figlio, in cui un partner viene costantemente confortato dalla presenza attenta e accudente dell'altro che, a sua volta, mostra amore incondizionato senza chiedere nulla in cambio. La seconda è quella che si basa sul bisogno di un partner di essere ammirato e gratificato dall'altro, che, essendo stato scelto per la sua personalità insicura, desidera abnegarsi per lui. Questo articolo, inoltre, sarà corredato di esempi di scritture con relative note di approfondimento al fine di descrivere, attraverso procedimenti e contenuti grafologici, quale tipo di legame intercorra realmente tra partner.

A Holistic Supply Chain Integration Framework to achieve Competitiveness

Abstract

This research sustains the current dialogue and latest literature on supply chain management (SCM), triple bottom line (3BL) sustainability, management, leadership and technology deployment, from an interdisciplinarity approach, by highlighting the importance for SMEs to undertake supply chain integration (SCI) initiatives to achieve competitive advantage. Nowadays, within the manufacturing sector, it is pivotal for all SC actors, to deploy a SC strategic approach, together with its business and manufacturing strategies, to incorporate all SC players within its strategic approach, to compete effectively across the globe instead of working alone. The inductively generated conceptual framework highlights that an integrated management and leadership approach, based on a set of strategic measures and a set of best practices across all management levels serve as a driver and as a binding force of all SC actors to form up a SCI holistic approach to achieve outstanding competitive performance. The research aims to explore the role of SCI for SMEs within the Maltese manufacturing. The scope is to generate a substantive theory to represent the reality of this phenomenon from practice. The research significance is based on addressing the various literature gaps associated with the phenomenon, and also to employ a Grounded Theory Methodology (GTM) to establish solid and rigorous research within operations management (OM) focused on SCM. The GTM employed several memos within the data analysis to establish what the data were saying which were also supported by computer-based qualitative analysis software to promote better management of data and also promoted an audit trail of all emerged themes during the data analysis. The research builds on the current literature referred as the virtual enterprise or enterprise management concept by the deployment of technology as the tool to create products and processes with all the associated services to promote sustainable performance from a 3BL perspective. Such an approach builds on the paradigm shift from distributed organisational resources to a single holistic SC based on SCI initiatives to gain from synergy effects based on an improved collaborative relationship between all SC actors, in a combined effort to remove all silos between all SC actors and by starting such an initiative from each SC actor internal operations itself. Such a stance requires the use of technology initiatives to enable and support the achievement of the optimisation of all resources, with the necessary visibility and flexibility to adapt to the demanding real-time requirements, such as agile information systems and lean operations. Finally, the core theoretical theme is the integrative management and leadership approach, which incorporates the role of the human element from a social perspective, which still plays a crucial part in all collaborative relationships, both within each SC player and also between all SC players.

Bio-note

Ronald Cuschieri B.Elec.Eng.(Hons.), MBA (Henley, UK) and Ph.D (Aston University, UK) joined the University of Malta since November 2006 after he previously worked for 15 years in one of Malta's leading telco operator, as an Engineer III. He is currently in his 11th year experience as a Senior Lecturer in the department of

Computing/Information technology department at the University of Malta Junior College. During this period he was awarded a PhD at Aston University UK. He also lectured in other local institutions in management at undergraduate level (c/o University of London), business management at Diploma level (c/o BTEC), strategy at MBA level and information technology at Diploma level (c/o City & Guilds). Before joining the University of Malta Junior College, he also attended various training programmes in software and hardware in Sweden, Japan and Italy. He also presented various scholarly work of his research locally, in India and in UK. His research interests are in business processes operations and optimisation in networked organisations from both an operations management and information technology theoretical perspective.

Bio-note

Ms Agata Derkowska is the Head of Outreach Department at the University of Malta Library. She finished her Masters in Librarianship and Information Science in 2011 at the Jagiellonian University in Krakow, Poland. She first came to Malta for a 3 months ERASMUS internship at the University Library, and soon after she became a full-time librarian. Her main point of interest is information literacy and library instruction. She recently completed a short undergraduate course on information literacy with the Aberystwyth University, Wales and is planning to further develop in this direction.

Changing Image of the University of Malta Library: New Roles, Challenges and Services

Abstract

Up to a few years ago, the Library was perceived as a study place with books, a simple on-line catalogue and access to several electronic databases. Currently the Library is subscribing to over 80 databases including almost 64,000 online journals available 24/7, not to mention a constantly growing Open Access Repository (OAR@UoM), an online archive that collects, preserves and disseminates the intellectual output of the UM. With the implementation of an integrated discovery tool, investing in a vast number of online resources and pushing forward the concept of open access publishing, the image of the Library has changed. The Library is no longer a study place where one can only borrow books and study; it has become a central hub of dynamic research for the academic community, connecting with students at different stages of their courses, academics and support staff. The various cohorts of users have different needs and the Library strives to keep up with current trends and emerging technologies to ensure that users' needs and expectations are catered for. In May 2012, the University of Malta Library set up an Outreach Department whose role is to establish and maintain an ongoing partnership with faculties and students, attend to queries about the Library and implement marketing strategies to promote new services and resources made available to users, as well as participate and support events across the University community. The Outreach Department is also responsible for providing support to academics and students pertaining to information literacy and how to maximise the potential of discovery and delivery tools, online resources and how effectively use the bibliographic management software (RefWorks). During April/May 2016 the University of Malta Library conducted a survey, which was aimed to identify users' opinions regarding the use and awareness of online resources and the overall users' experience. The results showed that 90% of participants were aware of electronic journals, 87% knew about electronic articles but only 59% were aware of electronic databases. 87% were actively using HyDi (Library discovery tool), but only 54% made use of the databases that Library subscribes to and almost 66% of respondents were using Google for their research. One of the main conclusions following the survey was that the majority of patrons are confusing basic definitions like articles, journals and databases. These results indicated that the Library should put more focus on promoting databases as another information source, as well as educate users to help them better understand terminologies and the salient variances between journals and online databases as well as the difference between the quality of results retrieved from Google and peer-reviewed academic information resources licensed by the Library. This presentation provides an insight of how the Library's role has changed during the past 5 years and what challenges are being faced in a rapid changing and dynamic information landscape.

Investigating the Experience of using Networked Technologies for Teaching at the University of Malta and the Junior College

Abstract

In further and higher education (FHE), networked technologies for teaching and learning have long been prized in relation to distance education. More recently the use of networked technologies for teaching and learning is increasingly being recognised as significant also for the case of on-campus formal education. Within the University of Malta and the Junior College, this last decade there were several initiatives encouraging teaching academics to incorporate networked technologies in teaching practices such as the provision of hardware and software infrastructures and support to use these resources in teaching, the setting up of an e-learning committee and the draft UoM e-learning strategy of 2012, the academic staff collective agreement of 2014 for the first time acknowledging e-learning initiatives staff members engage in, the scholarship scheme of 2014 inviting early adopters to an online teacher certification course. Within this institutional context, what are the understandings that prevail on the use of networked technologies for teaching? What are the different ways academics are going about using networked technologies for teaching? What are the qualitatively distinct ways in which academics may be experiencing the use of networked technologies for teaching? In this presentation are shared research findings of a qualitative study which sought to map out variation in experiencing networked technologies for teaching. In this study the focus on distinctions was used to rise above distinctions. Different ways of experiencing were sought in this investigation as all legitimate and related. The resultant configuration of qualitatively distinct yet related ways of understanding and approaching the use of networked technologies for teaching was devised from a collective of accounts generated by individual interviews with twenty-seven members of staff coming from different faculties, institutes and departments, teaching different subject areas, and holding different ranks and tenure. The resultant representation of variation is configured by an open hierarchical structure of inclusive distinct descriptions of intertwined approaches and understanding shaped by elements in focus. Qualitatively different ways of experiencing are projected coming together as emergent progression of expanding awareness; and a particular way of experiencing as temporally and situationally bound. These research findings prompt teaching academics to assess and reflect on their practices. They can potentially also serve to inform and assist preservice and professional development initiatives seeking to encourage teaching academics to develop their thinking and practice of teaching (and learning) in today's networked world, where technological connectivity is pervasive, "21st century skills" made it to the top ranks of buzzwords, and networked individualism is the order of the day.

Bio-note

Maria Cutajar holds a PhD in e-Research and Technology Enhanced Learning by Lancaster University. Her research interests focus on teaching and learning, particularly using networked technologies. Through research practice in recent years she also developed an interest in qualitative research methods, above all the theory and practice of phenomenography. She researched different aspects of the student experience of learning using networked technologies. Several times she also

investigated aspects of the teachers' perspective of their professional practice using available technologies. She is presently engaged using phenomenography mapping variation in further and higher education teachers' accounts of their experiences using networked technologies for teaching.

Ms Angele Deguara (University of Malta)

Disconnected Identities: the Conflicts Experienced by Gay Catholics

Abstract

This study is based on my fieldwork with Drachma LGBTI in Malta and with Ali d'Aquila in Palermo as well as with LGBT Catholics who do not frequent either group. Both communities offer a space where individuals may explore and deepen their spirituality as persons whose sexuality does not conform to the heteronormative model. Most of the study participants are male, in their mid-thirties and well educated although both groups are frequented by individuals who do not fall within these general categories. My main research question concerns how individuals whose sexuality and lifestyle choices do not conform to Catholic Church morality deal with the inevitable conflict between their religious and sexual identities in a secular age. In a traditionally Roman Catholic country like Malta, one is almost inevitably brought up as a Catholic and socialised into Catholic values and morality through parents, teachers, media messages and religious figures such as priests, nuns and catechists. Consequently, one tends to become imbued with a Catholic identity or habitus from birth. Being Catholic is taken as a given. Being brought up as Catholic also means absorbing notions of what it means to be a "good" Catholic. This would include being heterosexual, getting married in Church, not having sex outside marriage and having children. Therefore it is not surprising that becoming aware of the possibility (and eventually confirming) that one's sexuality does not conform to these accepted norms and values, often leads to a multitude of feelings, emotions, dilemmas, questions and struggles. One has to deal with the fact that, as defined by the hegemonic culture, two aspects of oneself are incongruent. The conflict that may arise from this incongruence is multifaceted and may manifest itself in a number of ways and on many levels. It can be internal (personal) and/or external (interpersonal). It may involve psychological, social, cultural, moral, ethical, relational, theological and ontological dimensions. It may span over a relatively short period of time or it may involve years of unrelenting tension and despair, at times even leading to suicide. The participants in my study both in Malta and Palermo grew up in a society where homosexuality was not yet part of the social and political discourse as it has recently become. It was also a society in which the Catholic Church was still the most powerful agent in determining sexual morality. Consequently, the teachings of the Church are among the primary sources of conflict.

Bio-note

Angele Deguara is a senior lecturer and subject co-ordinator of Sociology and Art at the Junior College of the University of Malta. She is currently conducting PhD research in the anthropology of religion and sexuality with LGBT Catholics in Malta and Palermo. She is the author of *Life on the Line: A Sociological Investigation of Women working in a Clothing Factory in Malta* as well as a number of other published works. Her main research interests are religion, sexuality, gender and poverty. She is also an activist for social justice and civil rights.

ordinator for the Bachelor on Psychology (Hons) course as well as chair for the Faculty Research Ethics Committee.

Gottfried Catania is an organizational psychologist and resident academic at the University of Malta. He has just been appointed Deputy Head of the Psychology Department, after having co-ordinated the Bachelor in Psychology course for 5 years. He has also designed, delivered and evaluated training programmes in various organizations, and is involved in consultancy in workplace settings. He is currently in the process of concluding his PhD, which has used a mixed-methods methodology to examine how financial advisors perceive ethical and unethical behaviour in their profession. His research interests include workplace motivation, ethical behaviour at work, the impact of technology on quality of life, and the impact of social media on face to face relationships. Gottfried has published his work in academic journals and edited books, and presented his research at various local and international conferences. He has been selected to participate in the 5th EAWOP Early Researcher Summer School in Birmingham as one of the 30 most promising late stage PhD students in organizational psychology in Europe, and his paper “The repertory grid technique as a method for eliciting tacit knowledge” was awarded best PhD paper at the 14th European Conference for Research Methodology for Business and Management Studies in 2015.

Mr Simon Caruana (University of Malta)

Use/Misuse of Learning Outcomes in Higher Education. Are We Threading on a Similar Path?

Abstract

One of the prevalent modes in education, including higher education today is outcomes-based learning. The perpetrators of this school of thought had put the emphasis on the importance of being a student-centred approach. That is, students together with other stakeholders will be directly involved in the setting up of the learning outcomes. Moreover, learning outcomes should reflect what learning will happen, following a particular course of study, in preparation for today's globalised socio-economic environment. The challenges faced by HEI today, that is the increase in student numbers, the diversity in the student type, the harmonisation of HE courses across the European Higher Education Area (EHEA) resulting from the implementation of the Bologna process all seem to have provided fertile ground for the adoption of an outcomes-based approach. It is however observed that whereas the original emphasis was on a student-centred approach and that educators would be allowed to operate within a certain degree of academic freedom and course innovation, the converse appears to be happening. Courses are being designed in a regimented way and learning outcomes are being used as a means of constraint in both the level of learning being carried out and the modes of learning utilised. Critics argue that learning outcomes have been reduced to a tool for Quality Assurance purposes. A seemingly neo-liberal view of education (the 3 M's as defined by Hil - Marketisation, Massification and Managerialism) is resulting in increasing staff workloads, lack of adequate finance available for HEI, a general teacher resistance to change and a drab student (HE) experience. Learning outcomes were conceived as a means to enable the student to make her/his way from the 'usual' forms of 'surface' learning (associated with recall, etc.) to more 'deep' forms of learning (e.g. reflection). However, the implementation of learning outcomes from a purely managerial point of view is leading to surface forms of learning being achieved, thus defeating the whole purpose of outcomes-based learning. Learning outcomes cannot be seen in isolation. The main stakeholders, in particular the learners themselves need to be involved in the design of the intended learning outcomes, the teaching and learning activities required to achieve these outcomes. Assessment tasks also need to be designed so as to serve as evidence proving that an outcome has been achieved and a competence level rubric needs to be designed in order for both the learner and the educator to determine the level of competence achieved by the learner. These were the thoughts behind the concept of Constructive Alignment.

Bio-note

Simon Caruana is a senior lecturer in the Department of Computing and ICT at the University of Malta Junior College and is also responsible for e-tourism and aspects of the Web 2.0 in tourism at the Institute of Tourism, Travel and Culture (ITTC) at the University of Malta. At the ITTC he is also involved in developing and implementing adventure tourism-related units. He has also been a regular contributor to MATSEC over a number of years, with his latest role being that of a reviewer of the area of ICT. His current areas of interest lie in the use of blended learning in higher

education, electronic forms of assessment, peer-based assessment, intercultural competence as a key 21st Century skill, and learning outcomes in higher education.

Dr Katya De Giovanni (University of Malta)
Mr Gottfried Catania (University of Malta)

The Impact of Technostress on the Work-Family Balance: A Quantitative Measure

Abstract

Technological advances have led to advantages in the quality and frequency of communication. This has however come with a price since the concept of technostress implies that the use of technology can also be stressful. This paper proposes to present findings from a quantitative study (n=720) carried out in 2017 regarding the impact of technostress on family life. Following a preliminary and exploratory qualitative study carried out in 2016, where themes were elicited and analysed by means of Thematic Analysis, an especially constructed questionnaire was devised to gauge levels of technostress on the Maltese Population. Participants in the past studies available in the literature have mainly been professionals. However, in this study, the authors have also included homemakers and other workers. The paper will present parametric tests and shall compare findings across several demographic variables such as age and gender. It will also compare findings to the General Health Questionnaire 12-Item Version and shall attempt to validate this instrument for the Maltese population. Following this paper, the authors aim to replicate this study and to refine the measure.

Bio-notes

Dr De Giovanni graduated with an honours degree in psychology at the University of Malta in 1997 attaining the shield for best dissertation. She then followed a PGCE in Primary Education specializing in inclusion in 1998 following which she commenced her career at Fra Diego Bonanno Girls' Secondary School, Marsa. In 2000, she joined the Programme for Teaching and Learning in Diversity at the University of Malta and trained as a Let Me Learn Trainer and Consultant both in Malta and at Rowan University, USA. Dr De Giovanni is a Chartered Occupational Psychologist and Scientist having read for an MSc in Occupational Psychology between 2001 and 2003. She also holds an Associate Fellowship from the British Psychological Society. In 2002 she took up the post of Team Leader at the Inclusion Education Unit at MCAST where she was responsible for the transition of students with learning disabilities from compulsory education to the college. In 2004, she was appointed lecturer within the Vocational Teacher Training Unit where her main responsibility was that of offering pedagogical training to lecturers. Between 2008 and 2012 she held the posts of Deputy Director and Director of the Institute of Community Services. Dr De Giovanni was also consultant for the European Commission and for the Council of Europe involving VET in Malta. She is also qualified as a Lead Auditor for ISO 2001:2008. Her main interests are evidence based policy, research methods and the effects of transitions on families. Currently Dr De Giovanni is a full time resident academic within the Department of Psychology, Faculty for Social Wellbeing at the University of Malta. She lectures Qualitative Research, Occupational Psychology, Academic Writing Skills, Economic Psychology and Psychometrics. She is the co-

per giovani e adulti in varie parrocchie.

Bio-note

Mario Debono studied in Malta and Florence, graduated in Italian and Maltese and then specialised in Italian, presenting a thesis on Don Giuseppe Zammit known as “Brighella”. He conducted linguistic research and analysed the orthographic errors made by Maltese students in a dictation and composition in Italian. He delivered lectures on culture and literature, conducted seminars on language for forty-two years and published papers of a literary nature. He collaborated in the writing of an anthology of Italian texts and questions for Maltese students. He contributed to the success which the University Junior College is enjoying. He conducted literary programmes on Campus FM, the University Radio. He is also a singer-songwriter in Maltese, whereby he won for five times the festival *L-Għanja tal-Poplu*, a prestigious song festival. He published various religious and social songs. He also participated in the conference on *Mediterraneità Europea* (2016) by singing two original songs. He has been involved in the New Evangelisation for youths and adults in various parishes.

Dr George Cremona (University of Malta)

The Eurovision Song Contest within Formal Educational Learning Contexts: a Critical Multimodal Interpretation of Possible Inter-Disciplinary Connections.

Abstract

The Eurovision Song Contest [ESC] is often viewed by many as a purely entertainment show followed annually by millions around the globe (Jordan, 2011) and by over 95% of the Maltese population (PBS, 2017). The aim of this paper is to move on to deeper levels and to discuss how the songs of this popular cult (i.e. Eurovision Song Contest songs) can be viewed as interdisciplinary resources which eventually serve as effective pedagogical tools within primary, secondary and tertiary formal educational contexts and classrooms. Adopting a socio-semiotic multimodal approach (based on Kress 2010, Norris 2004) the paper will present an original multimodal framework (Cremona, 2016) through which Eurovision songs are analysed before they are connected to these educational contexts to serve as pedagogical tools in class. Referring to a socio-constructivist epistemology, the paper will discuss practical examples taken from the ongoing *Learning through the Eurovision: a multimodal research project* (Cremona, 2017) where these songs are viewed as interdisciplinary tools made up of social, artistic, psychological, educational, cultural and technological elements which, when viewed as connected, can facilitate learning and teaching. As a conclusion, based on the feedback of teachers and students participating in the project, the paper will present a set of pedagogical benefits and challenges related to teaching and learning within this inter-disciplinary framework. Acting proactively, the paper will also present ten practical tips derived from the research venture which could serve as tools motivating teachers and learners who in the future intend to adopt these ESC related resources as possible pedagogic tools.

Bio-note

Dr George Cremona is the Coordinator for German programmes offered by the Faculty of Education at the University of Malta. He lectures in German language teaching methodology and gives lectures about Multimodality. Currently (since January 2012) he is also working on a research project series called 'Multimodality in Practice'. This project aims to implement Multimodal concepts and theories in practice particularly in schools and through the media (i.e. radio programmes, tv programmes and the internet). For this, in 2017 he was awarded the prestigious IGM national award. In 2009 he scripted and published a 13-week German for beginners course – for TV and also available online – which later was nationally recognized as the best educational TV series of the year. In 2014 he has also launched the ongoing innovative and original ‘Learning through the Eurovision: a multimodal research project’. The project aims to critically use Eurovision related resources as pedagogical tools in primary, secondary and tertiary educational contexts. The project was initially launched in Maltese schools. However, in just a couple of months since its launch, the list of participants, i.e. schools and universities requesting to take part in the project, constantly gets longer. These include educational contexts in Ukraine, Sweden, Spain, Switzerland, Italy and Germany.

Mr Mario Debono (Università di Malta)

Don Giuseppe Zammit detto “Brighella” – vita, opere e rapporti con la realtà italiana e maltese dell’Ottocento

Abstract

Don Giuseppe Zammit detto “Brighella” non è noto oggi come lo era nei suoi tempi soprattutto perché scrisse poesie occasionali di tono minore che furono poi dimenticate con il passare degli anni. Lo scopo di questa ricerca è di fissare le tappe più importanti della sua vita: nascita, infanzia, gioventù, primo amore, studi, presbiterato, prime pubblicazioni, studi a Roma, il ritorno e la ripresa dell’attività letteraria e giornalistica, il carcere, la sua fama come poeta latino e italiano, la vecchiaia, la sua morte e le sue connessioni con l’Italia e con la realtà storica, sociale, politica, religiosa, letteraria di Malta sotto gli Inglesi nell’Ottocento. Si cercherà anche di elencare le sue pubblicazioni, libri, giornali in latino, italiano e maltese che gli procurarono il nome di poeta famoso. Si vedrà anche quanto questo scrittore prolifico fosse intelligente e aperto a tutte le influenze del suo tempo di Malta e dell’Italia e quanto fosse impegnato quando lodò o criticò persone importanti dei suoi tempi. Molti suoi lavori sono sparsi in giornali e spesso non sono firmati ma fortunatamente il manoscritto n.33 della Biblioteca maltese e il manoscritto *In Hebreos* della collezione del Cavaliere John Frendo Azopardi contengono raccolte ampie delle sue poesie italiane. Inoltre, esiste un libro di cento sonetti tronchi dedicati ad un certo Pasquino. Esaminando la sua produzione in italiano si nota che il poeta è collegato alla tradizione letteraria italiana dell’epoca. Nei suoi scritti notiamo che la sua posizione ideologica si manifesta sempre a favore della dottrina cristiana, del gesuitismo, dell’antiliberalismo, del papismo e del nazionalismo. È sempre accanito contro gli esuli italiani, Garibaldi e Vittorio Emanuele II e si schiera contro la corruzione delle istituzioni dell’Ottocento maltese. Alcune poesie che saranno citate e analizzate sono: i sonetti *Ritratto dell’Associazione Patriottica; Ad un predicatore insulso – che fece la predicina di S. Antonio*; un altro contro Gaspard le Marchant (il governatore inglese); un sonetto contro Don Marforio (*Quod superest date pauperibus*); i cento sonetti contro Pasquino, in cui ricalca *Li Tre Giuli di Giambattista Casti* (fra cui i numeri LX e C che ricordano il Petrarca, il XXXIV che menziona il tema famoso della libertà di stampa, il LXXXIV, un’invettiva feroce, il XLVII che ricorda Rustico da Filippo). Inoltre troviamo stilemi danteschi ed alfieriani in *O stupidi costumi imperversanti*. Interessante l’inno *A nostra donna del Carmelo* e *A Sant’Elena imperatrice* che si possono inserire nella tradizione arcadica e manzoniana. Ci sono inoltre le poesie amorose, fra cui *L’invito*, una canzonetta arcadica con modulazioni metastasiane, rulliane, frugoniane e montiane. Va notato che durante la sua vita e anche per parecchi anni dopo la sua morte, Zammit fu noto come il più grande umanista maltese.

Don Giuseppe Zammit, known as “Brighella” and his Connection with the Maltese and Italian Cultural Scene during the 19th Cent.

Abstract

Don Giuseppe Zammit, known as “Brighella” is not famous today as he was in his times mainly because he wrote occasional poems on a minor tone which were then

forgotten as the years passed. One aim of this paper is to determine the most important steps in his life: birth, infancy, adolescence, first love, studies, priesthood, first publications, studies at Rome, the return and the restarting of the literary and journalistic activity, prison, his fame as poet in Latin and Italian, old age, death and his connections with Italy and with the historical, social, political, religious, literary reality of Malta under British rule in the Nineteenth Century. I shall list his publications, books, journals in Latin, Italian and Maltese which made him a famous poet. We will also see how much intelligent and open to all contemporary Maltese and Italian influences was this prolific writer when he praised or criticised important persons of his times. Much of his work is scattered in journals and is often not signed but fortunately manuscript n.33 of the Malta Library and the manuscript *In Hebreos* (which forms part of the collection of Chev. John Frendo Azopardi) contain ample collections of his Italian poems. Besides there is also a book containing a hundred truncated sonnets dedicated to a certain Pasquino. When one examines his production in Italian, one notes how much the poet was connected to the contemporary Italian literary tradition. In his writing we see that his ideological position manifests itself always in favour of the Christian doctrine, gesuitism, anti-liberalism, papism and nationalism. He is always against the Italian exiles, Garibaldi and Vittorio Emanuele II and he lines up himself against corruption in the Maltese institutions of the nineteenth century. Some of the poems quoted and analysed are: the sonnets *Ritratto dell’Associazione Patriottica, Ad un predicatore insulso – che fece la predicina di S. Antonio*; another against Gaspard le Marchant (the English governor); a sonnet against Don Marforio (*Quod superest date pauperibus*); the hundred sonnets against Pasquino, in which he follows in the steps of Giambattista Casti’s *Li Tre Giuli* (amongst which one finds sonnets number LX and C which were influenced by Petrarca; sonnet number XXXIV mentions the famous theme of the liberty of the press; number LXXXIV is a ferocious invective; number XLVI recalls Rustico da Filippo). Besides all this, we also find stylistic features from Dante and Alfieri in *O stupidi costumi imperversanti*. Quite interesting are the hymns *A nostra signora del Carmelo* and *A Sant’Elena imperatrice* which can be connected to the Arcadic tradition and to Manzoni. Besides there are the love poems, among which *L’invito*, an Arcadian song with modulations from Metastasio, Rolli, Frugoni, and Monti. One notes that during his life and even in the years after his death, Zammit was for many years known as the greatest Maltese humanist.

Nota biografica

Mario Debono ha studiato a Malta e a Firenze; si è laureato in Italiano e Maltese e poi si è specializzato in Italiano con una tesi su Don Giuseppe Zammit detto “Brighella”. Ha svolto ricerche linguistiche analizzando le devianze ortografiche commesse da discenti maltesi in un dettato e un tema in Italiano. Insegna lingua, cultura e letteratura italiana da quarantadue anni e ha pubblicato articoli di natura letteraria. Ha collaborato in un’antologia di testi italiani per studenti maltesi. Ha contribuito al successo che sta godendo attualmente il Junior College. Ha condotto programmi letterari su Campus FM, la radio dell’Università. È anche un cantautore in lingua maltese, ha vinto cinque volte il festival L-Ghanja tal-Poplu, una manifestazione canora famosa. Ha inciso varie canzoni di tipo religioso e sociale. Ha anche partecipato al Convegno sulla Mediterraneità Europea con due composizioni originali (2016). Per trentasei anni è anche impegnato nella Nuova Evangelizzazione