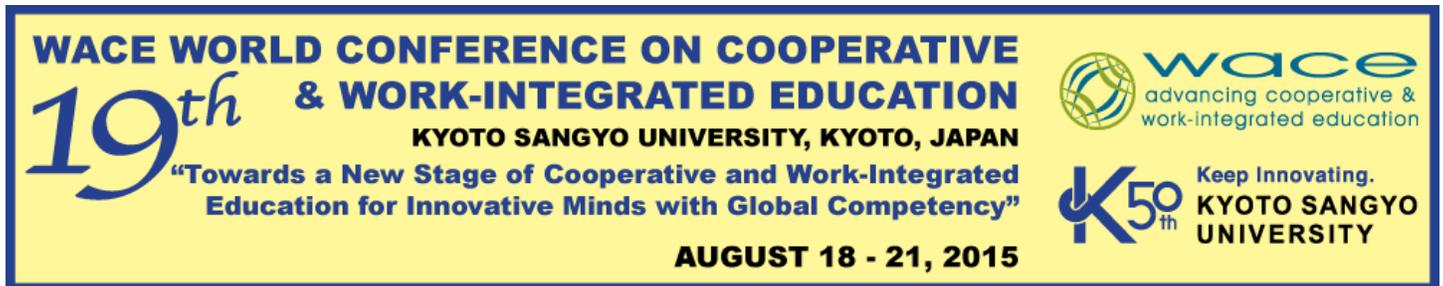


ABSTRACTS

All Concurrent Sessions Presented at the 19th World Conference on Cooperative & Work Integrated Education

(IN ORDER OF SESSION TYPE, ALPHABETICALLY LISTED BY PRIMARY PRESENTER'S LAST NAME)



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PANEL PRESENTATIONS

Title: International CWIE through WACE Network –from corporate perspective-

Panel Hosts: Ms. Keiko Miyskawa, WACE Japan Office (Japan) & Dr. Gayle Elliott, University of Cincinnati (United States)

Panelists: Dr. Sampan Silapanad, Western Digital (Thailand) Company Limited (Thailand); Dr. Hiroshi Nakajima, Technology and Intellectual Property HQ, OMRON Corporation (Japan); Ms. Ryoko Maejo, Akebono Brake Industry Co., Ltd (Japan)

Abstract:

Purpose of this panel is to advance International CWIE, utilizing WACE network, by presenting benefits of international CWIE from participating companies.

This panel session will be followed up and linked with

- 1) Several concurrent sessions of international CWIE done by institutions such as (SUT, UC, Nagaoka, Japan-Canada Program, or Uvic, FH JOANNEUM University of Applied Sciences ,etc.),
- 2) Networking session hosted by WACE/WACE ISO for WACE member universities/companies, and Japanese universities for finding new partners or expanding their International CWIE program.

Panel Session will be consisted of 3 parts.

Brief Introduction by Keiko Miyakawa (3 min)

Purpose of the Panel session, example of utilizing WACE's network (WACE ISO@SUT and WACE Japan office pilot program) and introduction of presenters

Presentation (14 min. x 3): why accepting CWIE students/what is important for the company/introduction of good practices Western Digital:

Its CWIE program and track records of accepting domestic and international CWIE students along with the corporate (global) strategy

Introduce example of WACE pilot exchange program between Thai-Japan Omron:

Why it is important to accept CWIE students, along with the corporate global HR strategy

Introduce its program accepting students from University of Cincinnati

Introduce corporate strategy, and importance of accepting students in/out of Japan

Introduce its good practice

Title: The Canada-Japan Co-op Program - proven employability, life-skills, workforce development and professional development results for Canadian students with Japanese employers

Panel Host: Ms. Jenny Reilly, Director, The Canada-Japan Co-op Program The University of British Columbia (Canada)

Panelists: Mr.Toshikazu Takemori, Osaka Gas (Japan); Fukui Byora (Japan); Canada-Japan Co-op student; Canada-Japan Alumni;

Embassy of Canada

Abstract: The purpose of the panel presentation will be to provide conference attendees with an understanding of The Canada-Japan Co-op Program. The brief presentation will provide an overview of how the academic co-op program is structured (from intake, pre-departure training, check-ins, reporting and evaluation to debrief), proven track record and results attained to date and stakeholder benefits of participation (stakeholders being Canadian co-op students from program partner institutions, Japanese employers and participating Canadian educational institutions).

The Canada-Japan Co-op Program is now in its 24th year and has had over 920 Canadian co-op students participate in multiple Japanese companies across the country. Panel members will represent employer partners, current students, alumni and a representative from the Embassy of Canada.

Two long-standing employer representatives will speak to the benefits of participation from a company perspective, the ease of participation, support provided prior and during the students co-op experience with the company, results attained and rationale for their continuous involvement in the program. A current Canadian co-op student will speak to their experience from application to pre-departure training, the company orientation received, current work duties and the life-skills, application of academic learning and professional skill development they have attained. An alumni will speak to how the experience upon reflection was of value in their career path after graduation. A government official will speak to the value of a national consortium based program and the importance of these experiences to Canada-Japan educational institution, student and Japanese industry relations.

Title: Lessons learned teaching Design Thinking & Innovation to prepare students for 21st Century Business Challenges

Panel Host: Wes Sonnenreich, CEO, Intersective (Australia)

Panelists: Dr. Leanne Carter, Macquarie University (Australia); Mr. Owen Firth, Performance Education (Australia)

Abstract: The 21st Century is presenting organisations with significant challenges; as a result employees need to not only cope with fast paced innovation and change but be a catalyst for it. To meet this challenge universities and corporations need to pioneer collaborative education solutions that prepare students for the work force they are entering. For the past three years Intersective has been collaborating with large corporations and universities to design and deliver WIL programs where students work in consulting teams to deliver an innovative solution for 'real' organisational challenge or opportunity. This panel session will share the highs and lows of the journey we have walked designing and delivering the EY Asian Century Challenge and Allegis Design Thinking Challenge with universities in Sydney and throughout Australia.

Title: Co-operative Education in Canada

Panelists: Ms. Amy Lee Simon Fraser University (Canada) & Ms. Karima Ramji University of Victoria (Canada)

Abstract: Canadian institutions offer a variety of work integrated learning programs, the most prominent of which is the Co-operative Education model. Cooperative Education first emerged in 1957 (at the U of Waterloo) and since then has enrolled over 80,000 Co-op students (2006/07). The Canadian Association for Co-operative Education (CAFCE) is pleased to present this panel discussion which will focus on representatives from different Co-op Programs across Canada sharing information and best practices relating to their own Co-op programs and their international endeavours.

WORKSHOP PRESENTATIONS

Title: WORKPLACE-BASED LEARNING FRAMEWORK AND PRACTICES IN SOUTH AFRICA;

–PUBLIC – COOPERATION IN WIL PROGRAMME: Using the principles of productivity to enhance students'work-preparedness at Universities of Technology

Presenters: Mr. Shakeel Ori Durban University of Technology (South Africa) ; Ms. Keiko Miyakawa WACE Japan Office (Japan); Department of Higher Education and Training (DHET); Southern African Society for Cooperative Education (SASCE); Japan International Cooperation Agency (JICA)

Abstract:

Introduction

Jobs are more than just earnings with benefits. There are also outputs which they generate, and part of who we are and how we interact with others in society. Through these outcomes, jobs can increase living standards, raise productivity, and foster social cohesion (World Bank).¹

In 2013, the global youth unemployment rate was estimated at 12.6 per cent, representing three million unemployed youths. The youth unemployment rate continues to be almost three times more than adults. Yet, developing countries are home to 87 per cent of the world's youth. (ILO)²

The above statements imply that "work" is more than just a labour contract between an employer and an employee, and that "work" is indispensable for both individuals and socio-economic development.

The purpose of this presentation on the public-private-university integrated approach in South Africa is two-fold; firstly to examine cooperative education in diverse countries in the industrial development stage referred to above, and secondly to promote the WIL Programme in these countries.

Department of Higher Education and Training (DHET):

In South Africa, the unemployment rate is 25% within a narrow definition, and over 40% within the wider definition. The situation is more severe for youth between the ages of 15 and 24, with the rate reaching 52%, equivalent to 1.3 million people.³

As a result, the Government of South Africa prioritised youth unemployment in the National Development Plan (NDP), and has been considering measures for job creation and human capital development within the education and training sphere. As for the latter, a policy shift sees industry needs-based education and strengthening the Workplace-based Learning (WPBL) for effective implementation. DHET, assigned to address this priority, ruled that implementation of the Work Integrated Learning (WIL) Programme at TVET colleges as mandatory, and also supports the WIL programme at some universities.

South Africa Association of Cooperative Education (SASCE)

To achieve expected policy impact, implementation capacity of higher education institutions, is essential. SASCE was established amongst the six universities of technology in South Africa, TVET colleges and the Polytechnic of Namibia and organised business and labour for promoting Cooperative Education. Due to the current scenario, SASCE's role has become increasingly more important to achieve the WPBL policy goals. Having said this, it should be noted that the function and implementing system of Cooperative Education for the WPBL policy needs improvement. For example, development of an effective databank mechanism for better placement of WL students at various enterprises, is underway.

Japan International Cooperation Agency (JICA)

The Japanese Government's Official Development Assistance (ODA) has an agenda selection mechanism in accordance with African countries' needs, called the Tokyo International Conference on African Development (TICAD). Human resource development for industrial development was selected amongst many agenda items, and the on-going Employability Improvement Project (EIP) is core for the Southern Africa. The EIP supplies a system for cognitive skills development education developed for students to yield maximum impact from the WIL Programme as per policy expectations. The EIP's "3i Model" is composed of Implementation (problem-based logical thinking), Improvement

(continuous process improvement), and Innovation (creation system). The training course transforms a classroom into a virtual workplace for effective acquisition of theories through hands-on practice for these three subjects.

Title: WORK INTEGRATED LEARNING ONLINE TRACKING AND MANAGEMENT

Presenter: Mr. Kris Moodley Durban University of Technology (South Africa)

Abstract: The online university management system (OLUMS) is a sophisticated database driven online management system that manages and tracks all aspects of work integrated learning (WIL).

OLUMS creates a convenience real-time environment to emulate the class room experience of academics and students to ensure proper supervision, mentoring and timeous feedback whilst students are engaged in WIL. The system produces real time executive reports to inform all levels of administration within the institution.

The main features of the system are: the management of student placement which includes database search, job advertisements, automated applications, cv management, interview schedules, interview process tracking and results; the management of WIL assessments which includes the management of student portfolio, employer and mentor approval, on-site visitation tracking, structured WIL content driven assessment and reporting; personalized dashboard for all users; Executive Reports; Convenient live and offline chat rooms

The WIL assessment system embeds the WIL outcomes into the system to ensure that the curriculum is properly structured and appropriately assessed. Students, mentors and academics engage directly with the WIL outcomes during the training, assessment and feedback. Student portfolios are automatically compiled into a PDF document with data extracted from the WIL rules and the data collated from the actions taken by the student, mentor and academic.

The system tracks and manages all the employer and mentor approval processes

The onsite visitation scheduler provides a convenient platform to monitor and schedule onsite student visitations with real-time chat room facility between the academic, student and mentor.

Title: International internship program to foreign industrial companies by Nagaoka University of Technology

Presenter: Mr. Masato AKETAGAWA Nagaoka University of Technology (Japan)

Abstract: Nagaoka University of Technology, one of Japanese National Universities, has launched the long term internship program (Jitsumu-Kunren) for 32 years. The university requires fourth-year bachelor students, who want to entrance to the master degree in the university, to participate in the internships in industrial companies to recognize the needs of society in the field of engineering and science. The internship develops practical experience, originality and an understanding of the significance of learning for students. Fourth-year bachelor students are required to spend up to five months working in industrial companies. In this report, the international internship programs to foreign industrial companies are especially introduced. 70 foreign companies (US, Canada, Germany, Thailand, Korea, Vietnam, etc.) have accepted the students in the internship program from 1990.

Title: The Canada-Japan Co-op Program an interactive workshop on co-op student international pre-departure training

Presenters: Ms. Jenny Reilly Director The University of British Columbia (Canada) & Ms. Yuko Nemoto Program Assistant, The Canada-Japan Co-op Program (Canada)

Abstract: The workshop will commence with a PowerPoint presentation by Jenny Reilly and Yuko Nemoto on the Canada-Japan Co-op Program. An overview will be provided on the program history, Canadian member institutions, student eligibility and how the student experience is structured, monitored and evaluated. Canada-Japan co-op student positions will be explained, sectors and geographical locations listed and primary objectives of employer, institution and student participation detailed.

An emphasis of the workshop will be to review the full-time, four-day pre-departure training provided to Canada-Japan co-op students prior to their arrival in Japan for co-op work terms. The full-time, four day training is provided to students annually in May and for all other departure dates (January and September) students receive a condensed version of the training in small groups over the phone or via Skype.

The interactive workshop will review in detail the topics covered in the full-time, four-day training provided at The University of British Columbia. Discussion will take place on the introduction exercises utilized, group teambuilding activities conducted, how review language sessions are facilitated across different assessed levels and the importance of case studies in transition exercises.

Alumni, health and safety speakers, cultural experience facilitators in addition to Canada-Japan expert guest speakers play a key role in the facilitation of the training to outbound students. An interactive activity will breakdown topics that could

be included in an international pre-departure session and small group discussion will take place on best practices used at institutions that can be shared amongst the group.

Interactive, Q/A period, handouts provided and small group discussion will take place in the workshop.

Title: Integration of ethical practice in Work Integrated Learning (WIL): Diverse Institutional Frameworks, Experiences, and Approaches

Presenters: Dr. Anne-Louise Semple Macquarie University (Australia); Dr. Leanne Carter Macquarie University (Australia); Dr. Kate Lloyd Macquarie University (Australia); Dr. Kath McLachlan Macquarie University (Australia) & Dr. Karolyn White Macquarie University (Australia)

Abstract: WIL is increasingly a part of higher education responses to: employability, global market competition, and the mutual benefits of collaboration (Smith, 2012; Orrell, 2004). Ethical practice is fundamental to each of these concerns; however, the manner in which it is integrated into curriculum, governance frameworks, and stakeholder experience, can vary significantly (Baker et al, 2014). The teaching of ethics (including for research) is common and the value of ethical understanding in WIL acknowledged; however, there is little published on how this might be achieved effectively (Baker et al, 2013; Campbell and Zegwaard, 2011; Rigby, 2009). This workshop aims to provide a forum through which the diverse nature of integrating ethical practice in WIL can be brainstormed, and international experiences shared and documented. Run as a world café (http://www.theworldcafe.com/method.html), attendees will have the opportunity to contribute to and learn from the forum, over artisan Australian snacks. They will also be invited to participate in a research ethics-approved project aimed at examining diverse institutional frameworks, experiences, and approaches to ethical practice in WIL. Attendees who do not wish to participate in the research are welcome to attend the workshop involvement will not be affected in any way. The workshop will address the following research questions: 1) What might ethical practice in WIL entail? 2) How might ethical practice in WIL be integrated into frameworks, experiences, and approaches? Ethical practice in the context of the Professional and Community Engagement (PACE) initiative at Macquarie University in Sydney, Australia, will be shared as one example.

Title: Evolution and delivery of work-study exchange programs between international universities and Japanese companies: Success story and future prospects

Presenters: Mr. Johannes Haas FH Joanneum University of Applied Sciences (Austria); Mr. Kosuke Kosuga KITO Corporation (Japan);

Ms. Keiko Saito-Miyakawa WACE Japan Office (Japan) & Mr. Takefumi Ogata KITO Corporation (Japan)

Abstract: KITO Corporation, a family owned Japanese company, is among the world leaders in material handling equipment, which is indispensable for lifting, transporting and securing various objects. KITO's electric hoists such as chain blocks, lever blocks, rope hoists and cranes, are manufactured and used around the world, in the U.S., Europe and Asia, as well as in Japan. Since 2005 KITO has cooperated with a professor for conveyor technology of the coop program Production Technology and Organization at FH JOANNEUM University of Applied Sciences. FH JOANNEUM is the pioneer in cooperative education among Austrian universities and has developed a strong focus of internationalization. Among the many agreements for exchange of students in work-study rotations, this initiative with KITO stands out especially in the mutual trust developed in an unlikely setting. Over the years this cooperation has developed from completing project based engineering tasks for KITO into a unique and sustainable exchange program for Austrian coop students and young Japanese engineers. In this workshop, offered by representatives from both institutions, the slow evolution of the program, success factors and specific elements, direct and indirect benefits for all participants will be presented and discussed with the audience. Together a framework for the creation of further initiatives towards a cooperation between international engineering programs and Japanese enterprises and the possible integration of Japanese universities will be outlined for further exploration.

Title: Managing Risk on International Co-operative Education Work Terms: Lessons Learned from the University of British Columbia, Canada

Presenters: Ms. Julie Walchli University of British Columbia (Canada) & Ms. Jenny Reilly University of British Columbia (Canada)

Abstract: Many universities in Canada and around the world are seeking to increase international experiences for their students. As one of the largest universities in Canada, UBC sends thousands of students abroad each year for a range of

activities, including study abroad, service learning, research experiences, and co-operative education work terms. In 2009, as a result of UBC's desire to ensure consistent standards for student experience abroad across our Vancouver and Okanagan campuses, UBC developed a Student Safety Abroad policy, making it one of the few universities in Canada with such a framework.

This session will explore the UBC experience with managing risk for student activities abroad, and will provide information on topics including: a student safety abroad registry, pre-departure preparation, risk mitigation tools when students are in the field, and support when problems occur, with a particular focus on co-op student experiences. Participants will leave this session with a greater understanding of the opportunities and challenges of risk management for international activities, and concrete ideas they can adopt at their institutions.

Jenny Reilly is the Director of UBC's largest co-op program in the Faculty of Applied Science, and Director of the Canada Japan Co-op Program. Julie Walchli is the Director of the UBC Arts Co-op Program, Current President of the Canadian Association for Co-operative Education, and served as Senior Advisor, Strategic Initiatives to UBC's Go Global office when UBC's Safety Abroad Policy was developed. Together, they have over 30 years of experience in the field of co-operative education.

Title: The Ong Family Foundation Scholarship Initiative

Presenter: Dr. Habiba Boumlik LaGuardia Community College (United States)

Abstract: In the fall semester of 2014, The Ong Family Foundation offered an opportunity for Asian-American students to complete internships at Asian-American non-profit organizations. The objective was to take heritage language speakers introduce them to a variety of professions within non-profits. The internship would complement our students' programs and enable them to gain real-world work experience.

The internship experience affords our students an opportunity to contribute to the mission and vision of organization by partnering with you to assist in new areas of development, special projects and the day-to-day activities. It also provides students with an opportunity to observe professionals in the workplace, to develop mentoring and networking skills and to feel a strong sense of accomplishment by actively participating in your organization. Some quick facts:

Internships are paired with an experiential learning seminar that helps students reflect on their learning experiences
Students receive academic credit for their internship assignment as well as a grade based upon an organization's review of our interns performance
Students intern for 25 hours per week for 12 weeks. This affords students ample time to become a part of your team.

Students will receive a generous stipend through the Ong Family Foundation to help support this new initiative. In my portion of our paper, I would like to report on the success of four students who participated in this program as well as the importance of scholarships to support students' participation in valuable internship experience.

Title: Going International for First Work Term: Fabulous or Foolhardy?

Presenter: Ms. Kerry Mahoney University of Waterloo (Canada)

Abstract: Conventional wisdom of co-op practitioners at the University of Waterloo has been that students should complete one or two domestic work terms before venturing into the international sphere. The rationale has been that students need the first term or two to develop their maturity and ability to handle any extra stressors that international work might entail.

But does this conventional wisdom hold up when we scrutinize the data? We looked at students' satisfaction with their work term, and employer evaluation of student performance. And how factors such as citizenship, visa status, gender, and faculty of study impact satisfaction and evaluation.

What does this mean for how we promote international? Find out what we learned and bring your experience to the conversation.

Title: Creating an evaluation plan for a co-op curriculum

Presenters: Ms. Anne Marie Fannon University of Waterloo (Canada); Ms. Erin Smith University of Waterloo (Canada) & Ms. Judene Pretti University of Waterloo (Canada)

Abstract: The University of Waterloo's Professional Development Program (WatPD) equips co-op students with the professional skills that are essential to becoming valuable members of the workforce. While on work term, students complete courses on topics ranging from teamwork to intercultural skills to ethical decision making. Students are encouraged to make connections between the concepts taught in the courses, their experiences in the workplace and their

academic program.

From WatPD's inception, campus stakeholders showed a keen interest in determining the impact of the program. In response, the program creators designed a unique program evaluation plan taking elements from both academic and corporate evaluation plans to address the unique nature of a work integrated learning curriculum. In this workshop session, the presenters will share lessons learned in designing and implementing the original WatPD program evaluation plan and describe how the evaluation plan has evolved. Workshop participants will brainstorm ways that an evaluation framework can support their work integrated learning curriculum for both program accountability and improvement.

Title: Developing Global-Ready Graduates: A Strategy for Internationalizing Work Integrated Learning

Presenters: Dr. Norah McRae University of Victoria (Canada) & Ms. Karima Ramji University of Victoria (Canada)

Abstract: An Internationalized WIL program can be a powerful vehicle for developing global-ready graduates. The presentation shares the strategy that has evolved at the University of Victoria, Canada to internationalize WIL across all faculties. This strategy includes: various models for international student mobility, curriculum development, the development and assessment of learning outcomes related to intercultural effectiveness, training and development of faculty and staff, risk management, community engagement, publications, and the establishment of a research program. This strategic approach has been beneficial for students traveling abroad for WIL placements, for international students working in Canada, and for Canadian students engaging with students from diverse cultures on campus as well as in culturally diverse workplaces.

Title: Comparing Co-operative Education with Other Forms of Work Integrated Education: the BC Comparative Matrix

Presenters: Dr. Nancy Johnston Simon Fraser University (Canada) & Dr. Norah McRae University of Victoria (Canada)

Abstract: Increasingly post-secondary institutions in North America and many other parts of the world are being asked to increase the number of work integrated education (WIE) options for students. While co-operative education is a dominant model within WIE, many others exist including service learning, internships/externships, professional practica to name a few as well as several forms of work integrated learning or WIL. Often these models are conflated and talked about as "one" even though they may differ in several important ways. In response to this lack of a shared vocabulary and understanding regarding the various models, the Accountability Council for Co-operative Education in BC, Canada (ACCE) undertook to help compare the many forms of WIE and WIL in British Columbia. This workshop outlines the multi-institutional process undertaken and presents the resulting Comparative Matrix for discussion. Join us as we try to better understand and define various models of WIE as they relate to Co-operative Education.

Title: Public-Private Partnerships as an enabling mechanism for successful WIL placements

Presenter: Mr. Brian Forbes Cape Peninsula University of Technology (South Africa)

Abstract: The aim of the Workshop is to explore public private partnerships to prepare and manage the transition, placement and support of students from TVET colleges into suitable work placements and entrepreneurship programmes. TVET students on the National Certificate Vocational (NCV) receive a certificate after three years of training then enter the labour market with inadequate work readiness skills and no support between institution and workplaces thereby reducing their chances of employment.

A public private partnership with collective responsibility between SASCE, the SETAs, public bodies, employers, professional bodies, and private training providers is critical to achieving economic growth and a skilled and capable work force. Currently TVET colleges are unable to source the resource demand in facilitating and managing work placements on their own. As part of the Skills Accord, business has committed to participating for workplace exposure for TVET college students and even lecturers.

At the NSA Skills Summit it was stated that cross sectorial working relationships have not worked well as skills development institutions are not integrated and have operated in silos. There is a strong need for role clarification and alignment between the various institutions. The Education and Training Minister emphasized that priority will be given to partnerships so that education and training integration becomes a reality experienced by all South Africans.

This GAPS (graduate access and placement strategy) Project is a solution in line with the NSA (National Skills Authority) strategy to build capacity to address issues of supply and demand and investment in human capital.

PAPER PRESENTATIONS

Title: Internship Program and Early Career Success

Presenter: Dr. MAMIKO TAKEUCHI Kyushu University (Japan)

Abstract: In 1996, the percentage of university students in Japan who participated in internship programs was only 17.7%, but increased to 67.7% by 2007. Although internships are important for developing career awareness, there are very few studies that demonstrate the impact they have on students after graduation. In this study, I investigate the wages, occupational matching, job satisfaction of employees who participated in internship programs compared with those who did not using young male employee's data in the metropolitan area in 2010. As the result of my analysis, I found that employees graduating with social science degrees who participated in internship programs earned higher wages than those who did not. Of those who graduated with natural science degrees, employees who participated in internship programs gained better job matching and express higher job satisfaction than those with no internship experience. Thus, we can assume that the effects of internship programs differ among social science and natural science students.

Title: CWIE: An Integral Part of Students' Experiential Learning and Career Development at NTU (Nanyang Technological University), Singapore

Presenter: Mr. Pui-Wah LOH Nanyang Technological University (Singapore)

Abstract: In a globalised and developed economy like Singapore, graduates from local IHL (Institutes of Higher Learning) face strong competition for top jobs from within the country as well as graduates from overseas. Therefore, university graduates must prepare and develop their careers well before they start looking for jobs, right from their freshmen year! At NTU, undergraduates move along a 4 Stage Career Development Path which provides a systemic process to prepare them for their future careers. The 4 stages mirror the undergraduates four year course duration from freshmen to final year. The university's goal is to give an early head start to all its undergraduates in career development as in integral part of NTU Education - FROM FRESHMEN TO GLOBAL LEADER: Developing graduates for the 21st century workplace. A brief description of NTU's 4 Stage Career Development Path as follows:

Stage 1 : Discovering Self - Freshmen Year

Every NTU undergraduate begins by discovering more about themselves, i.e. skills, interests, values and personal traits with the help of career assessment tool. The students are supported by Career Coaches and Career Consultants who help them explore different career interest, motivation with respect to their courses of study.

The Result - A personal career map that sets out general career direction. The student decides relevant learning to acquire the necessary subject knowledge, technical skills, work and relevant experiences which will prepare for jobs they want to be.

Stage 2: Exploring options - Second Year

Undergraduates explore possible careers through engaging employers in career/industry talks and networking events to find out more about the industries, types of jobs, career prospect and competencies required.

The Result - Gain a real sense of the business, developmental trends and potential careers directly from employers. Work during summer vacation or do internships. Join skill competitions or participate in projects and boot-camps to enhance their technical competencies. Be recognised by employers!

Career Coaches or Career Consultants discuss their past work and learning experiences. They guide students and refine career focus from general to specific; help students decide their career options and make a portfolio of jobs they like to do upon graduation.

Stage 3: Making decisions - Penultimate Year

Students decide what industries and job functions for their internships and work attachments. Thereafter, affirm their career choices from the work experiences. Career Coaches or Career Consultants give necessary guidance if the students are still unsure about career choices.

The Result Make informed decision about specific jobs or companies to work for. Acquire additional or special skills in Final Year to pursue their desired jobs!

Stage 4: Taking actions - Final Year

Graduating students know and have prepared for what they want to do upon finishing their studies. They engage employers directly through career fairs and recruitment events. They approach hiring companies directly or apply through job sites or NTU's exclusive job portal.

The Result 9 in 10 NTU graduates find employment 6 months after graduation.

In conclusion, Singapore universities achieve high graduate employment rate each year even during tough economic times. This is attributed to the strong emphasis of internships and work attachments by the Singapore government through the Ministry of Education. In NTU Singapore, the university enhances it further by making CWIE and integral part students' career development. Therefore, students are ready for work even before they start working because preparations start from their first day in school!

Title: Thirty Years of Professional Training (Work-Integrated Learning) at the University of Surrey (UK)

Presenter: Dr. Neil Ward University of Surrey (United Kingdom)

Abstract: The development of Professional Training (work-integrated learning) at the University of Surrey (UK) over the past 30 years has been remarkable. As a leading educational institute in the UK who developed work-based learning from 1896 it was thought that the established framework in the 1980s was well founded for the future. But the ever changing features of education in the UK, government realisation of the importance of internships (Wilson Report, 2011) and the demands to be part of the global expansion of student mobility and work-based learning has meant a constant reviewing and development of the Surrey PT programme. Moreover, as more students want to undertake PT (a main selling point of UG admissions), be placed in numerous countries for 12-month placements in their subject discipline and increased demands on academic time, the Surrey PT framework has had to be modified to meet these challenges. In addition, new issues had to be addressed, including insurance cover, health and safety requirements, academic assessment and most importantly, the ever changing demands of the placement providers (industry) for quality students, confidentiality work engagement and future employability opportunities. Furthermore, with increasing academic entry standards the type of students undertaking UG degrees has changed and the need to prepare them for placements is a major issue for PT staff at the University of Surrey. In this presentation I will reflect on the above from a position of personal involvement for 21 years of coordinating the Chemistry and a further 9 years overseeing the university PT programmes.

Title: Mutual benefit in student-initiated placements

Presenter: Dr. Marie Kelliher Macquarie University (Australia)

Abstract: The Professional and Community Engagement (PACE) initiative at Macquarie University offers undergraduate students the opportunity to engage in real world activities while they study. This paper examines student-initiated work-integrated learning (WIL) and community-based service learning (CBSL) placements (PACE activities) in the Faculty of Arts. PACE activities in the Faculty of Arts are diverse, but student-initiated internships and placements are a significant proportion. Such activities are beneficial both to students and to partners. As detailed by Reed (2006) student-initiated activities give students the opportunity to exercise autonomy in respect to their learning and career development. Autonomy is positively correlated with increased engagement and satisfaction (Skaalvik & Skaalvik, 2014, p. 76). Our experience is that students gain a sense of accomplishment from securing their own activity and developing their own professional networks. An additional benefit to students is that the process of identifying and applying for their own activities is that they are offered realistic feedback, contributing to their understanding of future employment opportunities in relation to their studies and develop work readiness with academic and professional support. Benefits to partners include that student-initiated placements act as a connection point between the university and industry or the community, in ways that might not otherwise have been initiated through higher-level organisational relationships. Student-initiated placements also foster mutual benefit because students are offered insights into the rigours of their chosen industry or profession, and prospective employers are provided with opportunities to aid future recruitment and access new thinking and ideas (Universities Australia, 2015, p. 2).

Title: Preparation for the First Cooperative Education Work Term

Presenter: Professor Alexander D. Christoforidis. University of Cincinnati (United States)

Abstract: Student preparation for cooperative education can have a significant effect on learning outcomes and job performance. This paper will review a process that has been used at the University of Cincinnati's architecture co-op program over the past decade. Aspects of professional practice which for good reason are not covered in the academic curriculum are taught to students by practitioners.

We will start with a discussion on the theory and intended effect of this preparation method. We will then consider how the workshop topics are selected, how workshops are arranged with professional offices, and how the faculty member organizes and pulls the lessons together. We will review employer reaction to the students who completed this series of workshops. The next part of the paper reviews lessons derived and the essentials of effective preparation. Finally, we will

discuss applications of this method of preparation to large classes, classes in other disciplines, as well as settings in which this application is not likely to work well.

Title: Inter-professional Work-Integrated Learning: Exploring Opportunities for Social Innovation in Australian Tertiary Education

Presenter: Dr. Tamara Blakemore University of Newcastle (Australia) & Dr. Amanda Howard University of Newcastle (Australia)

Abstract: Strong synergies exist between the practice contexts and pedagogical imperatives for undergraduate social work and law students. This paper presents an Australian case study of innovative inter-professional, work-integrated learning to build future workforce capacity within and across disciplines. While working partnerships between lawyers and social workers have existed in practice for decades, there have been longstanding concerns about the inability of social workers to articulate the value of the legal contexts of their practice, and that legal education supports lawyers decontextualizing their clients' experiences. While graduates of both disciplines may find themselves co-existing in practice, their education and training is often unlikely to provide exposure or opportunities for cooperative cross-disciplinary learning. In response, inter-professional pedagogies have been advocated as valuable in building connections and collaborative relationships between the disciplines early on in their professional development. The case study presented describes inter-professional work-integrated learning experiences addressing real-life clinical problems in a regional community setting. These innovative cooperative learning opportunities stimulated complex inter-professional problem solving, rich dialogue and debate between students, practitioners and educators alike. Preliminary analysis of the reflections of each indicate these learning experiences contributed to an increased awareness and understanding of the respective roles of each discipline and importantly a developed capacity for perspective-taking that has clear implications for improved service responses to the most vulnerable in our community. These preliminary initial insights warrant further exploration to build evidence for socially innovative, inter-professional work-integrated curricula that will best support future workforce development.

Title: Transforming the Global CWIE Workforce - A Talent Management Approach

Presenter: Ms. Lisa Ward University of Huddersfield (United Kingdom)

Abstract: Transforming the Global CWIE Workforce - A Talent Management Approach

As the global workplace becomes increasingly complex, there is a need to develop and retain a skilled workforce able to support students as they embark on potentially global careers. This paper explores a range of both innovative and award winning talent management strategies. These have been successfully implemented in the University sector and yet are of equal importance to industry.

- Practical and innovation strategies to support skill development. Including the first UK programme to achieve 100% of teaching staff recognised as Fellows of the Higher Education Academy (often using evidence from their CWIE activities).
- Supporting and mentoring staff for national and international recognition through success in schemes such as National Teaching Fellowship (Achieved the most in UK for the period 2008-14).
- Rewarding and recognising staff who support the student experience. Evidenced by 'The Thank You Awards' a student nominated scheme with typically 800 nominations. Winning these awards has been cited by staff as a pinnacle in their career. Excellent examples of where staff support students to make informed career choices.
- Building a culture of collaboration and support, through multi-disciplinary projects, inspiring conferences and networking fora. At the end of the session participants will be able to see approaches that could be transferred back into their university or industry workplace.

Title: Implementing Work Integrated Learning (WIL) in the National Certificate Vocational (NCV) Programme in South Africa

Presenter: Ms. Shanita Roopnarain Swiss-South African Cooperation Initiative (SSACI) (South Africa)

Abstract: The TVET sector in South Africa offers various programmes, which may or may not include Work Integrated Learning (WIL). In 2007 the NCV programme was introduced in the TVET colleges as an alternative to an academic route for students wanting to pursue a vocational route.

Historically the performance of the 50 public TVET Colleges is very poor, exacerbated by poorly qualified lecturers, poor foundation skills of students, inefficient management capacity and lack of formal links with the industry which is the major role player in the success of the vocational learner in European countries and elsewhere worldwide.

At policy level the White Paper for Post-school Education and Training, makes WIL central to the core business of the college. Colleges will be assessed on the extent to which their students and lecturers are provided with WIL opportunities. The Swiss South African Cooperation Initiative (SSACI), is a public-private partnership between the Swiss and South African government as well as companies, aimed at improving the public training system in South Africa, thereby opening up new pathway to skilled employment for young South Africans.

Since 2008, SSACI has worked systemically on providing NCV students with Work-based experience (not formally in the NCV curriculum), moving towards WBE becoming an assessed component in the internal continued assessment (ICASS) in various NCV programmes. Additionally to improve the quality of the lecturers a WIL for Lecturers projects was also initiated in 2010.

This paper/presentation will cover the implementation of the WBE- ICASS programme as well as the WIL for lecturer programme by SSACI within the 50 colleges in South Africa, the issues, the success and the lessons learnt for further improvement.

Title: Strategies and resources to enhance collaborative WIL partnerships

Presenter: Ms. Judith Smith Queensland University of Technology (Australia) & Ms. Judie Kay RMIT University (Australia)

Abstract: Building collaboration between employers and universities is crucial to growing work integrated learning (WIL) in Australia. The Australian National WIL Strategy (2015) highlights the importance of partnerships between universities and industry to strengthen WIL and enhance employability outcomes for students. This presentation will overview a project, funded by the Australian Government, which is collaboratively developing strategies and resources to support industry contribution to and engagement with work integrated learning. This project builds on recommendations from a number of recently published reports including the findings and recommendations emerging from the 2014 OLT research project Assessing the impact of Work Integrated Learning (WIL) on student work-readiness.

Engagement with industry partners is crucial to the systematic investigation of what it will take to strengthen WIL. The project is therefore applying participatory action research methodology to not only deepen understanding of the issues from different stakeholder perspectives but also to open up thinking to potential innovation. Consultation with peak industry bodies such as the Australian Industry Group and Australian Chamber of Commerce and Industry is being undertaken to connect with industry and inform research findings leading to the development of user-friendly resources that meet the needs of industry partners. The presentation will outline the key drivers for the project in the Australian context, the project methodology, progress to date and the anticipated outcomes that aim to enhance the capacity of industry to play a pivotal role in the development of students' professional capabilities.

Title: Multi-placement curriculum. Why compulsory WIL?

(Professional Development throughout an undergraduate program)

Presenter: Mr. John Tessier University of Newcastle (Australia)

Abstract: The University of Newcastle currently offers a diverse range of undergraduate degrees of which in excess of ninety per cent offer the opportunity to undertake a WIL activity. Many variations in format of WIL exist throughout the University and some programs have a greater history and experience in providing and monitoring these real-world experiences.

Degrees in the Health Professions integrate WIL throughout undergraduate programs. Several semesters include professional placements during which students are expected to display competence in several areas of practice. Placements include a requirement that students exhibit practical skills assessed by qualified professionals. In addition theoretical knowledge may be examined prior to or following the placement. Multiple placement experiences allow academic staff and students the opportunity to monitor progress with an end target of graduation from the program and transition into the professional workforce.

The challenges to both students and supervisors are numerous and the dynamic nature of the health professional workplace requires continual modifications to maintain and ideally improve WIL standards.

This presentation focuses on the Bachelor of Medical Radiation Science (Diagnostic Radiography) program and multiple compulsory placements. This undergraduate program has had to contend with a substantial student body increase in recent years and adaptations have been made to accommodate this. This paper presents the advantages and disadvantages of the WIL component of this program. These results may be of benefit in planning WIL for other programs as they include feedback from students, placement supervisors and university staff.

Title: An innovative partnership and best practice model for Work Integrated Education: A case study of a four year partnership between the NMMU and Cheshire Homes for persons living with disabilities

Presenters: Ms. Tracey Dissel Nelson Mandela Metropolitan University (South Africa) & Ms. Ronel Rizzo Nelson Mandela Metropolitan University (South Africa)

Abstract: This paper falls within the community development theme of the conference.

The main focus of the paper is on a successful experiential learning partnership between Cheshire Homes and NMMU which is now in its 6th year. Cheshire Homes accommodates a wide range of NMMU students annually (100-130) on a constant basis for experiential learning, compulsory community service projects, internships and curriculum and non-curriculum based volunteerism. Here students are exposed to the daily challenges in the lives of disabled persons. The partnership does not only allow students with experiential learning opportunities but they also to develop their civic mindedness and citizenship as they get the opportunity to learn about and understand, disability and this creates a platform for them to make a difference within the lives of disabled persons. The University as a result of this partnership is recognised as a valuable community partner and the home is recognised as a valuable training partner of the university. The partnership formalised between the two partners clearly stipulates the responsibilities of each partner as well as the students. The Home provides student orientation, structured training opportunities and feedback to the University for student assessment purposes. The Home monitors and ensures learning and course requirements are met in partnership with NMMU staff. In this way students have the opportunity to experience and understand disability but also fulfill the experiential learning requirements of their programmes. Each student who completes his/her training receives a letter of attendance and performance for inclusion in their portfolio.

Title: Towards a New Stage of Co-operative and Work Integrated Education for Innovative Minds with Global Competency THEME: Application of academic learning

Presenter: Mrs. Annie Moletsane Vaal University of Technology (South Africa)

Abstract: Today's interdependent and complex world requires that we prepare young men and women for innovative competency through co-operative and work integrated education. Against the backdrop of the National Development Plan 2030, we argue that within a developmental state such as South Africa, cooperative education because of its applied, descriptive, evaluative and pragmatic nature (Bartkus and Stull, 1997) should be embedded within the school and tertiary education curriculum. We use Edison's five competences of innovation, namely, solution-centered mindset: kaleidoscope thinking: full-spectrum engagement: master mind collaboration and super value creation, as a lens to show how the application of academic learning is essential in South Africa to sharpen its innovative edge and continual contribution to global scientific and technological advancement. The complex challenges of poverty, inequality, high levels of unemployment, illiteracy, crime and disease that span many years in the country, require collective effort, innovative minds, knowledge and attitudes to respond appropriately and effectively. Indeed, neither government nor the market can develop the necessary capabilities required to address these challenges on their own. The collaboration between the education institutions with government and industry to provided enhanced capabilities is imperative because long-term shifts in global trade and investment are reshaping the world economy and international politics. these shifts carry risks that affect the lives of all citizens. Greater investment in research and development, better use of existing resources, and more nimble institutions that facilitate innovation and enhanced cooperation between public sciece, technology institutions and other education sectors are required (National Development Plan 2030).

Title: Quality Assurance of Professional Practice in Coop Programs through Curricular Elements

Presenter: Mr. Johannes Haas FH JOANNEUM University of Applied Sciences (Austria)

Abstract: All degree programs in the Institute for Applied Production Sciences are designed according to the principles of Cooperative and Work Integrated Education (CWIE). Up to date two bachelor programs (â Production Technology and Organization and Sustainable Food Management) and one master program (â Engineering and Production Management) are the only such efforts in higher education in Austria. This status enabled academic staff, student representatives and participating enterprises to develop a unique and innovative set of measures to integrate two distinct learning environments. Academia delivers regular workloads representing a challenging higher education in engineering. Industry provides a minimum of three work terms with seven to 16 months of practical application, varying among the three programs according to their specific scope.

In this paper a selection of curricular elements will be presented which together constitute a comprehensive system of

quality assurance and management for the integration of work experience and learning outcomes into an academic curriculum. These elements can be included in almost every curriculum or organizational model and range from curriculum design and planning, to the application procedure and preparatory elements for work readiness in the first semesters to "reflection on doing" in the workplace and as an integrative part of teaching and learning at the university.

Title: Credentialed Awards for Career Readiness

Presenter: Ms. Annabelle Lewer-Fletcher University of New South Wales (Australia)

Abstract: The importance of supporting students to develop a range of skills that support future employment has been consistently recognised in recent reviews of higher education. Results from surveys of both employers and students confirmed this for UNSW and identified areas of our student educational experience that could be improved and hence enhance students' employability and professional development.

In this context the Diploma of Professional Practice (DPP) was developed at UNSW to further enhance the development of UNSW students' graduate capabilities. Three areas in particular were focused on; professionalism, leadership and global citizenship. (UNSW states in its strategic plan (B2B, www.unsw.edu.au/) that it spires to develop globally focused graduates who are rigorous scholars, capable of leadership and professional practice in an international community.) In partnership with studies in their chosen discipline(s), the Diploma of Professional Practice aims to provide students with opportunities to further enhance their capabilities, skills and knowledge to pursue professional careers nationally and internationally.

It does so by providing students with formal, structured work-based opportunities to systematically reflect upon and develop their knowledge, skills and capabilities.

On completion of the Diploma of Professional Practice students should have developed a deeper understanding of, and capability for, leadership, & professional practice in an international community.

Title: Work-integrated learning and multi platform media: a study of industry based on-campus journalism WIL during the 2014 G20 Leaders Summit.

Presenter: Dr. Faith Valencia-Forrester Griffith University (Australia)

Abstract: Nobody puts our baby journalists in a corner

Not all Internships or Work placements are created equal. Some placements offer a wealth of experiences whereas others see Interns stuck in a corner. Jackson refers to Wilton's (2012) recommendation that more research is needed about what contributes to the 'characteristics' of WIL that facilitate improved skill development, workplace performance and employment outcomes (Jackson 2013). What is not addressed in Jackson's paper is how universities might best overcome the variety of experiences students encounter as part of the WIL interaction.

While there is much made of the benefits of Work Integrated Learning (WIL) and the flow-on benefits to student education the actual process of engaging in an industry-based WIL placement for some students is not as beneficial as it is to others. In large part, it may rely on the initiative of the student to get the best from the placement as shyness and inexperience can limit their ability to engage (Forde & Meadows 2011), or level of contribution and affordances (Billett 2011) implemented by the employer.

This study looks how adopting an alternative version of the traditional WIL placement model increases the level of student engagement and employer affordances. Set against the backdrop of the 2014 G20 Leaders Summit, journalism student worked alongside industry to produce rolling coverage of a major international event. By bringing the journalism Industry into the classroom and sending students out into the community, all student participants were definitely not left in the corner.

Title: Emerging from Poverty: A Workforce Development Model for Marginalized Youths in a Jamaican Inner City Community

Presenter: Mrs. Joan Spencer-Ernandez The University of the West Indies (Jamaica)

Abstract: South St. Andrew, Jamaica, consists of inner-city communities, which includes Trench Town, Arnett Gardens, Jones Town, Wilton Gardens, Craig Town and Rose Town. These communities are situated near two of Jamaica's largest employers (The Kingston Wharves Ltd. and Kingston Container Terminal). Hundreds of students graduate from the two main high schools in these communities each year without being able to matriculate to tertiary level education and lack

the requisite skills to access available jobs. Both schools are less than 50% below capacity, have attendance rates of less than 50% and are underperforming on national and regional examinations. Many youngsters between the ages of 17 and 25 are unemployed, unemployable and disenfranchised and therefore join the ranks of existing gangs. The high level of poverty, which is well above the national average of 6.5% and a high incidence of crime and violence have been attributed to these factors. Youth unemployment in Jamaica is 38% but in these communities, the rate is twice as high. The research will employ a mixed method approach with focus on semi-structured interview and survey of residents. It will also utilize a workforce development model that will be driven by an integration of academics and career technical education (CTE) to create a programme of study that prepares students for success to further education. The proposal is to merge both schools and create one world-class high school and a polytechnic college, thus facilitating the provision of an integrated academic and CTE programme at the secondary and tertiary levels.

Title: Learning, English, Literacies: the nature of English for learning and work

Presenter: Dr. Howard Doyle Kochi University (Japan)

Abstract: Workers, managers, employers, instructors and others might all be learners at sometime. Learning what? Different things, but to mediate and negotiate them in context, communication skills rather than language skills specifically, are of the essence. This is a crucial distinction, yet it is frequently overlooked by stakeholders listed above. For instance, an Australian current affairs program investigating a crisis in international students' tertiary education in Australia spent about thirty minutes of an hour repetitiously railing about substandard English skills among students and how such graduates of, say, nursing might be a danger to patients as a result. However never did they mention the word literacy not examine the pedagogy or assessment in the specialised and vocational programs in question. If Australia is not an English-only society, English certainly is the prevailing lingua franca. Which English, is hardly considered though. In fact what is English, in these contexts?

This paper takes focus away from just the English. Instead, it is posited that English as language is just one mode of communication even if the major one, rather than discrete English skills such as under an English for specific purposes (ESP) umbrella. In this sense, it is argued that English can be seen as variable sets of literacy skills that are situated in specific vocational and similar contexts. None of this is new, with decades of research and recorded practice, some of which is brought together to support the view that both people with English as second and also first language can benefit from learning about situated communication in this way.

Title: Career Building for self, society, and the nation: realising national aspirations for private and public good - via participation, productivity & wellbeing agendas

Presenter: Mr. Martin H Smith University of Wollongong (Australia)

Abstract: The term employability when deconstructed to employ and ability enables us to conceive, how we employ our abilities for the greatest reward for self and for the wider community?

Our nations will be truly leveraging our collective investment in our higher education systems when these abilities align with the individual's interests, personality, intrinsic and extrinsic rewards sought from work, together with their core values, and indeed their passion and purpose.

Socrates originally stated (Watts, 2014) that all persons have at their core, a capability for excellence or arete and that one attains virtue through the application of that excellence in our communities. Marx also believed that our core guide in our vocation, must be the combination of our own perfection and the wider welfare of mankind (Watts, 2014 on Sultana, 2004).

The scholarship and practice of Career Development, yet to be fully leveraged in Employability and Experiential Learning contexts (including Work integrated Learning and Enterprise Learning) provides a focal point for this paper.

These intersecting domains underpin a transition pedagogy (Kift, 2009), along with related enabling strategies, for personal and professional agency.

Learning and teaching practices with career development learning at their core, can realise these aspirations' | without eroding the traditional values and purposes of higher learning.

This, combined with the concept of all players becoming co-producers of a future where the individual, the society and the wider economy are strengthened will be a consistent theme underpinning this paper.

We must strive for reciprocity between education workplace community and the individual.

Title: Using experienced workers' on-going learning to inform WIL

Presenter: Dr. Raymond Smith Griffith University (Australia)

Abstract: Experienced workers, that is, workers who have been engaged in occupational practice beyond initial entry preparations and requirements, hold substantial views about the kinds of work-learning experiences that best support and sustain their competence and employability development. These views are based in their years of generating and responding to the changes that characterise their work and working contexts and represent valuable sources of insight and expertise that can inform understandings and provisions of work integrated learning for students and novice practitioners. Further, these views are evidence of workers' understandings and acceptance of the nature of work as increasingly bound in learning, not as something separate from or prior to their practice, but as an inseparable aspect of it. In short, workers are highly informed and capable contributors to the learning needs that underpin their work and the viability of their employer organisations. These conclusions are some of those emergent from a three year study, involving extensive interview and survey data, of 190 Australian workers and managers within five industry sectors: transport and logistics, aged care, financial services, mining and general services. Drawing from this research and thus grounded in the learning experiences and preferences of experienced workers and managers, this paper advances a set of work-learning needs and skills considerations that can underpin and inform the shaping and organising of the kind of work integrated learning experience that seeks its bases in the authenticities and actualities of real work circumstances.

Title: Leveraging Intercollegiate Collaboration to Build Multidimensional International Programs

Presenters: Mr. Christopher Cooper University of Cincinnati (United States) & Professor Maureen Schomaker University of Cincinnati (United States)

Abstract: In response to the University of Cincinnati's strategic plan, the Division of Professional Practice and Experiential learning is tasked to double the number of students participating in international experiential learning within the division. This paper will examine the creation of an intercollegiate committee whose purpose is to increase international opportunities for all students, including engineering students, participating in a mandatory co-op program. This paper will provide an overview of the assessment, infrastructure, and resources subcommittees, as well as the resulting strategic timeline for sustainable program growth. This includes the development of deeper relationships with existing international partners by incorporating multidimensional programs, such as short-term faculty-led study abroad, semester study abroad, internships, co-ops, and research opportunities.

Title: Meeting industry's skilled manpower needs through integrating work and study.

Presenter: Dr. Fook Cheong Yee Singapore Institute of Manufacturing Technology (Singapore)

Abstract: Following the economic downturn in 2009, Singapore has undergone several years of restructuring. Besides tightening labour conditions, the nature of jobs is also changing. In 2013, 15,100 or 2.3% of degree holders were under-employed, possibly due to two factors: first, structural unemployment; and second, job polarization. With a mismatch of skills and industry requirements, it is not surprising that four in ten Singaporeans laid off in 2014 were degree holders. An integrated work study programme (IWSP) was designed and implemented at the Singapore Institute of Technology (SIT) to address such challenges in graduate employment. SIT is the first university in Singapore to implement such a programme. IWSP will provide students with the opportunity to be immersed in a real work environment, allowing them to integrate theory and practice and develop deep specialist skills in their chosen field. The IWSP is structured in a unique and distinct way for each degree programme to cater to the specific needs of the industry, developing industry-ready graduates. Students will undertake 8 to 12 months of relevant work within the course of their studies. IWSP is compulsory for all students in SIT degree programmes. The paper explains this new model of work-integrated education and gives examples of the successful implementation of such a programme in an Asian context.

Title: Partnership with Water Corporation to apply learning, and develop workforce and employability skills

Presenter: Dr. Rowena Scott Curtin University (Australia)

Abstract: Education students write lesson plans for assessments in their university studies as common practice. One science education lecturer collaborated with the education team leader of Water Corporation in Western Australia to develop a competition for education students to write lesson plans on one of six water themes. The best lesson plans would be uploaded onto the Water Corporation public website as teacher resources. The ultimate prize is an internship to work with the education team over summer holidays. This model of a mutually beneficial partnership is described. Data about students' perceptions of the connection between workplace and employability skill development data is gathered

and interpreted. The impact and value of this work integrated learning approach for education students to work beyond classrooms is part of the inquiry to evaluate this industry partnership.

Title: Luce World Pathways Heritage Language Program From Classroom to Corporation. Internship Success Stories

Presenter: Dr. Habiba Boumlik, LaGuardia Community College (United States)

Abstract: LaGuardia Community College is embarking on the second year of a pilot program that aims to draw on its major asset: students' cultural and linguistic diversity. Faculty presenters will highlight the outcomes of the Luce World Pathways Heritage Language Scholars Program which was developed with the support of The Henry Luce Foundation. Twelve exceptional and motivated LaGuardia students who speak Spanish, Mandarin Chinese, Arabic and Japanese as heritage languages were selected to embark on an 12-month long life changing experience which is expanding their heritage language skills and international and cultural understanding while transforming them into "world citizens" with professional level bilingual abilities. The program ultimately culminates with its participants engaging in an internship based on each individual's respective professional interest, background and qualifications while using their newly developed high-level bilingual abilities at internationally-facing corporations and organizations.

Presenters will demonstrate how through a demanding course of heritage language study supplemented by cultural events, weekly professional skills seminars and lectures by successful business owners with international backgrounds, program participants experienced an enhanced heritage language proficiency and broadened cultural knowledge and awareness.

These experiences transformed the difficulties of being a heritage language speaker into the benefits of being truly bilingual, while building upon the challenges of navigating between languages and cultures to provide the basis for developing high-level intercultural fluency through:

concentrated collaborative coaching

one-on-one mentoring

reflective pedagogies such as e-Portfolio

Title: Application of Sensory Food Science into Practical Use in Food Industry: A Case Study in Coconut Water Processing Plant in Nakhon-Pathom Thailand.

Presenter: Dr. Marju Limpawattana Siam University (Thailand)

Abstract: The cooperative and work-integrated education has long been recognized as a platform that strengthens students for the global competency. Students undertaking a four-year undergraduate degree course in Food Technology at Siam University in Thailand, spend 4 months on a professional training at food companies. Having modified the curriculum since 2012 in response to one of the three University's pillars; employability, third year students were then placed in the food companies located in Bangkok and its vicinity. This paper will focus on the application of academic learning taken from class into industrial practice. Sensory food science is one of the core courses dealing with human sensory perceptions of and affective responses to foods and has accommodated much consumer-oriented research. Student was placed in the coconut processing plant at Nakorn-Pathom province where its products are canned coconut water with and without natural flavors added. Coconut water has been increasingly popular in recent years on the international market as a natural functional drink. As part of the quality control division, the descriptive sensory analysis was firstly employed to establish the attributes that can be used to describe the product profile in comparison with chemical analysis. A lexicon list of 7 descriptors was adopted to differentiate the products: 2 tastes (sweetness and acidity), 6 aromas (butter, cardboard, cooked, floral, toasted bread) using a linear scale anchored to 0 (minimum intensity) and 150 (maximum intensity).

Title: What Employer Attributes attract TUT Graduates to an Employer brand

Presenter: Ms. Lorika Kruger Tshwane University of Technology (South Africa)

Abstract: The purpose of this paper is to determine which organizational attributes attract students from TUT. As in other countries, graduate unemployment problem exist. Where there are openings, employers compete to attract the best possible candidate. Chambers et al. (1998). Questionnaires were administered to students from their first to their final year of study to identify the students' preferred attributes of an organization when seeking employment. Surveyed evidence from 2013 and 2014 shows that many TUT students seeking employment prefer to choose a company based on four groups of attributes. These four groups can be identified as reputation and image, job characteristics, people and culture

as well as remuneration and advancement opportunities. Within each category, several attributes are listed and students were asked to rank these attributes in order of importance. Organizations are faced with the difficult task to recruit the best possible candidates and this study can become a valuable tool to assist them in the recruitment practices in order to attract generation Y candidates. The paper suggests that a majority of the students who participated in the questionnaire sees professional training and development as well as leadership opportunities to be some of the top attributes that would attract them to an organization. There should be a focus from an employers' side on putting measures into place designed to train, develop and give the new generation leadership opportunities in order for them to compete in the war for Talent in attracting the most suitable executive employees. (Chambers et al.)

Title: Work-Integrated Learning (WIL) and its Academic Challenges

Presenter: Mr. Desmond Jackson Cape Peninsula University of Technology (South Africa)

Abstract: Work integrated learning is a procedure that is followed within the department of Architectural Technology. It affords the student the opportunity to work within an architectural practice thus gaining the knowledge and skills of the daily operations and finding a sense of the duties of an aspirant architect in a busy practice.

Well prepared and motivated students are likely to make positive contributions to the professional life of such a practice. Whilst the department appreciates the goodwill of numerous participating practices within our field of work integrated learning, it needs to be acknowledged that it is a combination of two cultures. Subjected to demands of clients, contractors and statutory bodies to get the projects realized, practice tend to be constantly special and particular. Education on the other hand is about delivery of principles and the development of skills, both that need to be transferable across instances. A persistent criticism of practice is that schools are not covering aspects of building technology sufficiently. It is unlikely education would be able to cover all aspects of architecture within the first year of study, prior to engaging in work-integrated learning. It should not be expected of students to absorb everything within the short period allocated. What students are expected to do is to learn to learn in a critical way. The school can enable this by showing the extent to which principles taught are transferable or at least capable of being extrapolated several instances. There are course skills involved in doing so.

Title: A Competency-based approach to assessing skill development during placement.

Presenter: Dr. Linda Yeomans Macquarie University (Australia)

Abstract: Employability and graduate outcomes are a topical issue at Macquarie University and we have been looking at innovative ways to measure and enhance work-readiness. The Organisational Psychology Placement program is an important way for students to gain experience to enhance their career prospects. As the students are required to gather 1000 hours of placement over a 2 year Masters degree, this requires a high degree of collaboration with businesses and industry. I am coordinating 60 students on placements at any one time and partnering with over 100 different placement providers.

We adopt a robust methodology as both a learning process and a way of scaffolding students development. The framework of the program is aligned to a Development Planning Process which identifies specific competencies which students need to exit with. This approach is akin to Performance Development & Appraisal used inside organisations. Students complete a stepped process:

1. Identify own Development Needs (through Self directed Competency Development plan)
2. One-on-one coaching session to ascertain development goals
3. Participate in an experiential Assessment Centre to gather performance measurements
4. Receive feedback to identify actions the student needs to take
5. Student allocated to appropriate placement environment
6. On-site assessment of competencies at mid placement
7. Competency assessed at end of placement

This short presentation will provide an overview of the program, describe the forms & resources needed and explain the method of implementation. Participants will leave with sufficient understanding to be able to deliver this program in their own institution.

Title: Learning and teaching through PACE: Changing roles and environments

Presenter: Dr. Maria F. Amigo Macquarie University (Australia)

Abstract: Work Integrated Learning (WIL) projects require radical and far-reaching transformations in routine roles and

working environments of academics, students and workplace supervisors. This presentation will report on the preliminary findings of a study seeking to investigate the challenges, opportunities, and practicalities entailed in this dynamic, in order to better understand how to brief and support the three groups of stakeholders involved. The study funded by the Australian Collaborative Education Network (ACEN) in 2014 involves a series of focus group discussions for students, academics and work supervisors involved in the Professional and Community Engagement (PACE) initiative at Macquarie University, Australia. This initiative, which is a key component of Macquarie University's strategic direction, provides opportunities for students to apply theory to practice and develop valuable career skills; for partner organisations to benefit from the knowledge and ideas students bring to their workplace; and for academics the possibility of teaching and researching beyond their institutions. The focus group discussions provide these three groups an instance to reflect on the interchangeable professional roles, and the learning and teaching environments that participating in a PACE experience entail. The presentation will be based on a preliminary analysis of the data from these discussions, which will be conducted in the month of April.

Title: The experience of developing and delivering an online professional development module for WIL practitioners

Presenters: Dr. Karsten Zegwaard University of Waikato (New Zealand); Dr. Norah McRae University of Victoria (Canada); Ms. Judie Kay RMIT University (Australia); Ms. Katharine Hoskyn AUT University (New Zealand) & Dr. Kristina Johansson University West (Sweden)

Abstract: This presentation will discuss the experiences of developing and delivering an online module, 'Global Perspectives in Work-Integrated Learning', intended as a professional development opportunity for work-integrated learning (WIL) practitioners.

It has long been perceived that, with an increasing shift towards younger WIL practitioners who hold non-academic or non-research roles, there is a growing need to provide professional development opportunities to encourage practitioners to advance their best practice of WIL.

The module was developed involving established WIL practitioners from four countries; Australia, Canada, New Zealand, and Sweden, through their respective national associations (ACEN, CAFCE, NZACE, and VILAR). The focus of the module was to provide an international perspective of different models of WIL delivery and to link relevant learning theories to the practice of WIL, as well as providing a platform that encourages greater mentoring interactions between colleagues. The module was delivered solely online. The number of registrations were limited to 35 participants, however, expressions of interest exceeded this limit threefold, which provides a clear indication of the level of interest for WIL professional development opportunities.

The participants committed to 10 hours of participation, which included assignments, presentations, and interaction with the module conveners and other participants. The pre-module survey indicated that the participants held varying levels of familiarity of learning theories relevant to WIL and of different models of WIL delivery. The post-module survey showed shifts in the level of understanding of learning theories and revealed participants' views on how these shifts in understanding would inform and potentially change their practice.

It is intended that the experiences outlined in this presentation will inform and encourage other established WIL practitioners and researchers to develop online professional development modules to enable and empower the next generation of WIL practitioners.

Title: A Duality of Digitalization - How Can We Understand the Tension Between Professional's Beliefs and Affordances with Digital Services in Civic Orientation?

Presenter: Mr. Amir Haj-Bolouri University West (Sweden)

Abstract: Throughout the last 2 decades, workplaces have been provided with digital services for optimizing work activities and processes. A variety of professions have incorporated their tasks for teaching and learning through the utilization of novel digital services. Teachers and students have the opportunity to interact with each other regardless of geographical locations through distance education and learning. Overall, the phenomenon of digitalization has generated consequences and effects for the society in general, and workplaces and professionals in particular.

Recently, a notion of digitalization has reached projects conducted on a national level for integrating newcomers in Sweden. The Swedish government has appointed members from University West, together with a municipality in West Sweden to launch a novel digitalization project. The project emphasizes challenges and issues with designing, developing and evaluating an open digital experience in Civic Orientation. This paper examines and discusses a dichotomy of digitalization by investigating how we can understand the tension between professional's beliefs and affordances of digital

services in Civic Orientation. We will present results from interviews with professionals at the municipality, together with results from a survey evaluation. Doing so, we will illustrate how beliefs and affordances can emerge through past experiences of IT-supported learning activities together with general preconceptions on IT in general. We argue in the paper, that it is beneficial for further research, to understand how the tension between professional's beliefs and affordances of digital services can be seen as a consequence of digitalization.

Title: ENHANCING EMPLOYABILITY AND MARKETABILITY THROUGH STUDENT EMPOWERMENT INITIATIVES

Presenter: Dr. Samsinah Hussain University of Malaya (Malaysia)

Abstract: University of Malaya (UM) is the oldest university in Malaysia and is well known for its ethos of excellence in research and education. With the increasing numbers of Institution of Higher Learning coupled with the rapidly and radically changing job markets, UM graduates must also equip themselves with 21st century skills in line with the vision of the university to develop wholesome holistic graduates who are globally competitive. In tandem with this, UM has put into practice initiatives in planning the student career development to cater for the evolving and dynamic employability landscape. The Student Empowerment & Research Unit (SERU) was established in 2010 as a one-stop centre for the provision of soft skills and learning skills to enhance graduates employability and marketability. In engaging the students, the following framework was used: Lead Self, which aims to nurture the skills to Lead Others and finally able to Lead Community once they graduate and be part of society. Lifelong learning forms the foundation of this framework. SERU programmes are designed for students to acquire these skills through experiential learning activities. SERU works closely with internal and external stakeholders through involvements in industry-academia and community academia partnerships such as Structured Internship Programmes, student internship placements (outbound and inbound), preparatory Industrial Training Programmes and career fairs. This presentation aims to share some of the best practices that University of Malaya has in ensuring that our graduates continue to be the graduates of choice amongst the employers in both the local and global landscape.

Title: Developing an innovative assessment programme in a Co-operative Education capstone paper to meet stakeholder expectations: An AUT University Business School model

Presenters: Ms. Jenni Boys AUT University (New Zealand) & Ms. Kate Coleman ,AUT University (New Zealand)

Abstract: AUT Business School is amongst an elite group of 5% of business schools worldwide with accreditation from AACSB International. It is known for its effective engagement with business and the broader community. The Bachelor of Business (BBus) Co-operative Education programme (Co-op) is a 9 week full time work placement. Student are required to find their own placements with support from the University.

The paper is the capstone of the BBus degree and carries 60 points (one semester) of academic credit in the third year. Approximately 1,000 students complete the paper each year across the 14 majors offered.

The assessment programme in the Cooperative Education paper has been an ongoing debate across a wide range of stakeholders. A Faculty wide review resulted in a multiplicity of views on the balance of reflection, professional skills and discipline specific outcomes.

The challenge has been to develop a relevant and rigorous assessment programme that meets the requirements of the BBus Learning Goals, academic staff, accreditation bodies, diverse student profiles, variable work placement experiences, industry and employers.

This paper will address issues in developing an innovative assessment programme that meets all stakeholder expectations but is also an authentic and reliable assessment tool to measure proficiency in application of knowledge, reflective practice and development of professional skills.

Title: A comparative case study of the Career, Employer and Communication preferences of students and alumni of Nelson Mandela Metropolitan University (NMMU) for period 2010 to 2014

Presenter: Ms. Ronel Rizzo Nelson Mandela Metropolitan University (South Africa)

Abstract: The paper provides details of survey findings on the career preferences, employer choices and preferred method of communication of students and alumni of Nelson Mandela Metropolitan University (NMMU) over a five year period. It points out employers of choice per industry, how students perceive their university, which method of communication they prefer and what their career and employer preferences are. The findings illustrates the unique

differences between NMMU students and those students from other South African Universities in terms of career and work integrated learning placement choices and their preferred method of communicating in terms of receiving this type of information. The data suggests which employers the students would like to meet on campus, or alternatively which employers have been most successful in becoming attractive to NMMU students during the period of the study. The data further provides information on student satisfaction in terms of their studies and what they find unique about the university. The case study provides information on the channels students are using to research and find information about employers, (their purposes and future potential) as well as an understanding of the kind of information students would want to access from employers through online, print and in-person channels. The data was collected annually over a five year period through the use of questionnaires, focus groups and communication with both employers and professionals. Online data collection was conducted via alumni-networks, companies and different local and global partners. Target groups consisting of young and senior professionals were also engaged.

Title: Establishment of Schools of Excellence in the Wholesale and Retail sector, South Africa - A model enhancing co-operative education.

Presenters: Mr. Nhlanhla Dimba, Department of Higher Education and Training (South Africa) & Mr. Andile Sipengane, Wholesale & Retail Sector Education and Training Authority (South Africa)

Abstract: The Wholesale & Retail Sector Education and Training Authority (W&RSETA) was established under the Skills Development Act (1998) as a public entity with a mandate to facilitate skills development in the Wholesale and Retail sector. In advancing co-operative education within wholesale and retail sector (W&R sector) the W&R SETA established Wholesale and Retail schools of excellence in partnership with Retail industry, Training & Vocational Education Training institutes (TVET colleges) and Durban University of Technology (DUT). The model is aimed at facilitating implementation of co-operative education and professionalization of the Wholesale & Retail sector by addressing the following objectives:

Integrate theory, practice and work place experience in the curriculum delivery;

Promote learning progression from TVET Colleges into higher learning at Universities of Technology;

Implement work readiness for graduates to be employable or self-employed within the wholesale and retail sector;

Promote retail as a career of choice;

Facilitate work integrated learning

Career guidance services and;

Work placement opportunity for College lecturers.

The curriculum development is undertaken by industry; TVET College and University representatives starting from National Qualifications Framework (NQF) level 2 to level 5 with focus on scarce skills occupations.

This was established as a pilot project and is yielding positive results and experience for the global community. It is against this background that a presentation of the SOE Model needs to be shared for consideration across economic sectors and Industry with the purpose of enhancing co-operative education and putting work integrated learning into practice.

Title: A practical implementation of an excellence profile into a talent programme curriculum

Presenter: Ms. Gemma K Nijdam-Coughlan Hanze University of Applied Sciences (Netherlands)

Abstract: We have established an excellence profile describing characteristics and competencies most distinguishing of an international business professional, pertaining only to excellence, the IBEPRO (International Business Excellence Profile), consisting of five domains: (1) Achieving Results; (2) Communicating; (3) Innovating; (4) Self-Reflecting; and (5) Seeing patterns and Interrelationships, and a subdivision of these domains into 16 items.

Our conceptual profile, visualizing what an excellent international business professional is, is helpful for educators to improve talent programs as well as for the business community and will help to establish an answer to the following research question:

How can the pedagogy in talent programmes be adapted to best prepare talented students to become excellent professionals?

The IBEPRO starts to be measured in the talent programme intake procedure. After that it forms the basis of the students' goal orientation, and various assessment criteria. The profile is continually and individually reviewed and reflected upon throughout their three year talent programme. Finally, as part of the graduation assessment from the talent programme students, must be able to can actively demonstrate 75% of the characteristics from the profile.

We have seen a strong correlation with the implementation of the IBEPRO profile and the students' development in the

competency areas. By creating links between real working projects and active learning goals we are finding students' development in these areas is excelling and they are internalising, and demonstrating behaviours shown by excellent international business professionals.

Title: Towards a national Work Integrated Learning Strategy in Canada and Australia

Presenters: Ms. Judie M Kay RMIT University (Australia) & Dr. Norah McRae, University of Victoria (Canada)

Abstract: Improving the work readiness of graduates through work integrated learning is underpinned by critical partnerships between universities and business. In both Canada and Australia there has been a growing recognition that strengthening and expanding these relationships to enhance WIL requires a more focused strategic and collaborative national approach. This has given rise to new dialogue and engagement between Industry associations, WIL peak associations (ACEN and CAFCE)and university bodies in both countries over the last 12 months. Discussions have been focused on the development of a specific WIL national strategy. This presentation will overview progress to date in both the Australian and Canadian context including the drivers towards a national strategy, the processes involved, anticipated benefits and an overview of the outcomes to date in each country.

Title: Working together to achieve improved Work Integrated Learning (WIL) outcomes in Western Australia: Enhancing productivity through better employer involvement

Presenter: Dr. Denise A. Jackson Edith Cowan University (Australia)

Abstract: Many issues impact the implementation of Work Integrated Learning (WIL) in higher education. These include difficulties in effectively engaging with employers when organising WIL opportunities and achieving high student productivity during the WIL experience.

This research project is designed to develop and trial effective approaches that will increase employers understanding of, and engagement in, WIL opportunities in Business Schools in Western Australia. It is undertaken by an alliance of WA universities for the Australian Collaborative Education Network (ACEN), in association with the Chamber of Commerce and Industry Western Australia (CCIWA). In partnership, the project team will explore approaches to improve employer engagement in WIL; effective support requirements to improve WIL outcomes for all stakeholders; and ways of enhancing productive and mutually beneficial partnerships between industry and universities.

A survey of CCIWA members gathered feedback on employer experiences and perceptions of WIL. Focus groups were then conducted to further explore employer needs and innovative approaches to delivering WIL in different businesses. On the basis of these findings, an Employer Advisory Service was developed and implemented from February 2015 to improve employer engagement in WIL and support host employers during the placement process.

Data on the volume and nature of support provided to employers through the Advisory Service, and an evaluation by those students and employers using the service, will gauge its impact and usefulness for improving the WIL process. Strategies on setting up an employer support service to improve future WIL outcomes will be identified.

Title: Innovation needs Curation in Work-Integrated Learning

Presenter: Ms. Maree Simpson Charles Sturt University (Australia)

Abstract submission: In 21st century university education, work-integrated learning (WIL) is increasingly being incorporated into curricula to enhance student learning and to foster the development of the capacity for authentic practice and work-ready graduates.

This may pose challenges for WIL academics who need to respond to multiple demands from workplaces, from students, from workplace supervisors, from accreditation bodies, from government institutions, and from universities. This may require or benefit from innovation in tasks, programs and relationships such as supervisors from a related but different profession.

These multiple stakeholders impacts on WIL academics may also serve to progress innovation at so rapid a pace that all the desired documentation and archiving may be delayed or overlooked.

This study identified participants' perceptions of barriers and challenges, and innovative solutions to the need for curation for course sustainability and history, and, the dilemmas posed for time poor WIL academics.

In addition, recommendations are proposed which address areas of:

Staff turnover and handover in WIL;

Training and professional development needs and opportunities;
Highlighting strategies of curation that engage WIL academics, respect their intellectual involvement and innovation
Development of a sense of history and achievement within courses

Title: Learning to be a Professional: Mapping the interpersonal and non-interpersonal networks and the social relationships students use to acquire professional acumen

Presenter: Dr. Tracey Bowen University of Toronto (Canada)

Abstract: Many university departments are developing professional development skills programs to help students learn the professional acumen they will need for transitioning to the workplace. Professional skills are especially useful for students in Work Integrated Learning (WIL) programs. However, where do students really learn about becoming a professional? This study examines the ways in which students participating in academic internships gather information about becoming a professional, and how/where they identify professional acumen and best practices. The objective of the research is to examine how students think they develop professional competencies by accessing both interpersonal (face-to-face social relationships) and non-interpersonal (virtual networks, observation and experimentation) information sources (Ostroff & Kozlowski, 1992). The study explores how students visually and verbally conceptualize the social and informational resources they use to learn about professionalism by analyzing the networks and symbols they use to draw a "rich picture" of their sources. Rich pictures facilitate the understanding and processing of complex systems and relationships that involve experiential, affective, procedural and intellectual perspectives on a given problem (Berg & Pooley, 2013). Preliminary findings of a pilot with 14 students suggest that symbols representing family (parents), friends, teachers, coworkers, social media connections and past work experiences are used to describe interpersonal information sources; and TVs, computers, Google, books, higher education and YouTube represent non-interpersonal sources. These findings suggest that social media and vehicles such as YouTube may provide effective platforms for delivering professional development programs to students. However, further research using both rich pictures with face-to-face interviews is needed to explore these implications.

Title: Giving Students a Career EDGE: Innovation, Collaboration, and Integration

Presenter: Mr. Joshua D. Killey Indiana University-Purdue University Indiana (United States)

Abstract: IUPUI's Career EDGE is a program designed to foster undergraduate student involvement and support the career development process throughout four distinct-yet-related phases: exploration, development, graduation, and employment (hence, the acronym EDGE). Career EDGE provides a step-by-step process connecting education to experience, setting a strong foundation to ensure every IUPUI student finds satisfaction and success on their chosen career path. Career EDGE includes learning modules that students can complete individually; peer and faculty mentoring relationships; structured learning assistance opportunities; and integration of career-oriented content into relevant courses at various touch-points throughout a student's academic development, such as first-year seminars, gateway courses, career/internship preparation courses, integrator courses, and capstone experiences. This paper will describe the purpose and significance of Career EDGE; discuss how faculty, staff, students, and partners collaboratively developed learning outcomes, content, and modules; showcase how coordinated academic and career advising can facilitate work-integrated learning; identify the lessons learned and pitfalls-to-avoid in introducing, reinforcing, and assessing career competence in varying contexts; and provide an update on present accomplishments, work-in-progress, and future plans for Career EDGE.

Title: The experience of daughter-in-law to care of elder with dementia at home

Presenter: Dr. Shu-Lin Uei Mennonite Christian Hospital (Taiwan)

Abstract: The traditional role of filial care for frail elderly in Chinese family, the responsibility of caring has typically fallen on women, especially on the daughters-in-law (DILs). To date, little is known about the impact of these DIL caregivers in Chinese society. This study aimed to explore the experiences of DILs on their caregiving involvement for parents-in-law (PILs) with dementia.

Methods:

Qualitative design of phenomenological methodology was used employing focus group discussion and participant observation with thirteen DILs. Participants were recruited from the psychiatric outpatient department in Eastern Taiwan. Content analysis was used to identify themes.

Results:

Four main themes emerged: (1) care burden with filial obligation; (2) suffering alone; (3) feel powerless; and (4) adaptation.

Discussion:

The social expectations of DIL as primary family caregiver and lack of effective skill for caring PIL with dementia may lead DIL to feelings of vulnerability with associated physical problems and emotional strain. Family based interventions and educational program are recommended as a potential means to alleviate caregiver burden of the DILs.

Title: Visual spaces for connecting academic and work integrated education

Presenter: Dr. Narelle Patton Charles Sturt University (Australia)

Abstract: This presentation builds on Narelle's doctoral research that used photo-elicitation techniques to explore physiotherapy students' learning in clinical workplaces. Clinical learning spaces within workplaces were found to be complex, fluid, relational and uniquely experienced spaces that sparked powerful and meaningful learning for students. These spaces shaped student learning to such an extent and in such different ways from academic environments that re-imagining of practice-based education pedagogy and curricula is required. This nuanced understanding of clinical learning spaces offers a firm platform on which to construct wise pedagogical practices. Visual spaces represent one such pedagogical practice for connecting academic and workplace education curricula. Visual information can provide a wellspring for the development of new understandings of a phenomenon or experience. Visual strategies provide immediate, tangible and intimate ways of understanding and enhancing students' learning with the strength of images lying in their capacity to tap into wordless or tacit knowledge, the ambiguity between what we see and what we can describe. Students' and educators' viewing of and reflecting on images can facilitate deep and meaningful dialogue that triggers the development of new understandings of their views and practices, which often represent taken for granted experiences. This can occur for example during work placement preparation and debriefing sessions. The critical use of visual enriched pedagogy has the potential to enhance the richness and authenticity of practice-based education curricula and meaningfully connect academic and work integrated education spaces.

REFEREED PAPER PRESENTATIONS

Title: About the free in freelance: communication industries and work integrated learning at a regional Australian university.

Presenter: Mr. Paul Scott University of Newcastle (Australia)

Abstract: The issue of unpaid internships in media industries has been in the news in Australia on numerous occasions over the past 2 years. Fair Work Australia (FWA), an independent tribunal that monitors workplace relations in Australia, released a 2013 report that found media industries to be one of the most prolific when it comes to the utilisation of unpaid internships. This finding includes print and broadcast journalism, as well as public relations. In June 2013, the union covering media workers in Australia - the Media, Entertainment and Arts Alliance (MEAA) - released a statement outlining that the Fair Work Ombudsman (FWO) had agreed to work with the MEAA to ensure unpaid work arrangements throughout the media industry - including unpaid internships for young people - will be fair and lawful (MEAA, 2013). In 2014, the Public Relations Institute of Australia (PRIA) conducted seminars for its industry members and outlined legal requirements for providing students with work integrated learning opportunities. Institutional, employer and student interests in work integrated learning opportunities are required to operate within industrial frameworks that are attempting to provide experience rather than exploitation. This paper is reporting on research conducted with third-year communication students at the University of Newcastle that was undertaken as part of a larger research project investigating students' experiences with a variety of internship, work experience, and work integrated learning opportunities.

Title: Specifying eligibility criteria for Work Integrated Learning programs, what are the implications for the key stakeholders?

Presenter: Ms. Louise Dunn Swinburne University (Australia)

Abstract: Educational institutions often specify eligibility criteria for student participation in work integrated learning (WIL) programs, including paid industry placement experiences designed to improve student learning and employability outcomes. The criteria may be based solely on the completion of a preliminary stage of course work or include additional academic quality performance measures. Although it is acknowledged that eligibility criteria are required to assist in determining student preparedness for the industry experience, this paper argues that imposing academic quality criteria such as credit or distinction grade averages, in addition to course work completion, may be at odds with the overall objectives of the WIL program. Using the example of a 12 month paid industry placement program within the health and science discipline areas, this paper examines the implications of adopting this type of quality criterion for the three key WIL stakeholder groups: the university, employers and students.

Title: Making co-op work for you: A comparative exploration of student attitudes to co-op programs in the United States and the United Kingdom

Presenters: Ms. Sally Smith Edinburgh Napier University (Scotland) & Dr. Colin Smith Edinburgh Napier University (Scotland)

Abstract: University engineering and computing courses have a long tradition of co-operative education that plays a vital role in developing students' applied skills and giving confidence to students and potential employers. Nevertheless, not all students choose to participate in a co-op course. Our study was designed to explore the reasons why students did not participate in the co-op program and what perceptions participants have about the program. We also consider students' backgrounds that may play a role in their choice. Participants were in one of three groups: 1) those who were disinterested, 2) those who were interested and/or registered but did not complete a co-op program and 3) those who are currently participating in co-op. We used a qualitative approach, including surveys and interviews, to compare and contrast experiences, approaches, motivations and attitudes of student groups in the US and the UK. Initial results show that US and UK students who identified as disinterested in the program share similar perceptions, including the perceived cost of additional time to graduation. Students also express concern that taking time away from campus to complete a co-op affects social interactions with their peers. However, we found that students' experiences in computing and engineering differ depending on their routes in to their course of study. The overall aim was to uncover ways to increase participation in co-op education to the benefit of engineering and computing students: making co-op work.

Title: The Role of Social Network Ties and Relationships During the Internship Assignment: Shaping Social Integration, Task Mastery, and Satisfaction

Presenter: Dr. Phil Gardner Michigan State University (United States)

Abstract: Internships and co-ops have become critically important both as a corporate talent acquisition strategy and as an opportunity for students to gain firsthand knowledge of the workplace where they can apply their knowledge to work situations. Internships and co-ops now serve as the gate-keeper to full-time employment and a successful transition from college to work. Employer expectations on the skills and competencies gained from internships and co-ops have never been higher (Hanneman and Gardner, 2010). While some of the outcomes from internships and co-ops have been scholarly documented, the broader soft or boundary spanning abilities that are assumed to be developed are not as clearly demarcated. In fact we really do not know what fosters some of these skills (Teichler, 2009). This paper presents the initial examination into how the role of social networks, both networks an intern or co-op student brings with them into the assignment and those relationships forged during the assignment, influence the outcomes of the experience. Strong ties developed with supervisors and mentors are critical in socializing an intern into the organization, allowing them to gain mastery of tasks and assignments, to integrate into their work teams, and to enjoy greater satisfaction in what they did. Not all students, especially first generation, non-White, report positive gains which is partially attributed to smaller, less connected social networks.

Title: CWIE in Japan: Focusing on its outcome

Presenter: Dr. Yusuke Ibuki Kyoto Sangyo University (Japan)

Abstract: There are many researches on the outcome of CWIE. However, since CWIE should be modified or developed reflecting the path dependences and needs of a particular country, CWIE and its outcome should be discussed on a country-by-country basis. Literature review shows there is little research on the outcome of CWIE in Japan, which has a unique job-entry process comparing with the other countries, so in this paper we discuss CWIE in Japan, especially focusing on its outcome. Using the database of a university in Japan, we conducted the quantitative research on the relationships between the experience of taking CWIE courses and three outcomes of CWIE concerning with the job-entry process: (1) the full-time employment rate at the time of graduation from a university, (2) the timing of getting Naitei (preliminary pass for entering a certain company), and (3) the scale of the companies from which the students got Naitei. We found (1) there is a statistically significant difference of the full-time employment rate (higher if one took CWIE courses), (2) there is a statistically significant difference of the timing of getting Naitei (earlier if one took CWIE courses), but (3) there is no significant difference between the scale of the companies (students taking CWIE courses enter both large-sized and small-sized companies). The reason of the difference (and non-difference) of the outcome and the ideas of making CWIE more meaningful will be discussed.

Title: Reflective Practice: An Approach to improve Critical Thinking for Students Teachers during Teaching Practice

Presenter: Dr. Peggy Doris Siyakwazi Durban University of Technology (South Africa)

Abstract: One of the assumptions in teacher pre-service programs in South Africa is that student teachers know what reflective practice should be. Evidence from the field suggests that student teachers write daily lesson reflections as routine rather than as critical thinking tool to improve practice. Reflective practice is regarded as a key aspect of continuing professional development (McMillan and Weyers, 2013). They further state that practitioners need to always review their work to keep up with developments in their areas. There is therefore, a need for a paradigm shift in teacher preparation. In the United States of America, a similar recommendation was made by the National Council for the Accreditation of Teacher Education (2010). Reflective practice should not just be narrating what happened in a particular lesson. It should be about critical engagement with that information to improve practice and share with others. This interpretive research project is based on grounded theory, which involves qualitative approaches through in depth interviews and document analysis at a University of Technology in South Africa. The findings reveal that student teachers did not critically reflect on their teaching. Evidence in documents shows that student teachers write on reflections as routine tasks rather than make use of this as a critical tool for development. It is therefore, recommended that critical reflection could be included in the curriculum as a tool to enhance their effectiveness as teachers.

Title: Packing for PACE: Preparing Students for International Placements

Presenter: Associate Professor Kate Lloyd Macquarie University (Australia)

Abstract: Like many universities, Macquarie University regularly provides students the opportunity to work with community partners in mutually beneficially ways. Macquarie's PACE (Professional and Community Engagement) program is unique, however, in that students from all disciplines are able to use this experience to gain credit towards their undergraduate degree program. PACE360 has been developed in order to support those students choosing to do an international placement outside the scope of discipline-specific units. Taking an experiential learning approach, we recognize that the learning process begins well before, and extends well beyond, the community engagement experience itself (Dewey, 1966) and the potential benefits of intercultural experience for students can only be realised if they are well prepared, encouraged to reflect in productive ways, and scaffolded for skills development.

This paper specifically focuses on the unit's framework, which challenges students to engage with multiple ways of seeing, thinking, doing and being. Integral to this is the co-creation of curriculum resources with international partners, who have significant expertise in developing and delivering their own curriculum and have created a number of relevant modules. Moreover, if PACE, like other forms of Community Based Service Learning, is to help students develop their cross-cultural and collaborative skills, the curriculum should be built upon a model of cooperation and listening with respect (Meadows, 2013), where views of international partners are presented first-hand, in their own words.

Title: Towards a Framework for Reconceptualization of Work-integrated Learning: an ontological approach

Presenter: Mr. Said Morad Babaheidari University West (Sweden)

Abstract: The concept of Work-integrated learning (WIL) is very closely connected to the concept of purposefully designed curriculum. The main focus is on conducting a range of rigorous approaches to integrate theory with the practice. The existing view of the WIL emerged out of the theory of employability. WIL has been traditionally viewed as a strategic merely curriculum design rather than adopting a Whole-organization approach to effective leadership theoryâ practice symbiosis (LTPS), which we advocate. Such an approach is useful in enhancing an awareness to consider concerns and interests of all stakeholders that are involved in the multiple initiatives pursued in higher education institutions. But it requires fundamental rethinking and radical design of WIL-inspired educational processes such as course design. Rethinking implies approaching WIL ontologically. Depending on which extent the concept of WIL has been perceived by universities worldwide, it has been thus viewed and implemented from a diverse spectrum of perspectives. First, we discuss the implications for the existed conceptual differences. Thereafter, and inspired by the main philosophical assumptions underpinning a Whole-organization approach to WIL, we propose and thus thoroughly concretize a framework which we call Work-related Educational Activities (WREA). The model which is the theoretical foundation of WREA consists of a category of several components. After identification of the main components of the model, we adopt an ontological approach to the reconceptualization of WIL. The main purpose is to demonstrate how University West in Sweden views WIL as its newly announced research profile.

Title: Implementing the DHBW study model of cooperative education and work-integrated learning in the tertiary education sector in South Africa and Namibia

Presenter: Dr. Karin Reinhard Baden-Wuerttemberg Ravensburg (Germany)

Abstract: The Baden-Wuerttemberg Cooperative State University (Duale Hochschule Baden-Wuerttemberg - DHBW), founded in 1974, was the first higher education institution in Germany to combine on-the-job training and academic studies. The study model achieves a close integration of theory and practice, both being components of cooperative education and work-integrated learning (Reinhard, 2006). The success of the DHBW is based on its cooperation with over 9,000 partner companies, who take responsibility for recruiting the students who study at the university. Students are employed and remunerated for the duration of their studies by their partner company. Over 90% gain a permanent employment contract with their partner company on graduation.

In South Africa and Namibia, while cooperative education programs have a rich history, the study models developed lack the commitment from industry to invest in work-integrated learning. The present study models involve students taking up unpaid practical semesters, in order to achieve the transfer of theoretical knowledge into a practical work-related setting. While this model has the advantage that students are able to build up their professional experience, parallel to their studies, it does not provide the individuals with remuneration, which is for many a barrier to higher education. Additionally, there is no employment security on graduation.

This discussion paper outlines how universities of higher education, in South Africa and Namibia, in cooperation with industry, can implement the DHBW study model, in order to achieve greater synergies between theory and practice, as well as financial stability and employment security for their students.

Title: Development of Cooperative and Work-Integrated Education in Thailand: Looking Back, Looking Now, and Looking Forward

Presenter: Professor Wichit Srisa-an Suranaree University of Technology (Thailand)

Abstract: Facing with the demand of the new labour market that requires graduates to have firm theoretical knowledge, practical skills, and readiness for employment right after their graduation, it is necessary for higher education institutions to provide education that has a competitive quality in the labour market. Quality of graduate is therefore the vital area. Cooperative and work-integrated education (CWIE) has been found and acknowledged as a mechanism that responds well to this demand. In this paper, the development of CWIE in Thailand will be showcased, covering a long period of 22 years since its inception in 1993 to the current status of today. Two case studies at the institutional and at the national levels, i.e. Suranaree University of Technology (SUT) and the Thai government's CWIE policy, will be discussed, including details about the starting point, the implementation process, the evaluation results, and key stakeholders involved. Furthermore, the expansion of CWIE in Thailand to ASEAN and to a wider international level will also be presented. Along the path of CWIE development in Thailand, the milestones of important events will also be highlighted in this presentation. For further development, the directions for the future and the challenges that await CWIE will be shared. This paper will conclude with some proposed lessons for others to follow if they would like to develop or improve CWIE in their contexts.

Title: History, Present State, and Future Issues of CWIE in Japan

Presenter: Dr. Yasushi Tanaka Kyoto Sangyo University (Japan)

Abstract: With a system of employment characterized by life-time employment and seniority wage, companies in Japan had been known to offer extended On-the-job Training programmes to newly recruited work force. This was one of the reasons why Japan has remained behind in the development of CWIE among industrialized countries. However, the popularity of this practice started to decline due to slower economic growth particularly after the collapse of bubble economy in 1990s and there is a growing need for educational institutions to offer CWIE to supplement the company's OJT. This trend is further encouraged by the government's support.

This paper attempts to describe the background history, present state, and future issues of CWIE in Japan. First, it shows how the transition from study-to-work for graduates has been organized as well as its socioeconomic background since the end of the Second World War. Second, the present situation of CWIE is described and its reasons for falling behind in the popularity among the industrialized countries are discussed with reference to Japan's socioeconomic situation such as rapid industrialization and a high demand for higher education. Thirdly, the suggestions are made in turn for the stakeholders of CWIE i.e. students, universities, companies, the government and community at large, for Japan to catch up with the rest of the industrialized countries in the popularity of CWIE.

The aim of the paper is to show how CWIE can be developed/modified to reflect the needs of a particular country with own socioeconomic background, using Japan as an example.

Title: The Perceived Workplace Support System for Work Integrated Learning: Consequences on student-workers commitment to the host organization, the work, and the team.

Presenters: Dr. Antoine Pennaforte CNAM (France) & Ms. Judene Pretti University of Waterloo (Canada)

Abstract: The development of individual work competencies through Work Integrated Learning (WIL) emanates from a predisposition of students to learn from both the workplace and the educational institution, as well as from WIL stakeholders to support them. This exchange between individuals and organizational insiders, according to the social exchange norm of reciprocity, may also nurture organizational behaviors. WIL student-workers may perceive support from insiders, and orient their behaviors to increase their contribution to the host organization performance, in developing specific bonds of commitment towards different targets. Given the lack of studies with an organizational approach in WIL field, we propose to investigate the different organizational supports perceived by WIL student-workers in the workplace, and whether these supports develop specific bonds of commitment. We designed a Perceived Workplace Support System for WIL including four key stakeholders (host organization, academic institution, supervisor, and coworkers) as a predictor of bonds of commitments to the host organization, the work, and the team. Relationships between perception of supports and the different bonds of commitment were tested on a sample of 2457 students enrolled in a co-operative education

program in North-America. Results supported the hypotheses, except the non-significant relationship between the perception of academic institution support and the three bonds of commitment. Limitations, propositions for future research, and implications for WIL partners (employers and academic institutions) are provided.

Title: What has been done and still needs to be done to Skill South Africans

Presenter: Dr. Maggie Chetty Durban University of Technology (South Africa)

Abstract: The National Infrastructure Plan is made up of eighteen Strategic Integrated Projects (SIPs) each of which consists of a large number of projects drawn from a wide range of economic sectors and stretching across all nine provinces of the country. The Department of Higher Education and Training, was given the task of ensuring that the skills demands of these projects were realised both in advance of (for), and on the sites of (through), the development of the Strategic Integrated Projects (SIPs). This paper presents the approach adopted to determine the occupations required and the interventions necessary to address the demand. Although focused on infrastructure skills, the approach can be generalised for skills planning in any field such as health, education, etc. The concept of determining which occupations are required is fundamental to the process. The aim is to increase the pool of those with the requisite skills on the South African labour market rather than seeking to map an individual to a job vacancy. Education and training providers have their own language, that of qualifications which does not speak to the language of occupation in a linear fashion. So the notion of a learning pathway was created to bridge the two. It commences with the underpinning knowledge or theory required, followed by simulated practice of some of the critical skills and procedures, followed by supervised practice in a real workplace and culminating in a formal assessment which might result in a professional designation, a trade certificate, a license to practice or some other recognition that the practitioner is now competent to practice without supervision with the qualification of providers being equivalent to the first one or two steps of this pathway. A methodology was developed to determine the skills required for the different types of projects. The methodology essentially consists of developing what are called skills prototypes for typical projects in each of the different sub-sectors. These prototypes are then used to estimate the skill requirements of similar projects by scaling the prototype up or down. In this way an estimation of the total skills required for all projects was developed.

Title: Inside and Out Teaching the Recently Incarcerated How to Get to Work

Presenter: Dr. Francine White LaGuardia Community College (CUNY) (United States)

Abstract: For many years LaGuardia Community College offered GED instruction to inmates at Riker's Island - a detention facility located near LaGuardia's campus. In recent years, for a host of reasons, that work was downsized. The GED instruction that LaGuardia offered was never seen as sufficient to support the successful transition of program participants from Riker's to the communities that they returned to. In an effort to offer a more comprehensive program that might actually help to prevent recidivism, LaGuardia recently partnered with The New York Department of Corrections to create a very ambitious program model thought to cover much of what would be required to give participants the tools to start a new page in their lives. The program included academic instruction and a wide variety of other resources, including additional training on LaGuardia's campus and a potpourri of financial incentives. Nineteen women were chosen to participate in the program. All women were scheduled to be released from Riker's between one to six months from the start of the program. A substantial part of this program was the offer of internships and job search assistance to a pool of women demonstrating a wide range and academic and life skills preparedness/deficiencies. This presentation will share the details and outcomes of this program as well as LaGuardia's planned next steps in this area.

Title: Developing Global Engineers through International Cooperative Education: A University of Cincinnati Model

Presenter: Dr. Gayle Elliott University of Cincinnati (United States)

Abstract: International experiential education is essential to create global skills needed by today's engineering professionals; but integrating this into the engineering curriculum can be difficult. The University of Cincinnati worked across academic units and created the International Co-op Program (ICP) to respond to this need. Students work three co-op semesters in the US then complete over 250 hours of language/culture instruction in preparation for an eight-month capstone co-op experience in Japan, Germany, or a Spanish-speaking country. The ICP offers students the opportunity to learn Japanese or German language/culture in preparation for an eight-month capstone co-op assignment abroad. A small Spanish option is also available. Some ICP students complete additional coursework, above that required to participate in the ICP, and also earn a certificate in Asian Studies or a minor in German. This paper describes: a) background and curriculum of the ICP at UC, b) development of the ICP Japanese and

German programs including prior study results with regard to characteristics of engineering students and the suitable syllabus types for ICP students, c) the ICP Japanese and German course curricula with the description of preparation for co-op assignments, and d) the future direction of online materials using the words included in the engineering terminology dictionary in order to develop ICP students' autonomous learning abilities and Japanese language proficiency at co-op sites, and e) a guide for a textbook to be written for engineering students which includes the fundamentals of technical and business German (or Japanese) while at the same time covering basic cross-cultural differences, e.g. work ethics and etiquette.

Title: UNDERSTANDING EMOTIONAL WORK-READINESS IN THE WORKPLACE: A PRACTICAL OUTLOOK

Presenter: Dr. Suniti (Sue) Bandaranaike James Cook University (Australia)

Abstract: Global competence in the workplace requires the challenge of understanding the shared operation of cognitive and affective knowledge and skills to work and communicate effectively in a variety of situations. To date Work Integrated Learning [WIL] universally identifies the application of academic learning to the workforce mainly through cognitive knowledge with minimal recognition of affective skills. This paper therefore looks at the combined influence of cognitive and affective skills in the workplace through the concept of Emotional Work-readiness [EW]. EW is the capacity of an individual to recognise and manage their emotions, and the emotions of other people in the workplace. Guided reflective practice is used in this research to identify affective skills in the workplace and illustrate its application to cognitive knowledge. A validated employability framework, the Work Skills Development Framework [WSD] (Bandaranaike & Willison, 2009, 2014), is used as the base to elucidate EW. In this paper each of the six core employability skills in the WSD is associated with a cognitive and affective function using reflective thinking to understand EW in the workplace. EW is used to unlock the potential of the cognitive skills and gain a deeper understanding of affective skills. While a generic application of EW is provided here, this format can be readily adjusted to be discipline specific. The methodology is innovative and the outcome contributes to acquisition of life skills in the workplace and in developing global competency.

Title: Trends in research methods and approaches in cooperative and work-integrated education research

Presenters: Ms. Katharine Hoskyn Auckland University of Technology (New Zealand) & Dr Karsten E. Zegwaard University of Waikato (New Zealand)

Abstract: This paper investigates 15 years of articles published in Asia-Pacific Journal of Cooperative Education (APJCE) to determine trends and changes within methods and research approaches in cooperative and work-integrated education (CWIE). Coll and Chapman noted in 2000 that, at that time, quantitative research methods dominated in cooperative education research, contrary to what was common practice in other educational research areas. It is our view that since 2000 that there has been a shift towards different research approaches in CWIE. The aim of this research is, therefore, to review research practice reported in APJCE in order to identify any trends or patterns in research approaches. The review included over 150 publications, where journal articles were separated by type (e.g., research articles, topical discussions, best practice). For research articles, the analyzes included methodology, research approach, data collection instrument, method of analysis, and other research-related components. The findings indicated a trend in CWIE research towards using a wider range of research approaches with a greater number of phases and triangulation points within a research project. It is argued that it is no longer sufficient to think of CWIE research as being either qualitative or quantitative. Rather, there were an increasing number of research articles using mixed methodologies, with varying weightings towards either qualitative or quantitative, presenting virtually a continuum between the two main research approaches. It was also found that a greater focus in recent publications was on the student journey and employability, however, other topical issue were apparent.

Title: IMPROVED INFORMATION MANAGEMENT THROUGH A CENTRALISED WORK-INTEGRATED LEARNING UNIT

Presenter: Dr. Roelien Brink University of Johannesburg (South Africa)

Abstract: Within Higher Education Institutions there are various qualifications that are unique and diverse leading to different approaches to work-integrated learning. To identify and research the information management for work-integrated learning models in place at specific universities well known for their work-integrated learning programmes, two international universities in the United States of America were identified as they had been developing and implementing work-integrated learning programmes for some time. These two universities were consulted and research was conducted to identify best practice benchmarks for information management for a work-integrated learning feedback system. In

future, a similar system could also be rolled out in a South African Higher Education Institution, namely the University of Johannesburg. On engaging research with all the relevant and appropriate departments within the University of Johannesburg an analysis was done of work-integrated learning related practices and processes which were in place and used by these departments. However when taking a closer look several gaps and areas of concern were identified. This article highlights that the information management of work-integrated learning can be improved through a centralised work-integrated learning unit.

Title: Case Study of the Design, Operation, and Proliferation of KOREATECH's Co-op (IPP) Program

Presenter: Dr. Chang-Heon Oh, Korea University of Technology and Education (South Korea)

Abstract: KOREATECH has designed an Industry Professional Practice (IPP) program that allows students to work full-time in relevant industries for at least four months since 2012. The IPP, which can be seen as a Korean system for cooperative education, is a collaborative education model that combines academic study and work experience. By allowing students to alternate between study and work experiences, it maximizes the impact of field-based education. In addition, by enabling students to make decisions about their careers that reflect their own aptitudes and specialties, the system can enhance the employment prospects of university graduates, helping to address the national issue of youth unemployment and the gap between universities and industries when it comes to labor supply and demand. For the IPP to successfully achieve these anticipated objectives, the design, operation, and assessment (leading to feedback) of the program must be systematically conducted. In this paper, we intend to share KOREATECH's experience and expertise.

First, to compensate for the problems encountered by traditional short-term internship programs, KOREATECH benchmarked the cooperative model developed in North America, which has a 100-year history. The American co-op model was adapted for the Korean educational system; its main features are as follows: 1) the operation of a semester-based quarter system (spring/fall semesters with summer/winter sessions); 2) academic credits and tuition payments for IPP; 3) asymmetrical separation of time (six and four months) during ten-month IPP period; 4) project/task-based IPP operations; and 5) preparing students entering university to take advantage of the IPP system. To successfully operate an IPP program, it is necessary to formulate and implement a IPP-aligned school affairs management system in a detailed way. To be effective, the KOREATECH IPP program required a dedicated center, with nine staff members and a portal system (IPPOne) designed specifically for the management and operation of IPP.

In addition, KOREATECH developed a systematic performance assessment model to evaluate the effectiveness of its IPP program and find ways to improve the program's operations and procedures. To do so, it developed an assessment method and indicators based on an analysis of various international models, establishing a logical and comprehensive assessment system by mapping methods and indicators onto Kirkpatrick's four-stage assessment model (response assessment, learning assessment, behavior assessment, and outcome assessment). Applying this performance assessment model to the 2013 operation showed that the IPP program was somewhat effective in improving student attitudes toward work and abilities in non-major fields. In addition, the students' satisfaction with their corporate employers and jobs was very high. In contrast, however, there was no significant improvement in student abilities in their major fields.

The KOREATECH IPP program has achieved fruitful results over the years: in 2012, it sent 132 students to corporations, 241 in 2013, and 330 in 2014. In 2014, 71 students were sent to corporations on condition of possible employment, and 53 of these students later became employed. In addition, the employment rate of IPP participants, particularly in small- or medium-sized companies, grew significantly in comparison with that of non-participants. This result suggests that IPP can help to address issues of youth unemployment and workplace mismatching by enabling university students to challenge negative images of small- and medium-sized corporations through field experience.

The Korean Ministry of Employment and Labor has decided to launch an IPP-based Work-Study Parallel System project, combining the IPP program offered by KOREATECH since 2012 with the Work-Study Parallel System (Korea's new apprenticeship system) from April 2015 in order to enhance the practical knowledge and professional skills of university students, thus addressing the problem of youth unemployment caused by workplace mismatching between universities and corporations. It plans to select 10 universities to implement IPP and to provide each of them with an annual budget of 1,000,000,000 won (approximately 0.9 million USD) over five years.

Lastly, we will discuss the obstacles we expect to encounter in promulgating the KOREATECH IPP program among other universities, as well as some solutions to those problems.

Title: The Co-operative Education Practicing in China

Presenters: Dr. Tenggang Xu Shanghai University of Engineering Science (China)

Abstract: In 1985, under the guidance of national Ministry of Education, Shanghai University of Engineering Science, in collaboration with the University of Waterloo Canada, took the lead with the first cooperative education pilot, marking the start of co-operative education program in Chinese mainland. Now co-operative education, integrating real-world work experience into students' learning, is more and more popular among higher education institutions in mainland China with an expansion of different higher institutions and modal diversification.

However, we are facing big challenges in practice of cooperative education. Since China is a big country, the difference of regional economic development and human environment creates an imbalance development of cooperative education. Moreover, the rapid development of market economy with the adjustment of industrial structure and the popularization of higher education cause a big change of talents needed, and a further higher education reform has to be carried out. This paper attempts to describe the development history, current situation, and further development of the cooperative education in mainland China. Firstly, with the collaboration of Shanghai University of Engineering Science and University of Waterloo Canada as an example, showing the way to introduce the successful experience from abroad combined with national conditions. Secondly, the main problems we are facing in current practice of cooperative education and probable reasons in conditions of a developing country. Thirdly, recommendations on further implementation of cooperative education, especially the internationalization development in cooperation with institutions and companies abroad in terms of students exchange both for work placement and academic learning.

Title: FROM WORK-INTEGRATED LEARNING TO STUDENTS' ECOPRENEURIAL START-UPS ACTIVITY:

How far will students go?

Presenter: Dr. Ratna Lubis Telkom University (Indonesia)

Abstract: This paper builds on previous study undertaken by the author with the paper title 'Work Integrated Learning (WIL): A Promising Experiment in Students' Entrepreneurial Activity'. The present work is a continued action-research effort by the author to support the claims relating to the students' perceptions on how the advantages of Work Integrated Learning (WIL) are significant as they bring the context of environmentally-friendly business ownership to the fore as an important factor to be considered in start-up development.

This study aims to identify Indonesian students' perceptions of how the environmentally-friendly start-ups would contributed to growth in the future in order to provide fresh insights into the attributes of rapid-growth green values. A total of 235 students during academic year of 2013/14 at Telkom University completed ecopreneurial start-ups activity questionnaire. The '3Es' framework (eco-innovation, eco-commitment, eco-opportunities) were used. The respondents were asked to state their agreement/disagreement on statements on a four-point Likert type scale. Findings suggest that those 3Es are useful framework for examining students' copreneurial start-ups activity.

The findings of this paper could help guide educators and policy makers in designing effective students' start-ups that are customized to respond to clean and green business. Some of the insights could prove invaluable to students' ecopreneurial start-ups in other parts of Indonesia and even in other countries with similar socio-economic contexts.

Title: Exploring WIL through a community development lens

Presenter: Dr. Kate McLachlan Macquarie University (Australia)

Abstract: Community development (CD) can be defined as the process whereby people work together to find solutions to their common problems. Models of practice have been influenced by social justice, self-help and social capital perspectives and more recently by strengths based approaches that focus on developing the cohesive capacity and resilience of communities in dealing with the increasing complexity of societal issues. Collaboration and relational partnering are central to this approach.

This paper uses a CD lens to analyse research on the Professional and Community Engagement (PACE) program at Macquarie University. Core to its vision of being a university of service and engagement, PACE offers undergraduate students WIL opportunities with local, regional and international partners. Through PACE, students work on mutually beneficial projects that both meet the partner's organisational goals and enable students to strengthen graduate capabilities while contributing to positive social change and gaining credit towards their degree.

The discussion draws on data from the Student Experience of PACE Project, which explores the extent to which PACE activities can be regarded as enabling experiences associated with incremental outcomes of awareness and effort to act in ways which align with the values associated with a 'global citizen'. The project adopted a mixed methods approach

incorporating semi-structured interviews (N=27) and a questionnaire survey (N=389) of students enrolled in PACE units in 2014/15. Preliminary findings from a thematic analysis of the data suggest that the benefits of collaboration and relational partnering, as CD principles, are critical to the ongoing success of the PACE program.

Title: Attitudes and Perceptions of students about work Intergrated Learning (WIL) in the B. Ed Programme in Higher Education

Presenter: Dr. Duduzile Mzindle Durban University of Technology (South Africa)

Abstract: There are principles, processes and procedures that inform the design and delivery of the programme not only in teacher education but also in other programmes in Higher Education. One has discovered that students exhibit certain behaviour patterns which we did not teach them as teacher educators, but because they are ingrained in their hearts and mind, they find themselves using them in conducting lessons in teacher education. In mentoring students, one realised a pattern of behaviour which is an alarm bell (Perkins, 1992) for teacher educators. One discovered that students exhibit attitudes and perceptions during the evaluation and monitoring of their lessons that are different from what they were taught. This has negative impact on the effectiveness of the lessons they conduct. Furthermore, the discovery exhibits tension between a museum possession of knowledge as opposed to a workshop possession of knowledge. The paper explores the attitudes and perceptions that students possess in the design and delivery of their lessons against what policy requires them to do. The phenomenon is an indication of the misfit between what policy says and what is happening practically. Students find it challenging to break the barriers that existed between Theory and Practice and between head, heart and hand.

It is believed that work integrated learning is an important resource for students learning. Whilst this fact may be true, it needs constant monitoring and coaching for it to achieve the desired outcome. The new approach to teaching and learning is a shift significant enough to be called a paradigm shift. It requires a lot from student teachers. They do not cherish what they were taught, instead they revert to the old ways which they saw their teachers do in schools and rely on their experiences in terms of how they were taught. This is an indication of restricted professionalism as opposed to extended professionalism the latter which we cherish in teaching and learning. For instance students do not consider the importance of communicating outcomes to their learners. They think it is not important to unpack and discuss the journey that they embark on. This is an indication that the role of mediator of teaching and learning (Norms and Standards, 2000) is strongly sacrificed yet learners take the blame for failure and lack of understanding. The investigator is going to share experiences that she has gathered over the years in monitoring and evaluating students lessons during work integrated learning.

Title: Conceptualizing the Quality of Cooperative Education Work Term Experiences: An Exploration from the Students' Perspective

Presenters: Mr. David Drewery University of Waterloo (Canada) & Ms. Judene Pretti University of Waterloo (Canada)

Abstract: What differentiates good from bad co-op work term experiences? While the literature discusses the importance of quality in the context of work terms, few studies have sought to develop an understanding of its meaning and the process through which it can be achieved. This is surprising given the widespread use of co-op work terms as a form of work-integrated learning and a body of experiential learning literature which outlines that the quality of students' experiences shapes their learning outcomes. Using a grounded theory framework and semi-structured, in-depth interviews with co-op students (n = 20), this exploratory study aims to identify the dimensions of students' (global) assessments of their co-op work experiences and to develop a process-based framework for the enhancement of students' work term experiences. Results are presented as a theoretical framework which describes a process through which onboarding students, adjustment, interpersonal relationships (with supervisors and team members), and psychological empowerment contributes positively towards global assessments and the achievement of learning outcomes. The implications of the study with respect to practice are discussed and areas for future research are proposed.

Title: Training industry mentors as a means to move toward global competency and work-integrated learning success

Presenter: Ms. Karla Keating Cape Peninsula University of Technology (South Africa)

Abstract: Work-integrated learning (WIL) is a component of Co-operative Education and an essential module in qualifications as presented by Universities of Technology (UoT's) in South Africa (SA), and many other institutions across the world. This type of learning component requires time spent at a quality organization related to a student's field of study where theoretical learning can be translated into real life skills. However, regardless of the status of the placement

venue, the lack of mentorship leads to a negative view of the company and the students' experience as a whole. In addition to this, it has been observed that the term mentor is assumed to be the students' departmental supervisor. Contributing to these factors is the reality that staff selected as student mentors are not trained for the role. Due to an increased interest among researchers to develop best practice guidelines for the success of WIL programmes, the need for a mentorship training programme for industry staff has become apparent. The study reviewed literature highlighting the definition of work-integrated learning (WIL) under the umbrella of co-operative education as well as defining the role and expectations of mentors. Surveys were conducted with final year students who have experienced a 6-month WIL placement as part of a Hospitality Management diploma at a particular institution, thereby gaining insight to their experiences with industry mentors. On the basis of the investigation, recommendations are made for the development of topics in a mentor training programme. The researcher aims to use the analysed data in the development of a mentor training programme, which will assist educational institutions in the movement toward global competency in their WIL programmes through effective and consistent student mentoring.

Title: Bringing the real world to Campus - using experiential based pedagogy to deepen marketing students' learning and employability skills.

Presenter: Mr Mark Tolson Deakin University (Australia)

Abstract: While in the past, tertiary business students were focused on employment, today's business student cohort is more likely to be focused on employability. One way that marketing academics have addressed this is by exposing students to real life perspectives of the business world by adapting their teaching and assessment methods to engage real clients for marketing assignments.

In this paper we examine the learning outcomes and skills development based on using a real client with a real business issue in a marketing undergraduate subject. Such an Experienced Based Learning (EBL) approach has students actively engaged with a practical business issue that also allows them to take time to reflect on the issue.

The findings demonstrate that the use of a real client had a positive impact on students' learning outcomes and skills development, improving their understanding of the subject and studying techniques, their ability to integrate key principles in a real world business context thus enhancing their discipline skills and employability prospects.

In future, where possible, marketing educators should consider using a real client with a real business issue for assessment tasks to ensure that marketing education reflects the real business world so, students' learning and employability skills may be enhanced.

Title: Cooperative Education at the Tshwane University of Technology: a new direction for work integrated learning and employability

Presenter: Dr. Marius Wessels Tshwane University of Technology (South Africa)

Abstract: The Directorate Cooperative Education of the Tshwane University of Technology received a mandate from senior management of the university to review the strategy and structure of cooperative education institutionally. A task team, consisting of internal and external representatives, was established to execute this mandate. After numerous workshops and local and international benchmarking exercises, a new strategy and structure was developed and approved. The new strategy makes provision for mainly two focus areas in cooperative education i.e work integrated learning and employability.

In this paper, a description is presented of the reasons why this initiative was undertaken, processes involved, research methodology and results that included a new governance structure for work integrated learning, new structures for both faculties and the central office and roles and responsibilities of the various role players involved.

Title: An Undergraduate Career-Restructuring Program, its Rationale and Educational Outcome

Presenter: Dr. Tetsura Onitsaka Kyoto Sangyo University (Japan)

Abstract: The purpose of this study is to discuss the rationale for the implementation of Career Re-design I, an undergraduate course targeted at those students who wish to restructure their career perspectives, and to evaluate qualitatively its outcome.

The majority of the students enrolled have completed relatively few credits, a fact that derives from their decreased involvement in university activities. Previous research has clarified that it is a sense of frustrated self-image in being unable to be ideal university students that drives them away from the classroom.

In order to free them from this downward spiral, each student is encouraged to feel himself/herself liberated from hegemonic manners and discourses, and to create his/her own life-story, a resource to produce dialogues among them. The qualitative analysis of the reflexive texts indicates that (1) all the students have deeply internalized a code of conduct of an idealized university student; (2) the texts produced by the students are either a lineal and superficial discourses or complex, multifaceted and self-inconsistent discourses; (3) the latter is in complementary relation with a true sense of the otherness or attitudinal readiness to dialogue; (4) a complex, multifaceted and self-inconsistent discourses are linked with a true sense of the otherness or attitudinal readiness to dialogue through memory of classroom as a spatial-temporal entity. The texts produced by the students reflect the dialogues they produced in the classroom. The analysis suggests, therefore, that creation of life-story and its sharing through dialogue is an effective way to develop one's own independence.

Title: WALKING THE WORK INTEGRATED LEARNING ROAD OTHERS HAVE WALKED BEFORE BUT AVOIDING THE IMPLEMENTATION POTHOLES: A TRANSDISCIPLINARY APPROACH

Presenter: Mrs. Annie Moletsane Vaal University of Technology (South Africa)

Abstract: South Africa's high unemployment rate of nearly 27% makes education, training and skills development a national priority. Academics have recognised the imperative to produce qualified, skilled and work-ready graduates. A work integrated learning (WIL) partnership model was developed to fast track student placements into industry, facilitate them gaining relevant work experience and increasing their employability. Successfully implemented with Human Resource Management students, the model is being implemented by a different discipline, Commercial Accounting, with the hope of achieving similar successes.

This conceptual paper presents a comparison and reflection on the transdisciplinary approach taken by departments in different faculties of the same institution. The purpose is to present a working WIL model as a road already travelled, bypassing identified potholes, documenting the planning and preparation strengths, weaknesses, opportunities and threats. The aim is to encourage academics to embark on transdisciplinary WIL projects with full awareness of the challenges and benefits involved.

The changing South African education landscape, human resource development and international calls for education-industry-government partnerships provides the context, with experiential learning the theoretical framework for the transdisciplinary approach. An overview of lessons learned and adaptations made are outlined.

Value is added on three levels: strategic, theoretical and practical ones. Strategically, this paper contributes to national skills development imperatives. Theoretically, the WIL body of knowledge on initiatives across higher education disciplines is increased. Practically, contribution is made to implementation effectiveness of a revised, working WIL model to enable young Accounting discipline graduates to enter the workplace with confidence.

Title: TEN YEARS LATER: A PUZZLING PICTURE OF WORK-INTEGRATED LEARNING TO STUDENTS' ENTREPRENEURIAL SKILLS

Presenter: Dr. Riema Kusumadewi Telekom University (Indonesia)

Abstract: This paper expands a study reported at The Asia Pacific Cooperative Education Conference, Auckland, New Zealand in the year of 2004, with the paper title An Option For Cooperative Education: Bridging The Gap With Walkabout Project, following with the paper Undergraduate Perceptions Of The Need For Entrepreneurship In The Business Management Curriculum: Five Years After which was presented at The 3rd Triennial Conference of International Association for the Advancement of Curriculum Studies (IAACS), Cape Town, South Africa in the year of 2009. Ten years after the first study in 2004 is a long time to wait for a Work-Integrated Learning (herein after referred to as WIL) study to support the claims relating to the value of project-based learning and to illustrate on how the students bring their insights back to the classroom for further analysis and reflection. The present study was limited to the international class of undergraduate students at Telkom University, Faculty of Economics and Business majoring in International Business Management studies and should be noted as an action-research effort by the authors.

Meanwhile, a substantial number of questions are asked about the state of WIL, including ones about content and delivery. All of which invites the question a So what can educators do to improve WIL in terms of building students' entrepreneurial skills?

This research paper proposes an alternative framework to advance the understanding of a puzzling picture of WIL in terms project-based learning to tie theory and practice.

Title: The Efficiency improvement of Cleaning Process on Passenger Train by Using Lean Management Technique: A Case Study of Chiang-Mai - Bangkok Route

Presenter: Dr. Anucha Watanapa King Mongkut's University of Technology Thonburi (Thailand)

Abstract: This is Bachelor of Technology State Railway of Thailand Project (BTech SRT Project), which resulted of Work integrated learning (WIL) under the collaboration between Faculty of Industrial Education and Technology (FIET), King Mongkut's University of Technology Thonburi, (KMUTT), and State Railway of Thailand to establish and develop ASEN Rail System Development Institute, ARSD. This research using concept of lean (Lean) to analyze the cleaning process management on the train. The objective of this project was to study the efficiency enhancement of cleaning process on passenger train: a case study of Chiang-Mai - Bangkok route by using Lean Management Technique, Value Stream Mapping to classify the value of working process, and Fishbone Diagram to analyze problem by collecting the truth data under simulation. The instrument used for data collection were; 1) the modified checklist of train cleaning process, and 2) a five-rating scale questionnaire of the passengers' satisfaction towards cleaning service of the Chiang-Mai â Bangkok Express Train no.12. The project results found that the efficiency of cleaning process after enhancement was increased 5.63% and could reduce 125 minutes of working process. Moreover, the opinion of Chiang-Mai Railway Station officers toward the modified checklist was at very good level ($\bar{x} = 4.58$), and the overall of passengers' satisfaction towards cleaning service of the Chiang-Mai â Bangkok Express Train no.12 after cleaning process enhancement was higher than before cleaning process enhancement from moderate level to high level.

Title: WORK INTEGRATED LEARNING (WIL): Improving shipping channels from packing section (Carton pack) to the Warehouse in ABC company Thailand using Arena Program .

Presenter: Dr. Wisitsree Wiyaratn King Mongkut's University of Technology Thonburi (Thailand)

Abstract: This research is Work integrated learning (WIL) cooperation KMUTT University and ABC Company in Thailand, in the form of entrepreneurial project-based assignment. This paper will present their own outcome from students who do the research in ABC company through WIL project.

This research aims to improve cargo channels from Carton pack section to the warehouse and reduce the line Carton packaging. The application of Arena Simulation Program to assist the optimum design of process areas, transportation, and locations is proposed. The operation process charts, material flows, and work areas have been investigated. Arena simulations have been employed to design the four alternatives (A, B, C, D) Carton packaging lines and compared the performances between new layout and exist layout in term of, Wait (total time). The alternative plant layout D should be selected because could reduce the two packaging lines to one packaging line. The value of the wait (Total Time) was 0.01155, which does not exceed the standards of the plant was 0.10. The renovation plan D, the width is increased from 2.10 m² is 17.43 m² and could reduce the number of employees from 19 to 15 people.

Title: Work Integrated Learning for South African Mine Surveyors, a seven year journey

Presenter: Dr. Hendrik Grobler University of Johannesburg (South Africa)

Abstract: The current strength of the National Diploma: Mine Surveying qualification is considered to be the experiential learning component of one year. It has long been considered that this compulsory one year exposure to the working environment enables the newly qualified Mine survey diplomat to be of immediate use within the mining industry with very little site induction required to make the student a fully functional member of a production crew. With the introduction of a new Bachelor degree in Mine Surveying this critical component of the current qualification will no longer form a core component due to a number of legislative and safety concerns. A model that will incorporate most of these requirements is required to replace the current experiential learning model. In order to ensure that all aspects of such a programme is considered a critical review of current experiential learning practices are made. An analysis of some of the shortcomings identified over the past seven years includes the on-mine culture, medical fitness, simulated versus actual underground mining environments, the introduction to realistic conditions and work pressures. In addition the introduction of second level qualifications designed to address the critical stage between graduation and professional registration is discussed and a model of training is proposed.

Title: Enhancing the employability of Exercise Science students

Presenter: Dr. Gregory Reddan Griffith University (Australia)

Abstract: The notion of employability is gaining importance as an essential outcome of many degrees in institutions of higher education throughout Australia. This paper aims to determine the effects of an Exercise Science course, which

includes elements of both career development learning and work-integrated learning, on six dimensions of employability - commencement readiness, collaboration, informed decision-making, lifelong learning, professional practices and standards, and integration of knowledge/ theory and practice. The course components that were examined by the presented study included fieldwork placements, workshops and related career development assignments. Work Readiness scales (Smith et al., 2014) were administered prior to and on completion of the course. Students also rated the extent to which they considered any changes in their abilities were the result of each of the course components. Furthermore, responses from an open-ended questionnaire were analysed to determine common themes affecting student development of each of the six dimensions. Comparison of pre- and post-work placement scores on the Work Readiness scales demonstrated statistically significant differences in all the dimensions of employability except informed decision-making. Student ratings suggested that placements had a more significant effect on the changes in their abilities than the course workshops and assignments, however all three course components contributed to the development of workplace competencies. Student responses indicated that the course increased their awareness of personal strengths and weaknesses in relation to employability, as well as their knowledge of specific occupations relevant to Exercise Science.

Title: Learning and Soft Skills Development in Chemical Engineering Practice School Students Using AIChE National Student Design Competition Problems

Presenter: Dr. Saranya Thonglek King Mongkut's University of Technology Thonburi (Thailand)

Abstract: Chemical Engineering Practice School (ChEPS) at King Mongkut's University of Technology Thonburi (KMUTT) in Thailand is a two-year international Master's program that emphasizes hands-on problem-solving and soft-skill development. The program requires one semester of internship. To better prepare students for internship in the second year, team design projects are employed in the first year to help students with teamwork, critical thinking, and oral presentations. For the first time, AIChE National Student Design Competition (NSDC) problems were used to train 19 ChEPS Class-18 students in a competition format. A total of three NSDC problems were used. The students were divided into six teams, with two teams being assigned to the same project to compete for a better solution. A panel of three referees from the ChEPS faculty and from outside the university judged the teams based on four oral presentations. The effectiveness of the new competition format were subsequently assessed via group interviews and surveys. Qualitatively, the interviews showed that most students believed the new format had helped them in key learning areas such as self-learning, problem-solving, and soft-skill development. On the other hand, the surveys asked the students and the judges to quantitatively rate the new format in a number of key areas pertaining to learning. The survey results showed that on a scale of one to 10 with 10 representing the most positive outcome, the average scores were larger than eight, which indicated a high degree of success in using AIChE NSDC problems. Finally, both the students and the competition judges overwhelmingly recommended that this competition be continued next year for the next class of ChEPS students.

ACADEMIC POSTER PRESENTATIONS

Title: Technological Knowledge Sourcing, Knowledge Acquisition Types and Technological innovation capability in New Ventures

Presenter: Professor Chun-Yao Tseng Tunghai University (Taiwan)

Abstract: New venture is an important mechanism through which entrepreneurs use technology to bring new product, process, and ways of organizing into existence. Investigation of technological innovation capability is helpful understanding of new venture in a Schumpeterian perspective. This paper aims to examine the relationship between technological innovation capability and both technological knowledge sourcing as well as knowledge acquisition types in new ventures. Based on the analysis of patent and citation data from the U.S. Patents and Trademark Office (USPTO) during 2000â 2014, the empirical findings are observed as follows. First, technological innovation capability of semiconductor firms is not affected by their formation of time. Secondly, technological knowledge from patents has a positive effect on technological innovation capability, but the effect of technological knowledge from conference and journal paper on a firm's technological innovation capability is not significant. In addition, this study divides technological knowledge from patents into three sources and only in that technological knowledge from G8 countries' (Group of Eight Industrialized Nations) patents has significant positive influence on technological innovation capability. Finally, knowledge acquisition by collaborative innovation with other firms positively affects technological innovation capability in new venture, but knowledge acquisition by collaborative innovation with other inventors does not affect it. Furthermore, the effect of knowledge acquisition by collaborative innovation with G8 firms on technological innovation capability is significantly more than the effect of collaborative innovation with domestic or Non-G8 firms.

Title: The present situation and problems of internship in Seisen Jogakuin College : Focusing on student's reports for the past 8 years by text mining

Presenters: Professor Ruiko Takeda Seisen Jogakuin College (Japan), Professor Hirofumi Omori Seisen Jogakuin College (Japan), Professor Takuya Katase Seisen Jogakuin College (Japan) & Professor Nobuyuki Murata Seisen Jogakuin College (Japan)

Abstract: The purpose of this study is to clarify results of the internship program using text mining based on the self-evaluation reports of the students who participated in the internship program in the past 14 years in our college and is to investigate future curriculum improvement.

Specifically, we consider it based on three points of following analyses.

Firstly we will analyze it about "the type of industry" and association with "the business that students experienced" in future to develop a reference index when a student chooses a company.

Second we will focus on keywords expressing feelings by the description about their experience in the program and analyze a comparison in the difference at the time of summer vacation and the spring vacation.

Third we analyze what kind of influence a student came under in the workplace environment and a leader.

Through deeply looking at student's reports, and deciphering past documents, we think that we can make use in the following:

We can build on the hope of the student and a matching system of the appropriate training.

In looking back, students can deepen their understanding and commit to a meaningful impression, while we can utilize it to make our supervision better in the subsequent internship learning.

Through such internship improvement, we can let them deepen their meaning of the internship experience as they are only able to visit the workplace only once in the junior college life.

Title: Are the students growing in their activities searching for a job, shukatsu in Japan?

Presenter: Mr. Atsushi Igarashi Fukushima University (Japan)

Abstract: In the process of the transition from school to job, university students in Japan have several activities, what we call shukatsu, in order to get a job before graduation. The students are supposed to make an informal contract, naitei, with the firms which accept their application until they make a contract formally. We suppose that the student will grow according to such experiences through those activities because we tend to give more weight to sociality as a generalist than a job ability.

This study surveys the relations between students' self-growth and several factors. Self-growth motivation is defined as the force to develop oneself by him/herself. (Hayamizu, Nishida, and Sakayanagi 1994)

Participants are 519 seniors(228 males, 257 females). Measures are self-growth motivation, career maturity, and career decision-making self-efficacy.

Result: The students whose applications are accepted informally (S.A. n=291) gave higher mark in the measure of self-growth than the students whose applications are not accepted (S.N.A). They scored higher in the items of developing humanity, knowing about more things, and broadening their minds. For this self-growth, personality-growth and career decision making are the explanatory variables significantly and positively in S.N.A. In addition to this, in S.A., ability-growth is also the explanatory variable. Career concern in their maturity of both groups is the explanatory variable significantly but negatively.

We should investigate which is good for students or bad to have concern about their own lives and career high, and consider how we support those students.

Title: An Analysis on Issues of Internship Programs Using Study of Failure

Presenter: Dr. Toshinori Maruoka Nagoya Sangyo University (Japan)

Abstract In Japan internship program not as a part of recruitment activity but as a university education become socially important. Recently there were many reports of success cases of internship program but few reports of failure case were published. The purpose of this research is to clarify the issues of internship program as a university education by using the methodology of studies of failure by the questionnaire survey for failure cases of it in Chubu region of Japan. Moreover, it is able to derive the solution for failure of internship program through workshops for discussion about failure cases. 23 failure cases from 18 universities or colleges (response rate 78%) were summarized as 2 mandala figures of failure cases. The original mandala is a graphic in Buddhism representing their perspective. We held two workshops (total 37 participants of faculty member) on solution for failure of internship program. The main results show: 1) Practical and concrete issues of internship program were identified by failure cases of it. 2) Implicit knowledge of faculty members at internship program was actualized by workshops for failure cases. 3) The lack of advance guidance for internship program is a major problem of practice of internship. 4) The lack of communications between universities and companies is a major problem of internship program as a university education. To disclose and summarize failure cases of internship program is effective to improve the quality of them. We should continue to accumulate and discuss about failure cases of internship program.

Title: Reviewing the Role of the Teacher in Cooperative Education

Presenter: Ms. Nami Araki Sapporo University (Japan)

Abstract: The most important feature of our Co-op education programs is the concept of first-year education. We have a combination of programs that raise the human potential within the experiential learning process. It is important that teachers think about the meaning of their experiences and awareness through activities.

Title: Developing a Community of Learners through Collaborative Activities in the Work Integrated Learning Context

Presenters: Dr. Naoko Osada Ritsumeikan University (Japan) & Professor Ruiko Takeda Seisen Jogakuin College (Japan)

Abstract: This study discusses how to facilitate effective communication among learners in a work integrated learning context. Cooperation between the industry and academia for general education courses could be one of the most important career development programs in Japan. There are already a multitude of good practices that deploy PBL in the work integrated learning environment, as well as many reports that describe the improvement of the learners' performance. With this background information, this study focuses on the communication among learners which could be one of the critical factors for reaching the successful learning goal.

Osada & Morita (2014) consider the relationship between the company and the university as a social interface, and they indicate that there are uncertain interactions regarding the learning activities of students in that social interface. In order to organize this uncertain interaction they designed a collaborative learning activity based on a learning method, such as Jigsaw. Based on this research, we undertook the case studies with respect to the activity model. The first case concerns the class in the next year, the second case concerns the subsequent course given by another instructor, and the third case concerns the application of the class in a different institution.

Results show that well-designed collaborative activities could promote effective communication and reflection of learners. The students who attended more than one class pointed out the constructive link between the two classes. But there are also further considerations for exploitations in different contexts.

Title: Implementation of Career Focus Education Curriculum: A Case study of a South African University

Presenter: Dr. Busisiwe Gugu Ndawonde University of Venda (South Africa)

Abstract: This paper reports on the results of a case study on the implementation of career focused curriculum in five South African Universities. The aim was to find out how universities integrate career focused education in their curriculum. Data was collected through semi-structured, face-to-face interviews and direct observations with career focused education coordinators and managers. The results showed that there were programmes that were career focused in the institutions, that however differed from departments and faculties within the institutions. Issues of strategic planning, policies, and consistence in the way career focused education curriculum was implemented came out from the study. According to the guidelines for the implementation of Work-Integrated Learning (WIL) in South Africa's new qualification framework, universities should be career focused. That raised concerns on whether or not heterogeneity in the implementation of career focused education would results on career focused higher education institutions. For promotion of quality education, the authors of this paper are now working in partners with the universities coordinators from the institutions in order to share ideas on the successful implementation of career focused education. Hence, workshops are subsequently organised to deal with the matter of curriculum implementation of career focused education.

Title: Human resource development and entrepreneurship of engineers in the region for the recovery from seismic disaster in Tohoku area

Presenter: Dr. Yasuo Utsumi National Institute of Technology, Sendai Campus (Japan)

Abstract: Six technical colleges in Tohoku area including the stricken area have been developing the system of human resource development that could solve problems in response to short and long-term needs toward industrial revitalization and earthquake reconstruction in the affected region. the achievement will be shown.

Title: Workplace Cultural Learning using Augmented Reality and Computer Vision

Presenter: Professor Mau-Tsuen Yang National Dong Hwa University (Taiwan)

Abstract: Even though work-integrated education (WIE) can enhance students' professional competencies during their training in workplaces, many learners cannot afford the time and cost for an extended stay at off-campus locations. Alternatively, augmented reality (AR) technology can overlay virtual objects in the real world to create a feeling of immersion. Computer vision (CV) technology can recognize free-hand gestures from captured live images to enable intuitive interactions. The combination of AR-type immersion and CV-based interaction shows promise to popularize WIE. We explored the potential to simulate the experience of WIE by using the latest AR and CV technologies. Each learner wears a pair of mobile computing glasses with a head-mounted display and camera. Equipped with the capability of maneuvering virtual objects by using free-hand gestures, the proposed system can create immersive and interactive experiences for WIE learners.

Title: Virtual Sightseeing at Street Level for Contextualized Vocabulary Learning

Presenter: Professor Ya-Chun Shih National Dong Hwa University (Taiwan)

Abstract: Google Street View was incorporated into a 3D virtual environment known as VECAR (Virtual English Classroom Augment Reality), which is regarded as a promising authentic learning multi-user virtual environment, especially when a physical environment is not available. VECAR enables individuals to learn through participation in a community of practice, interacting and working collaboratively in real-world (i.e., street-view) situations while embodied as avatars which can interact with other avatars controlled by peers located remotely. Integrated (i.e., intentional and incidental teaching and learning) contextual curriculum approaches were implemented, along with the construction of a VECAR-themed New York City, to facilitate language learning. Recently, we undertook a qualitative case study in conjunction with time series design to show how vocabulary knowledge scores change through time and to explore the impact of using VECAR, through contextual guessing and doing, on graduate students' vocabulary acquisition and attitudes toward vocabulary learning in situational context. The Vocabulary Knowledge Scale (VKS) was used to assess the degree of vocabulary knowledge of sixty target words. The results revealed that large gains were evident in students' vocabulary acquisition and learning attitudes, and this program can be used to deepen learners' knowledge of target words and can lead to their higher motivation and positive attitudes toward vocabulary learning. The results and broader implications of the technology and curriculum we developed can provide a valuable reference for the designing of contextualized learning environments and curricula in the field of work-integrated learning.

Title: A Study of Applying Program Theory-Based Evaluation Approach to Evaluate Teacher professional Learning Community

Presenter: Professor Su-ching Lin National Changhua University of Education (Taiwan)

Abstract: The learning community (LC) is considered to enhance teacher professional development in various dimensions. This study used a program theory-based evaluation approach to evaluate teacher professional learning community. Five-hundred ninety-six teachers from 28 elementary schools and 129 secondary schools in Changhua County were randomly selected to fill out questionnaires. To ensure confidentiality, each questionnaire was completed anonymously. With a response rate of 81.87%, 471 teachers returned completed questionnaires, including 48 elementary school teachers and 10 secondary school teachers. Document analysis and interview were also used to collect data. Data analyses included both qualitative and quantitative methods. The results are as follows: 1) Program theory of teacher professional learning community was appropriate. 2) Implementation theory of teacher professional learning community was fulfilled. 3) Expected outcomes of teacher professional learning community were fine and had some difference. 4) There were gaps between the design and the implementation of teacher professional learning community programs. Based on the findings of this study, the study proposed some suggestions for educational authorities, schools, and future studies as well.