

# HCT INTERNATIONAL GENERAL EDUCATION CONFERENCE

Practice and Pedagogy in General Education



**05** Wednesday  
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HCT - Dubai Women's Campus



## ABSTRACT

### **A Liberating Game: the positive impact of using gamification and Liberating Structures in online university level writing courses.**

**JASMINA NAJJAR**

(American University of Sharjah)

#### **Abstract**

In Fall 2020-2021 and Spring 2020-2021 Jasmina Najjar conducted a best classroom practice trial on required general education university level writing courses (Academic Writing for all majors and Technical Communication for engineering majors) at the American University of Beirut. It involved using gamification and several different Liberating Structures (LS) in courses delivered fully online using the flipped classroom model and combining asynchronous and synchronous sessions.

This best classroom practice trial was created to address the instructional challenges of building a sense of community and human connection online, promoting inclusion, creating higher engagement, fostering key 21 st century skills such as collaboration, and making online courses effective learning experiences that meet CLOs while being entertaining yet reflective.

Effectiveness was mainly examined through indirect assessment via an informal anonymous survey of students halfway through the semester, a required course reflection all students had to submit on the last day of classes, and feedback from the anonymous Instructor Course Evaluation (ICE) administered by the university at the end of the semester. Direct assessment was also considered (observations based on work submitted, preparedness for class, and other factors).

The overall results were encouraging and favorable, showing evidence of improved student learning and engagement, critical thinking, creativity, contextual understanding, and communication skills. Results also indicated the successful creation of an inclusive and collaborative environment based on knowledge sharing, exchange, and even friendship.

## **A research into the influence of flipped class assessment preparation on college students' achievements in foreign language in one of the UAE colleges**

**HAYA RASHED ALNUAIMI**

(Higher Colleges of Technology)

### **Abstract**

Flipped classroom approach has been recently used in high education institutions in the UAE. The rationale of using the flipped classroom approach is to increase students' self-reliance and encourage them to take responsibility for their own learning. However, the flipped classroom has received some criticisms that argue that this approach does not fit different levels of students nor suits different learning styles. Hence, some teachers started to provide tutorials to help students comprehend the flipped class materials and help them prepare for tests. Therefore, this research aims to examine the influence of flipped classroom assessment preparation on EFL students' achievements in foreign language tests. The methodology used in conducting this research is empirical qualitative methodology. The data included in this research were primary, interviews with students, and secondary, including artefacts collected for analysis purposes. The targeted group were 15 students who took the professional communication and reporting course. Several findings were revealed by analysing the data. The first finding is that a flipped classroom approach does not suit all students' levels and learning styles. Additionally, when using flipped classroom approach in teaching foreign languages, it is vital to consider students' language proficiency which can be a barrier that prevents students from comprehending the information and negatively influences their achievement. The final finding is that assessment preparation sessions can influence students' grades and achievements positively. However, not all students benefited from the sessions due to different reasons that unfortunately were not revealed by the students.

## **An Evaluation of Remote Assessments Challenges during COVID-19 Pandemic in one of the UAE Government Colleges: A Cross-Sectional Study**

**SHAYMA EBRAHIM MOHAMMED ALAWADHI**

(Higher Colleges of Technology)

### **Abstract**

This cross-sectional research paper aims to evaluate the main challenges of remote assessments during COVID-19 in one of the UAE government colleges. The remote assessments challenges I am targeting in the papers are (1) academic honesty (2) technical issues and (3) measuring students' performance. I have conducted a questionnaire survey on 60 undergraduate students from different majors, we have also conducted a similar survey on 10 teachers by using simple random sampling. The results of the surveys are similar between teachers and students. Both groups agreed that remote assessments do not prove students' academic honesty, whereas face-to-face exams are better methods to test students' authentic knowledge. Additionally, participants believe that they had many technical difficulties during remote exams. Those technical issues included Wi-Fi issues, slow

internet and apps crash. The majority of the sample group confirmed that they received help from their college's online IT help desk, received spare laptops and granted makeup exams. Finally, teachers believe that remote assessments do not show students' real performance and they encouraged in-campus exams. Students felt mostly neutral to have exams in-campus to show their authentic work and knowledge which may indicate slight biases to remote exams.

## **An Exploratory Study on Academic Writing Challenges Chinese EFL Undergraduate Students Encounter at a Sino-foreign University**

**HONGJUAN YU AND PING YAN**

(Xi'an Jiaotong-Liverpool University)

### **Abstract**

It is essential for students to achieve a desired level of competence in academic writing in EMI undergraduate programs since their academic performance is severely subject to the quality of produced academic texts. However, Year 1 (Y1) students at Xi'an Jiaotong-Liverpool University (XJTLU) who lay their language foundation by taking EAP classes are observed to experience academic writing difficulties as they accommodate their existing writing knowledge to the conventions of academic writing at the tertiary level. Having adopted a questionnaire and focus-group interview, this study aims to investigate writing difficulties encountered by Y1 students among 48 participants. The findings are subdivided into four thematic sections: students' general attitudes towards academic writing, students' perceived difficulties of academic writing and students' adopted writing strategies. It is indicated that, despite the effectiveness and values of the current EAP teaching, overall, half of the participants still regard academic writing difficult. While these students experience various levels of difficulties in referencing, idea generation and development, organization, lexis and grammar use, they proactively take numerous writing strategies to tackle these barriers. Correspondingly, pedagogical implications will be provided for enhancing EAP teaching praxis.

## **Analysis of Arabic as a First Language Acquisition Syllabus Reform in one of the UAE Universities**

**FATEMA EBRAHIM AL AWADI**

(Higher Colleges of Technology)

### **Abstract**

Arabic as a first language: principal and pedagogy is a syllabus reformed in one of the UAE federal colleges as one of the Education program courses. A concentration on such as syllabus is formed as a result of own experience in the curriculum design and development filed. The main aim of the research is to evaluate and analyze Arabic as a first language syllabus reform. The research methodology implemented follows the theoretical method and the horizontal approach to evaluate the syllabus by using the CIPP curriculum evaluation model. This model entails the evaluation of context, input, process and product of the designed course. The syllabus evaluation revealed the achievement of the

three stated research objectives and drew some recommendations. The first result of the evaluation is that the syllabus is well designed and is matching its theoretical underpinning and approaches, so it helps to construct knowledge, designed according to student-centeredness tasks, implies Helda Taba's model of curriculum reform, progresses based on Bloom's Taxonomy and fits the context of higher education. At the same time and based on the CIPP model, it proves its effectiveness as a course in terms of skills building, application, assessments and evaluation. Some recommendations also resulted from the evaluation and responded to third research objective such as, adding further formative assessment weekly, reshaping the practicum tasks to fit the online practicum situation and involve students in curriculum planning. The study was concluded with some recommendations for future research which may consider using qualitative data to support the evidences of the syllabus appraisal. Another recommendation is to measure the impact of student's input, survey of course satisfaction and curriculum development meetings on the course change.

## **Assessing Professional Skills: Preparing Learners for a Careers in the 21st Century**

**DR. WASIF MINHAS AND TIMOTHY WHITE**

(Higher Colleges of Technology)

### **Abstract**

21st century skills are increasingly branded as the quintessential component of an individual's skillset and the foundations of success in an ever changing labor market. Education institutions are jostling to identify the best way to incorporate these skills in burgeoning curriculums that already include key components of Math, Literacy, and Science, and in some cases an additional language. Existing frameworks such as the Partnership for 21st Century Skills P21 (2006), the American Association of Colleges and Universities (2007), and the Organization for Economic Cooperation and Development (OECD) (2005), provide effective avenues to help facilitate 21st century skills in modern education institutions. And whilst these institutions have been quick to adopt and deliver the 21st century skills agenda, their ability to measure the effectiveness of their efforts has received less attention. This small scale study aims to explore and better understand how we can effectively measure 21st century skills. This initial study will employ a basic instrument that measures 21st century skills. By incorporating student and teacher feedback the study will lead to a better understanding how we can improve and best use the instrument. The study will be used as a launch pad for a larger, quantitative, international study in the future, which will seek to develop empirically proven constructs that can be generalized in the regional context.

## **Assessing Sustainability: An Empirical, Exploratory Study of UAE Schools**

**SANDRA L. KNUTESON, SANA SAYED, AND MARIE-FRANCE WAXIN**

(American University of Sharjah)

### **Abstract**

In line with Goal 4 of the UN's Sustainable Development Goals, the United Arab Emirates (UAE) Ministry of Education has strived to implement a sustainability focus into its educational institutions for more

than a decade. Sustainable schools bridge environmental education with community engagement, involve various stakeholders, and cultivate an environment of ongoing learning, growth, and development while using sustainable methods and infrastructure. However, there is a lack of research on sustainability implementation in schools across the UAE. Our research objectives are to examine the level of sustainability implementation in schools; the influence of school size, fee structure, profit system, and gender segregation on school sustainability implementation; and the main challenges and suggestions to implement sustainability successfully. This research adopts an exploratory qualitative and quantitative survey approach relying on sustainability-related staff's perception of management, infrastructure, operations, curriculum practices, and the challenges faced. 89% of respondents reported that their schools include sustainability within the strategic objectives, but levels of school sustainability behavior varied. Fewer than 50% of respondents reported schools having certain management practices such as sustainability competencies in hiring and training. Over 60% of respondents reported schools having energy, water and waste practices and sustainability related courses. This exploratory research contributes to the literature on sustainable education in schools in general and in the UAE in particular. The results of this study will help better understand and overcome the challenges related to integrating sustainability so that the schools in the UAE can design and implement key strategies that foster sustainability.

## **Association between growth mindset, students' gender, and academic performance of ADU freshmen students**

**MS. DEENAZ KANJI, MR. ANAND DWIVEDI, AND MR. WALEED IHSAN**

(Abu Dhabi University)

### **Abstract**

Academic success and students' performance are a function of multiple factors. The current study has explored the relationship between Abu Dhabi University's freshmen students' growth mindset, academic performance and gender. A total of 500 freshmen students participated in this study. Primary data using the Growth Mindset Instrument was collected from freshmen students of Abu Dhabi University between Fall 2022 and Spring 2022. Secondary statistical information included their grades measured as GPA. Quantitative analytical methods including correlation and Chi Square were employed using SPSS to analyze the association between growth mindset, academic performance, and gender. Result of the study revealed high correlation between female students and growth mindset. Female students, in general were found to have higher growth mindset. The study also revealed the existence of very high correlation between GPA and growth mindset. The implications of the study are profound as this study will enable instructors to align their pedagogy to develop students' growth mindset in a focused manner - this is likely to result in the enhancement of students' academic performance based on the high correlation found between these variables. The study will be of significant importance for academic policy makers, school leadership, teachers as well as students. Comprehensive set of recommendations based on the findings of this study have been proposed.

## **Bolstering Online Learning and Teaching in Mathematics**

**MONOGARAN NAIDOO**

(Higher Colleges of Technology)

**Abstract**

Choosing the right digital educational tools is essential to achieving successful outcomes in the delivery of an academic course. Elements to be considered in choosing a particular course include the ease of navigation, student interface, feedback mechanisms, assessment and grading options and the ability to integrate with various learning management systems. STEM courses present extra demands on requirements, especially Mathematics, where symbolic notation is key. It is not always easy to find mathematical education software where students are able to easily enter their responses in mathematical statements and where the system is robust enough to interpret acceptable variations in input, and successfully guide students where partially correct answers are given. We discuss the suitability of the BOLSTER platform in meeting the challenges of an online mathematical teaching and learning tool. Although initially designed to provide support to foundation students in mathematics, the platform has extended its support to courses in statistics, physics, chemistry, programming (Python) and advanced courses in mathematics. We review the data base of foundational material and courses and the ease of augmenting and tailoring courses according to specific needs. The ability of BOLSTER to generate unique assessments for each student through randomization and the use of proctoring tools is elaborated on, in considering its suitability in ensuring integrity requirements are met under examination conditions.

## **Brain-targeted Teaching: A Pedagogical Framework for the 21st Century**

**DR. HIEA MIZYED**

(Higher Colleges of Technology)

**Abstract**

Learn about surprising research findings on the implementation of the brain-targeted teaching model as a child-centered pedagogy, teachers' potential to shift pedagogy with training rooted in the socio-cognitive theory, and what we know about effective teaching and learning. Takeaways include new supports for teaching and learning that is grounded in cognitive science and is evidence-based. The study revealed that the BTT model provided participants with perceptions of change in child-centered pedagogical content knowledge. The findings showed that the BTT model was an effective pedagogical framework for knowledge building needed to apply child-centered instruction. Teachers' reflections and interview responses showed an increase in knowledge about the BTT pedagogy framework, including: (a) the importance of the socio-emotional climate, the physical environment and (b) the BTT as an interconnected model. Teachers also experienced increased knowledge of instructional strategies that foster development of problem-solving skills, including (a) the basic problem-solving process and (b) types of questions to ask children.

## **Comparative analysis of students' academic performance between intensive and regular semesters**

**ANAND DWIVEDI AND SMITHA DEV**

(Abu Dhabi University)

### **Abstract**

Many factors can impact the academic achievement of students at the university level. The present study attempted to examine the role of Regular and Intensive semesters on students' performance. Quantitative analytical strategies including Chi-Square and Two-Way ANOVA were adopted using SPSS. Secondary data was used for comparing the difference between students' performance in Regular and Intensive semesters. Statistical information related to their grades and marks in various courses was used in this study. The study did not find any statistically significant difference in students' academic achievement between regular and intensive semesters, therefore, the research team recommended the university consider offering general education courses in intensive mode, i.e. each general education course is taught in a period of 6 weeks, especially for part-time students. Keywords- Academic performance, academic achievement, regular semester, intensive, condensed semester, gender-based.

## **Developing Global Citizens through Educational Living Lab Experiments**

**PETRA JEFFERY**

(Higher Colleges of Technology)

### **Abstract**

The criticality of taking action toward the sustainable development goals (SDG) as 'the blueprint for peace and prosperity for people and the planet' is highlighted with the recent economic and societal developments. Our grand societal problems can only be solved through joined effort and quadruple helix collaboration between governments, academia, private sector and citizens. Today's educational agendas must reflect this paradigm change and accelerate the implementation of these goals by engaging and committing the next generation leaders to this shared agenda. SDG core values need to be integrated into graduate profiles, where the goals are diffused into program learning outcomes, and finally to the course content. In this chapter we discuss a best practice method for this integration, namely Living Lab methodology. Living labs are multi-disciplinary open innovation platforms where students work with companies and governments on real life challenges and projects. The SDGs are defined as the key themes for collaboration (e.g. no hunger) which each student group can address from their own discipline, e.g. mathematics, social studies or languages. Students are invited to innovate solutions and implementation paths in workshops or hackathons, and share their work with industry leaders for increased ambition and experience. Such experimental and immersive experiences lead to higher order learning and understanding of the underpinnings of the SDGs and their interconnectivity. This approach further develops students' 21st century skills and prepares them for employment as globally oriented, socially conscious and environmentally aware citizens.

## **Developing interpersonal and communication skills in the post-pandemic face-to-face classroom with Gen-Z learners**

**YASEMIN ALTAS**

(Higher Colleges of Technology)

### **Abstract**

During the course of the COVID-19 pandemic, the use of social media and computer technology increased exponentially, with students spending most of their time behind a screen rather than actually interacting face to face with each other. Classes were held online and although institutions used learning technologies that would enable interaction among participants online, the nearly 3 - month lockdown and serious isolation policies in the UAE over the last two years have created a highly isolated learning environment. This has led to a decrease in essential "human" skills that will be in high demand in the digital future. According to the report by Degreed named "State of Skills 2021: Endangered", the demand for social skills like communication, entrepreneurship, leadership, intercultural and interpersonal skills and cognitive skills like creativity or problem solving will be skyrocketing in the future; these skills are vital to building trust, engagement, collaboration, and tolerance in a highly diverse society such as the UAE. Lacking such skills can lead to difficulty in forming personal relations that will not only affect a student's private life but also future employment. With the ongoing decrease of competency in these skills, students may not have the proficiencies needed to land the positions they want and perform well. For the Gen-Z, the "digital natives" for whom technology is simply part of the fabric of everyday life and who mainly interact with each other via online through what's app, TikTok Snapchat applications , we need to establish a learning environment that enables the development of their social skills. The aim of this workshop is to discuss the difficulties faced in the post-pandemic classroom and suggest ways to make the classroom more Gen-Z friendly.

## **Developing or revisiting your teaching philosophy**

**MARIE-CLAUDE TORIIDA**

(Hanazono Univeristy)

### **Abstract**

A statement of teaching philosophy is a document that states a teacher's core beliefs about teaching and learning. While not all employers require one when applying for work, many do. Writing a teaching philosophy was time-consuming, but well worth the effort. The COVID-19 pandemic changed education as we know it. My teaching philosophy helped me stay focused while I navigated through emergency remote teaching. However, the experience of emergency remote teaching also made me reflect on how to better the face-to-face classroom experience. In this presentation, a brief description of what a statement of teaching philosophy is will first be given. Participants will then be presented with possible ideas for teaching philosophy statements and asked to add ideas to a Padlet wall. Participants will then engage in a small-group discussion by talking about one of their teaching beliefs and asked to give examples of how that exemplifies itself in their teaching. Finally, a few tips will be given to get you started on developing or revisiting your teaching philosophy.

## **Digital information literacy for the 21st Century**

**GAIL ALHAFIDH AND SHAIMAA SAKR**

(Higher Colleges of Technology)

**Abstract**

This paper is exploratory research aimed at gaining a better understanding of the alignment between the demands of the future job market and the competencies of students in terms of digital information literacy. A mixed-methods approach is used to gather both quantitative and qualitative data: student exit quiz grades from a 4-week digital literacy course as part of HCT's LSS 1113 Basic Research Skills course; Focus group data from teachers involved in the course and alumni testimonials through interview sessions. The results will help inform current and future practice in the teaching and learning of digital information literacy skills at HCT in the context of a rapidly changing future work environment.

## **Enhancing Student Motivation and Engagement in Business Statistics Via Instructional Technology**

**ALAWI A. AL-SAGGAF**

(King Fahd University of Petroleum and Minerals)

**Abstract**

The Covid-19 pandemic has brought problems and challenges to many sectors of our public life, including education. The pandemic forced teachers to develop a new way, teaching online and adapting instructional technology to a locked down world. On the other hand, today's generation of students has grown up with these technologies. To create an effective interactive classroom that meets the needs of the student, a modern teacher must utilize advanced technology to enhance a student's motivation and engagement. In Dammam Community College (DCC), the conventional chalk-and-talk and PowerPoint methods are still used, where there is an increasing demand for innovative teaching to provide flexible learning opportunities. These conventional classes of Business Statistics are known to cause lack of student motivation due to the mathematics content and computer software applications. In DCC, we developed an instructional technology which uses Tablet-PC and Online Learning Management System (OLMS). In this system, the instructor presents the lesson in an innovative way and the students can access the course material ease through the OLMS. The system provides online student-student and student-teacher interactive. Furthermore, one of the major challenges for the teacher to effectively monitor student progress, the developed system enables the teacher to online monitor student assignment, Lab activities, and online homework. This study focus on how the adaptation of instructional technology has been used to foster good teaching and effect learning for students in Business Statistics. This paper aims to result in the instructional technology used and its implementation in a boost in the intrinsic motivation of students in the Business Statistics. To test this hypothesis, two surveys were conducted. The first survey is used to determine the

level of students' satisfaction on how the used instructional technology affects their learning and the second survey is used to identify the DCC instructor's perception towards the usage of the instructional technology. Results of this study revealed that students' attitudes are more convenience during the lectures, the students have positive perceptions that the instructional technology provides availability and easy to access of course materials, and the instructional technology provide effective communication among the students and between the students and the instructor. For instructor's survey, the result found that the instructors in DCC have positive perceptions that the instructional technology can enhance their teaching practices and students' performance. In addition, the analysis found that instructors of the DCC recommended providing more training for instructors to sharpen their teaching skills by utilizing the instructional technology.

## **Excellence in Digital Learning through Intelligent Technologies**

**DR. VISHWESH LAXMIKANT AKRE AND DR. HESHAM ALLAM**

(Higher Colleges of Technology)

### **Abstract**

Digital education is the innovative use of digital tools and technologies during teaching and learning, and is often referred to as Technology Enhanced Learning. The technologies and practices that have developed over the last decade have been heralded as opportunities to transform both online and traditional education systems. For educational organizations, digital adoption can help institutions become more competitive. In the wake of the pandemic, people have begun to realize the far-reaching power of education-driven technology. Artificial intelligence (AI) has led to a generation of intelligent technologies in education. Artificial intelligence (AI) allows teachers to create content that suits their students best while ensuring personalized learning. AI has tremendous potential to help students achieve the goal of knowledge seeking by helping in streamlining the education process. AI could make significant and positive impact on students by providing access to the right courses, improving communication with teachers, self-assessing their skills and leveraging social tools for knowledge sharing with their peers. This research aims to present student perspectives on various facets of Digital Education and application of Intelligent Technologies to deliver and receive Digital Education in a professional manner.

## **Going Global in the Time of Corona: HCT-SAIT Student Mobility Pilot**

**DR. BHARTI PANDYA AND DR. MARKO SAVIC**

(Higher Colleges of Technology)

### **Abstract**

The concept of international exchange of students, in person or virtually, is in existence for several decades. The literature on exchange programs is available in abundance discussing its benefits

and challenges for the students, faculty and higher education institutions. However, most of these students' exchange programs were geared towards the mobility of students for language curriculum and predominately limits the scope to European and American contexts. The seminal work of O'Dowd (2021) reviewed 345 portfolios and noted that the geographical locations for exchanges were limited to western countries including UK, USA, France, Sweden, Finland, Poland, Ireland and Israel. There is a dearth of scholarly work on the international exchange of students between Middle Eastern Countries and Western countries. Furthermore, the process from conception to completion of an exchange program reflecting the benefits and challenges from faculty and students' perspectives is not readily available. The purpose of this white paper is to share the process adopted by the Higher Colleges of Technology and Southern Alberta Institute of Technology to pilot their first successful virtual student exchange, using the collaborative online international learning approach. The paper also highlighted the challenges faced during the pilot, strategies adopted to mitigate the challenges and benefits of the exchange program to the faculty and students. Paraphrasing Gabriel García Márquez' "Love in the Time of Cholera" in the title of this paper, authors want to emphasize the context in which this experience took place – both as an obstacle and as an opportunity.

## **Growing a Paradigm Shift through the Empowerment of Young Minds – The First Global Sustainability and Climate Change Program within Education**

**DR. RICHARD MOTTERSHEAD**

Ras Al Khaimah Medical and Health Sciences University

**MR. MARK DOUGLAS**

CEO and Creator of Our Classroom Climate, UK.

### **Abstract**

The 21st Century has seen an immediate need to address concerns towards climate, biodiversity and pollution emergencies in order to manage the Earth's finite capacity to sustain human well-being and life. The authors believe that human knowledge, technology and ingenuity can transform society through an internationally aligned sustainability education program.

The initiative is entitled Our Classroom Climate (OCC) and is currently the largest climate change education program undertaken in the United Kingdom (UK). The Program utilizes specially designed technology to create a learning package that allows the students to engage with their environments to learn, analyze and impact change to meet climate goals. This school-based initiative uses space station science to capture carbon directly from the classroom. This feature will allow a UK national football team to have their carbon footprint offset by 200 participating schools for their participation in the 2022 Football World Cup, hosted by Qatar. This is the Worlds' first carbon capture initiative supported in this case by 200 schools. This academic year will see participation rise from 200 to 1500 schools and colleges with support and investment from the diverse sectors of Higher Education, Industry and even a well-known Hollywood actor.

Moving forward, the project has undergone a curriculum rewrite for the United Arab Emirates (UAE) education sector so that collaboratively the program captures the imagination of the next generation of UAE scientists by providing a package of digital lessons, teacher resources and experiments to meet the agenda for sustainability and wider health and wellbeing needs of our young people.

His Highness Sheikh Zayed bin Sultan Al Nahyan (may God have mercy upon him) wrote:

“Future generations will be living in a world that is very different from that to which we are accustomed. It is essential that we prepare ourselves and our children for that new world.”

This wisdom illuminates the pedagogical evidence base of the program through a ‘learning by doing’ philosophy based within grass-roots classroom engagement creating a self-awareness as students to affect change.

## **How did the DUCK get to the boardroom? Up skilling Higher Education students by sharing management innovation leadership entrepreneurship (SMILE) skills using Lego Serious Play® (LSP)**

**SUSAN CARTER**

(Higher Colleges of Technology)

### **Abstract**

As we continue to build on upskilling students through a variety of typical normal methods of teaching using proven techniques. The future economic growth is leading towards the fourth Industrial Revolution. Higher Education students need to be equipped with an advanced skill portfolio. The future learning of a workforce that has a work orientated growth mindset will enable them to continue lifelong learning within professional skills. This is needed to keep up with the labour market requirements and future economic growth.

This paper presents a journey to discover new learning methods, with the objective of harnessing the opportunity of improving the process by measuring the changes of behavior of the students. The learning environment will apply the LEGO® SERIOUS PLAY® (LSP) methodology to enhance the quality of the learning process which can lead us to facilitate among others communication, creativity, innovation, ethics and shared mental models leading to improved future foresights.

Increasing awareness and growth individually and in teams. The ecosystem with LSP will lead to increased homegrown entrepreneur upskilled to take on the futures changing economic environment.

The duck can influence the potential of future company's, startups and individuals. Let's all follow the (DUCK) Discover, Understand, Creativity and knowledge towards the boardroom injecting our own influence in the growth in the economy.

## **Implementing Dialogic Interactions in a Second Language Writing Classroom**

**Ji Young Shim**

(American University of Sharjah)

**Jinyoung Lee**

(Seoul National University of Science and Technology)

**Hadeel Al Rahal**

(American University of Sharjah)

### **Abstract**

The sudden outbreak of COVID-19 has changed the world, not to mention the method of teaching and learning. Various online platforms were adopted and the nature of teacher-student interactions has changed accordingly. This paper examines different types of interactions between a teacher and students, especially focusing on dialogic interactions in a university's L2 English writing classroom. Drawing on Bakhtin's (1981) dialogism, the study compares teacher – student interactions in two different environments: an online platform and a face-to-face writing conference. While all the students received written feedback from the

teacher via online platforms such as Google Doc and Blackboard, they differentiated themselves in following interactions with the teacher. The first group was engaged online with the teacher, the second group had a face to face interaction with the teacher, and the third group did not follow any of the dialogic interactions. The results show that the students who were engaged in a dialogic interaction with the teacher either online or offline/face-to-face improved their writing skills significantly compared to those who did not participate in a dialogic interaction, which confirms the importance of active interaction between the teacher and students. However, there were differences between online and face-to-face interactions as to the degree of meaning negotiations. The findings of the study sheds light on the importance of interactions and collaboration between the teacher and the students, which can be achieved via various ways such as online and offline methods.

## **Including all students in writing activities**

**JOHN CARGILL**

(Higher Colleges of Technology)

### **Abstract**

Many students often do not contribute fully to the Writing process, for a variety of reasons, allowing other students to complete writing tasks in the classroom. I will show one method for including all students in the writing process, whereby all the students in the class will have all contributed to the final product. This involves pre-teaching of main areas of structure, grammar, and vocabulary in

preparation for the writing process. By the end of the lesson, all students will have had the opportunity to contribute to the final product, which can be used for evaluation and remedial opportunities by all the students and the teacher.

## **Inclusive Teaching in Higher Education: An introduction to the challenges of students with SEND**

**ALYSON MAI GIBBONS MENZIES**

(Higher Colleges of Technology)

### **Abstract**

For almost two decades the UAE Ministry of Education has been a staunch advocate for inclusive education in all schools. However, although literature on inclusive practices has been scarce in higher education, new studies are gradually emerging. It is therefore essential that current policy guidelines are updated in accordance with these new recommendations to ensure the UAE continues to take a lead.

Although educators at HCT may be aware of the different groups of SEND, what they may not understand and appreciate is the challenges that many students face in our classrooms.

This workshop is designed to bring awareness of the diversity of SEND students in higher education, and the unique challenges they face. This will be followed by presenting some examples of small non time-consuming differences teachers can make to better support their SEND students.

The workshop will open by simulating some of the main disabilities to give the audience a unique insight into the difficulties and challenges SEND students face. For each SEND group, tips and advice would be offered to show how support can be given with minimal disruption, time consumption or unnecessary exposure of a student's disabilities.

If future General Studies conferences are to be scheduled, it is recommended that presentations continue the theme of teacher support for SEND students. This would ensure a truly inclusive teaching environment is maintained. Importantly, since very few students with SEND in higher education graduate, it would better comply with HCT's focus on preparing all its students for successful employment.

## **Integrating interview skills into General Education studies**

**ALMA PIRIC MESIC**

(Higher Colleges of Technology)

### **Abstract**

As the job market is changing, one thing remains the same – we still have to go through a job interview. In order to help students prepare for the real world, the General Education division has added this important employability skill to the capstone project. Students are learning about and practicing their interview skills. At the end of the semester, they go through a mock interview, and then are assessed on

their skills. The mock interview allows the students to better prepare for the assessment by practicing their answers, but also by using the scoring rubric to evaluate their peers. This paper will describe the steps the students take to prepare for the mock interview and the assessment.

## **Integration of UN Sustainable Development Goals within multiple pre-existing higher education programmes**

**Stephen King**

(Middlesex University, Dubai)

### **Abstract**

SDG: 4.7

This session will present a case analysis of how the UN Sustainable Development Goals have been integrated successfully into multiple, pre-existing, Grade 4, higher education programmes at an institution in Dubai. The session leader will share experiences from following a constructivist pedagogy with significant project-based learning elements. This session will also demonstrate how SDGs have been integrated into summative assessments across two different modules between September 2015 and April 2020. Evidence and examples of success based on the criteria of the Higher Education Academy of the UK (reach, value and impact) will be presented as well as the tools that were specially developed or adapted to support the delivery of learning content.

A critical analysis of related literature will also be shared, including Education for Sustainable for Development (ESD) and Environmental Education (EE), and recent changes to the Times Higher Education rankings to include the UN's Sustainable Development Goals as a criteria by which students may select their higher education learning experience.

## **IXL.com for learning**

**Josh Norman (Shokei University, Japan)**

### **Abstract**

IXL.com is a worldwide online website for learning academic subjects such as English, math, science, etc. Licenses can be purchased for individual students or school groups and there are different international editions to fit the educational curriculum of each country. According to the website, it is currently used by 1 out of 9 students in the United States to supplement school learning or for the purpose of homeschooling. In this workshop, the presenter will first explain how IXL was incorporated into his mandatory English grammar classes for both 1st-year and 2nd-year students at his university in Japan, including a thorough demonstration of the website. The presenter has noticed that compared with his ordinary (i.e., non-computer based) English classes, a lot more new vocabulary and grammar patterns have been able to be introduced through the practicing of the different types of skills found on the website. In addition, allowing students to take more control over their learning, including the

skill level and pace at which they proceed, has led to a notable increase in student engagement both in class and out. Although IXL can be used for any skill level of English student, its beginner-level phonics skills can be especially of use in helping students with their pronunciation. This is true for not only university students, but younger children as well.

## **Learning Disrupted: Impact of Virtual Labs on Health Sciences Students' Performance During COVID-19 Pandemic**

**BEIDAN MUSSA, ADAM MAHMOUD KHRAISAT,**

**RONNIE DUMALE AND LAI KOK SONG**

(Higher Colleges of Technology)

### **Abstract**

The COVID-19 pandemic presented challenges that catalyzed innovation in teaching and learning (T&L). A switch to online T&L for students became an effective measure to counteract the risk of spreading disease. However, the impact and value of these online adaptive methods requires further examination. In particular, hands-on practical skills labs are vital to T&L of health sciences students. This presentation will report on the findings of the impact of virtual labs on student performance in health sciences during the COVID-19 pandemic. These findings are essential to gain a better understanding of the benefits or drawbacks of virtual labs. In addition, this study helps to improve future directions in health science T&L.

## **Looking back and looking forward: Reflections on an action research project among university faculty**

**RASHITA PUTHIYA, CONCHITA FONSECA,**

**PHILIP ANDERSON, AND LYNDA HYLAND**

(Middlesex University Dubai)

### **Abstract**

This presentation documents our experiences as a cross-disciplinary research team conducting a multi-method, longitudinal study. The project sought to explore the use of educational technology by higher education faculty in the hybrid learning environment. It had its genesis in our own lived experiences as educators who were moving into hybrid mode following the distance learning period. Returning to the classroom, albeit in a hybrid form, would bring new challenges and opportunities. One central question was whether educational technologies still had a place in this environment. Designing the research to tap into potentially shifting perceptions of faculty from several different disciplines suggested the need for a longitudinal, qualitative approach. It was challenging to figure out how to

collect longitudinal data from colleagues without overburdening them. We designed pre- and post-implementation focus group discussions, which provided unique insights into faculty motivations for experimenting with education technologies and perceptions regarding their continued role in the hybrid environment. Additionally, faculty (n = 25) reflected on their use of these technologies over an eight-week period. The first two phases of this study concluded earlier this year, and we are now preparing to collect 12-month follow-up data with participants. Throughout the research process, we learned much about the practicalities of conducting action research with colleagues. In this presentation, we will share the highs and the lows, some early outcomes, and the unexpected benefits of working on this project.

## **Manifestations of digital poverty identified during the Covid-19 pandemic and predicted impacts to quality of learning**

**STEPHEN KING AND ADITI BHATIA**

(Middlesex University Dubai)

### **Abstract**

The translation of communication from offline to online, during the COVID-19 pandemic, brought about a seismic shift in the representation of individuals and their environments, notably, in the field of education. A multinational qualitative study including 31 participants residing in various parts of the world, was undertaken to identify the emergent themes in digital communication in professional and educational settings. Photo-elicitation interviews were conducted online and latent, abductive content analysis and thematic analysis revealed major themes supported by Ragnedda's theories of digital capital including: Virtual Privilege (translation of privilege to online environments); Virtual Identity as a Performance (authenticity of self-presentation online), and Digital Spaces (security, privacy and logistical concerns). Findings suggest the exacerbation of the digital divide between students from varying socio-economic backgrounds and resulting differences in self-presentation. The implications for learning environment design and student engagement are further highlighted.

## **Mentoring students for a 21st Century workforce**

**Gail AlHafidh, Katrina Kinsella, and Elizabeth Cobacho**

(Higher Colleges of Technology)

### **Abstract**

This paper explores the vital role that college mentors can play in the development of 21st Century skills for undergraduate students. Currently, given the rapid pace of change in the workplace, it is critical that students graduating in the next few years are enabled and empowered to engage successfully with the demands of the job market and meet the needs of the country's transition to an innovation-based knowledge economy. Educators are now focused on developing program curricula that also stimulate

critical thinking, creativity, innovation, digital literacy and strong communication skills. Alongside the curriculum drive, mentors can provide a highly effective support network to generate opportunities for the application of these transferable skills and inspire a growth mindset in the students. Two particularly successful examples of interdisciplinary, cross-curricular mentoring are showcased in this paper: i) coaching presentation skills for the nationwide Innovation Ibtikar competition; ii) delegate coaching for an M.U.N (Model United Nations) simulation conference. Student mentees will reflect on how participation and engagement in these activities, inspired by their mentors, positively impacted them and equipped them with an armoury of 21st Century skills.

## **Online learning habits and engagement of male Emirati students: exploratory study**

**DR. LARYSA NIKOLAYEVA**

(Zayed University)

### **Abstract**

Current study aims to identify online learner-content interaction style of Emirati students under the circumstances of online studies happening in course of unforeseen events. This investigation would help improve learning experience and academic success of Arab students in online media of instruction where online studies is the only option available. Exploring students' behavior in the digital learning world is a way to improve teaching and learning experiences. Investigating learners' engagement with online resources throughout the semester gives teachers an opportunity to enhance the quality of materials, explore ways of increasing participation, identify struggling students, and provide individual support to those who require it (Soffer, Kahan and Nachmias 2019, 205; de Almeida Neto and Castro 2017, 4; Al Meajel and Sharadgah 2018, 352). The data were collected during the period of Spring semester 2021 affected by COVID-19 pandemic. The information on students' behavior was retrieved through Blackboard course reports. Analysis results enabled discovery of Emirati students' behavior patterns in an online learning environment and their content type preferences; it helped identify students struggling with learning, take decisions on content amendment, and see the correlation between the level of their online activity and final course grades.

## **Reduce Academic Fatigue and Enhance Retention for the Determined Ones (TDOs) in Online Learning**

**DR JACQUI LOTTIN**

(Higher Colleges of Technology)

### **Abstract**

The COVID-19 Pandemic had a remarkable influence on peoples' daily activities worldwide. The sudden transition from on-campus to distance learning caused by the pandemic left students and

educators with restricted time to prepare for such a massive switch in teaching and learning. This impacted more on students with a variety of disabilities (TDO), because their standard routines were ditched, leading to uneasiness and stress.

The study adopted a qualitative approach with the purpose of determining effective strategies for online learning, engage directly with TDO students, implement a support program to meet student needs and enhance online learning and teaching experiences, to reduce academic fatigue and improve retention. The research tools included semi-structured interviews, observations and document analysis. Four themes were derived from the findings, including a lack of training for students and staff, standardization of TDO identification procedures, limited use of the technology and online tools by students and staff and a lack of time.

By the spring of 2021, data was collected that revealed a reduction in academic fatigue with shorter class times and retention figures improved from the increased use of technology tools that facilitated high student engagement, e.g. Nearpod, Padlet, Kahoot, WebQuest, Quizzies. The recommendations were to create a TDO Support Hub on Campus to serve TDO students, expand the use of assistive learning technology, such as, audio books, desktop magnifying screen, supernova software as a critical factor. Also, to offer a more personalized curriculum and deliver training to staff and students on the online/hybrid approach.

## **SDGs and EAP – a sustainable partnership?**

**Laura McNabb**

(Xian Jiaotong-Liverpool University)

### **Abstract**

Incorporating the Sustainable Development Goals into teaching curriculum allows teachers to mine material from many different angles while expanding students' awareness and understanding of key topics in the global society. The challenge as a teacher is to design and present learning activities like projects and inquiries that engage students rather than overwhelm them and inspire these students to incorporate their learning into the fuller scope of their lives. While the SDGs are readily available online, they are not always accessible to students due to language barriers. Along with vocabulary, EAP language lessons centered on decoding messages and target audience awareness can help to comprehend data-dense text. The goals can also seem distant to students, and learning activities are one method to facilitate student realization of their own agency and thereby help make a change, both locally or globally. Students start to view their English language learning for communicative purposes rather than merely assessment progress. This presentation will introduce a handful of different learning activities used in the EAP classroom that can be adapted for other subject majors. In the Vygotskian manner of social learning, the activities were designed to facilitate a space for partnership between students as well as students and teachers and students and the wider community. Analysis of these learning activities reveals which activities were more successful as well as where expectations fell short and could be improved upon.

## Situating the SAMR Model

### Dr Richard Stanley Peel (Westford University College)

#### Abstract

The SAMR Model (Puentedura, 2010) tracks the adoption of technology into pedagogy: from merely a substitute for the earlier medium (a textbook for example), to increased functionality, then pedagogic change, and finally a different learning model which could not have been done without the new technology. It consists of the following four classifications of technology use for learning activities, with a continuum from mere substitution to redefining the learning experience:

- Substitution: The technology provides a substitute for other learning activities without functional change.
- Augmentation: The technology provides a substitute for other learning activities but with functional improvements.
- Modification: The technology allows the learning activity to be redesigned.
- Redefinition: The technology allows for the creation of tasks that could not have been done without the use of the technology.

The SAMR Model remains a useful tool for measuring the level and efficacy of technological integration in pedagogy, and is widely used globally. Here in the UAE, it has also been used to measure the adoption of technology into pedagogy. The 2012 launch of the iPad in public universities here—the biggest iPad initiative in the world at university level—was one such example.

However, it is important to note the SAMR model has also been critiqued for several reasons, such as prescribing over-simplified hierarchical categories for pedagogy. This presentation intends to examine the model in a nuanced way in terms of its applicability, and will consider both its merits and the views of some of its critics.

## Stakeholder experiences of an integrated curriculum in a foundation programme

### ANDREW MACKENZIE, RORY MCCONNON, AND LYNDA HYLAND

(Middlesex University Dubai)

#### Abstract

Students in specialized university transition (foundation) programmes may benefit from exposure to discipline-specific content (Stohlmann et al., 2012). An integrated curriculum tangibly introduces subjects that will later be studied at a more advanced level. It can allow early and meaningful

connections to develop for students; an early focus on discipline-specific content may also benefit educators (Zhou et al., 2017). This research focuses on an integrated curriculum in a foundation programme's 'sustainability-themed' module. Students registered for the module were introduced to various activities designed around the module theme, integrating theory and practice. This exploratory qualitative research aims to assess the perceived effectiveness of this module, as evidenced by student and faculty experiences. The researchers conducted semi-structured interviews with 19 foundation programme students representing a typical cohort (i.e., students from a range of grade brackets) and seven faculty. Thematic analysis was used to identify key themes across stakeholders. This presentation will share some of the main findings, discuss the implications of early exposure to an integrated curriculum, and the importance of researching our own educational practice.

## **Student partnership in development of teaching resources and its impact on student learning**

**DR. ANITA DANI AND WAHIDA DASTAKEER**

(Higher Colleges of Technology)

### **Abstract**

Dialogic practices facilitate unfolding of abstract concepts through a two-way dialogue between a student and a teacher. These are central to most pedagogical practices in mathematics classrooms. In the blended learning environment, interactive videos are provided as teaching materials for flipped learning. It is important that these videos provide maximum learning experience for the students as many students refer to them for reinforcement of understanding. Videos do not provide an opportunity for learners to ask a question as they would ask in a face-to-face session. One possible alternative is to introduce dialogic approach in developing these videos.

This paper reports finding of a pilot study which explored use of this dialogic approach in development of video lessons. Four video lessons were developed for the 'Applied mathematics fundamentals' course. Fundamental concepts of number system, algebraic expressions were explained in the form of a dialogue between a teacher and a student. Research assistant students played the role of a novice student and posed typical questions or misconception to the teacher.

These videos were assessed by students who have passed the chosen course. A convenient sample of eight students was chosen to participate in the interviews to assess these videos. Analysis of this interview data revealed that students liked the videos made using dialogic approach. Research has shown effectiveness of scaffolding provided through dialogic inquiry in face-to-face sessions. Our aim is to stimulate similar scaffolding approach in virtual lessons as well. Effectiveness of these resources will be examined after integrating them in curriculum.

## **“Tender Narrations”: Humanities Education in Times of Crisis**

**PAUL ALMONTE**

(American University of Sharjah)

**DARIA SMIRNOVA**

(University of South Carolina)

**OLEKSANDRA SMOLIAR**

(LCC International University)

### **Abstract**

In her 2018 Nobel Prize lecture, Olga Tokarczuk emphasizes the “massive significance” of storytelling as a means to “perceive the similarities and sameness” among people. Seeking “metaphors that transcend cultural differences,” Tokarczuk looks to build “tender” relationships between herself and her readers. “It is a way of looking,” she says, “that shows the world as [...] interconnected.” This principle of connection defines for us the value of Humanities education, especially now when social isolation and political fracture is so prevalent. The past two years have seen undergraduates experience disruption or witness one catastrophe after another. Even in calmer times, incoming students often lack the means to describe their feelings while negotiating new academic and social experiences. COVID-enforced isolation has exacerbated this problem as social media often offers only superficial forms of expression. Students’ vocabularies—the words, images, and ideas they use—are shrinking. The polemic extremes of our political discourse has narrowed conversation even further. As part of the discussion of the role Humanities education, especially core curriculum programming, has in university studies, our focus is on how storytelling can help students find their own voice while also engaging the perspectives and experiences of others. We propose to discuss our efforts—some successful, some less so—in engaging our students, in helping them express themselves and participate in important post-COVID societal conversations.

## **The Doctoral Journey**

**DIANA JOHNSTON**

(Emirates Global Aluminum)

**ANDREW JOHNSTON**

(Higher Colleges of Technology)

### **Abstract**

We are educators with over 70 years combined teaching experience. We both started as early childhood teachers and have worked up through the grades to teaching tertiary level students and adults in the workplace setting. Our educational learning path has now reached the pinnacle whereby we are two thirds the way through our own doctoral journey. It has meant a lot of sacrifices over the last 4 and a half years. For that reason, this workshop is an invitation to anyone who already has a

doctoral degree, is studying for a doctoral degree course and planning to start a doctoral course. The session will focus on a discussion about the success, challenges, and tips for studying at the doctoral level. The challenges will look at the emotional roller coaster, physical challenges, and resources needed during the study period.

## **The Future Trends in Teaching and Learning: Employability and Skills Driven Curriculum**

**DR. LANA HIASAT, DR. FAOUZI BOUSLAMA, AND DR. CHRISTINE COOMBE**  
(Higher Colleges of Technology)

### **Abstract**

Presently, many organizations are in a phase of a major transformation to streamline their businesses and improve productivity which was brought about by technologies such as Artificial Intelligence (AI), Machine Learning, and Smart Automation. Several existing job roles are being redefined and many young professionals in non-supervisory roles are at risk of losing their jobs. These organizations are now more than ever keen on identifying the required knowledge, attributes, and skill set, and links between personality traits and professional success. This transformation requires an urgent need to address the gap in knowledge and skills and identify the jobs to be retained in the current and future workforce to create plans that would close any skills gap. The presenters will introduce an innovative Emotional Intelligence (E.I.) based human skills framework to assess and map university graduates and young professionals into typical career tracks and hence create a sustainable professional profile in the post-COVID-19 era. We will showcase how the proposed framework is integrated into the General Education curriculum and the activities we developed. The proposed framework, entitled the "Career Profile of the Future Framework-CPFF", has four dimensions: Knowledge, Attitude and Mindset, Skills, and Human attributes. This framework is expected to be a valuable asset in assessing the knowledge and skills of university graduates and young professionals, and helping in finding answers to questions such as "How can I stay relevant, given that automation and AI can do the tasks related to my job?"; "What reskilling and upskilling in existing and new employment sectors do I need?", and "How can I identify the requirements to synergize my E.I profile while catering to my mental health balance?".

## **The Historical Emergence, Current Structure, and Future Direction of Higher Education in the UAE**

**ROBERT M. BRIDI AND NAEEMA ALHOSANI**  
(United Arab Emirates University)

### **Abstract**

The purpose of the paper is to investigate the development of higher education in the United Arab Emirates (UAE) with an eye toward identifying challenges and making recommendations. The

primary research question is to what extent has the development of higher education in the UAE been the result of interrelated socio-cultural, economic, and political factors? The objectives are to examine the integration of Western-based higher education in the UAE more generally and Arab culture more specifically, and to appraise the effectiveness of higher education in addressing the UAE's knowledge-based economy. An extensive research design was employed to identify journal and news articles, government documents, and international reports on higher education in the UAE. The findings demonstrate: first, the UAE government has sought to stimulate scientific progress through the development of higher education as part of a strategy to meet labor demands and economic development. Second, the intermingling of Western-based higher education with Islamic traditions and the introduction of English as the medium of instruction has in some cases led to the polarization of the cultural identities of Arab students. Third, while Western-based education has led to the liberation and empowerment of Emirati women, some have expressed concern about a lack of cultural relevance to women's social roles. Fourth, the preference among Emiratis for employment in government has resulted in a lacuna of Emiratis in the private sector. Higher education reforms are required that train students to meet the challenges posed by a dynamic market economy.

## **The Impact of Online Learning Strategies on Students' Academic Performance**

**KHALED HAMDAN**

(United Arab Emirates University)

### **Abstract**

Higher education institutions have shifted from traditional face to face to online teaching due to Corona virus pandemic which has forced both teachers and students to be put in a compulsory lockdown. However the online teaching/learning constitutes a serious challenge that both university teachers and students have to face, as it necessarily requires the adoption of different new teaching/ learning strategies to attain effective academic outcomes, imposing a virtual learning world which involves from the students' part an online access to lectures and information, and on the teacher's side the adoption of a new teaching approach to deliver the curriculum content, new means of evaluation of students' personal skills and learning experience. This chapter explores and assesses the online teaching and learning impact on students' academic achievement, encompassing the passing in review the adoption of students' research strategies, the focus of the students' main source of information viz library online consultation and the collaboration with their peers. To reach this end, descriptive and parametric analyses are conducted in order to identify the impact of these new factors on students' academic performance. The findings of the study show that to what extent the students' online learning has or has not led to any remarkable improvements in the students' academic achievements and, whether or not, to any substantial changes in their e-learning competence.

## **The Inclusion of Artificial Intelligence, Machine Learning, and Block-Chain Curriculum Content in Most Academic Programs of Higher Education Institutions**

**DR. JUAN DEMPERE AND DR. PEDRO FLORES**

(Higher Colleges of Technology)

### **Abstract**

The proposed chapter evaluates the current need for Artificial Intelligence (AI), Machine Learning (ML), and Block Chain (BC) curriculum content in most academic programs of Higher Education Institutions (HEI). The chapter will overview the best curriculum practices and trends based on an exhaustive literature review. The inclusion of AI, ML, and BC-related content in the curriculum of most majors offered by HEIs worldwide will determine their survival over the long term. These technological innovations have evolved quickly, so most universities have not included them in their academic curricula nowadays. The chapter will help faculty incorporate AI, ML, and BC principles, concepts, and tools in their existing courses to equip their students with the skills and knowledge they will need after graduation to compete successfully in the Industry's 4.0 (I4) job market. Examples of academic majors demanding these competencies include elementary education (Williams, Park, Oh, and Breazeal, 2019), medical sciences (Sit, Srinivasan, Amlani, et al., 2020), modern languages (Bin and Mandal, 2019), accounting and finance (Kokina and Devenport, 2017), etcetera. The current teaching and training programs analyzed in the chapter will include Sony Global Education, APPII, GradBase, TEduChain, EduCTX, BADGR, Mozilla Open Badge, etcetera.

## **The Intersections of English-Language Proficiency, Use of Technology and Teaching and Learning Math in Undergraduate Courses in the UAE**

**NATALIIA BORYSENKO, CORNE LOTTER, AND**

**PANAGIOTIS PAPADOPOULOS**

(Higher Colleges of Technology)

### **Abstract**

There is an undeniable link between language proficiency and mathematical performance. Research also indicates that the use of technology in instruction benefits both math and language learners. In institutions such as ours in the UAE, the medium of instruction is English, which poses a further layer of complexity in learning math skills. How can math teachers overcome these difficulties? Previous research indicated that explicit vocabulary instruction, mnemonic strategies, and gamification strategies, including technology, were proven effective in overcoming poor math performance in the math classroom. We interviewed an experienced mathematician who shed light on strategies to help students to overcome their math phobia and predisposed negative connotations to math as a science. We assume that technology, strategic use of explicit language teaching, storytelling, and

gamification will increase student motivation and performance in math. Furthermore, mathematical instruction should move from scientific pedagogy from facts and specific principles to a language-focused, technology-infused pedagogy to support students whose first language is not English. We conclude that there is a paucity of research on interdisciplinary approaches to teaching math, and it warrants further investigation by mathematicians, language teachers, and technology experts in cooperation rather than in separate sciences.

## **The place of the Oral Presentation in a digitalizing world**

**PUSHPA SADHWANI AND JONATHAN FITENI**

(Higher Colleges of Technology)

### **Abstract**

Oral Presentations (OP) are a challenging requirement for under-graduate Non-native English Speakers (NNES) due to the range of demands placed on presenters. Pandemic-related social distancing measures necessitated students to perform online OP, as the face-to-face medium was not available. In addition to the linguistic demands of presenting online, the new medium required students to make use of video-conferencing technology and to interact with peers and faculty synchronously online. Students responded to and adapted to these new presentation requirements in varied ways, and with varied degrees of success. These student responses and the student needs that emerged with regard to synchronous online interaction will be discussed in our presentation. Moreover, with increasing digitalization of society and changing working practices, it appears that the ability to communicate ideas synchronously online in English now sits alongside other key academic skills and we will also discuss the need to situate the development of this skill-set in Higher Education.

## **Transforming Higher Education Teaching Through Active Learning Approach: A Case Study of Incorporating Active Learning Approaches in General Education Courses**

**DR. MOHAMMED FTEIHA AND MS. DEENAZ KANJI**

(Abu Dhabi University)

### **Abstract**

Traditionally, faculty teaching higher education classes have favored a transmissionist pedagogical style. There is an increasing body of research that supports the practice of active learning and speaks to its benefits and advantages both for student and faculty success. Active learning approaches include classroom activities that focus on developing student skills and engage them in higher order thinking, requiring activities to become an integral part of the instructional design. This descriptive paper presents a case study of how active learning, when it is planned and deliberate, can be utilized in the teaching of general education courses.

## **Using Artificial Intelligence in Higher Education: Benefits, Challenges, and future look**

**HESHAM ALLAM**

(Higher Colleges of Technology)

### Abstract

Artificial intelligence (AI) is a thriving field of technology with the potential to revolutionize every aspect of our social interactions. In higher education, AI has prompted the creation of innovative teaching and learning strategies that are currently being assessed in a variety of contexts. Numerous schools and institutions around the globe are utilizing artificial intelligence to improve their students' learning experiences. Colleges and universities can use AI to assist in quickly completing a variety of activities. Today, many individuals inquire, "What impact has this technology had on higher education?" The potential benefits of AI for higher education include helping colleges and universities engage with students from all over the world; improving how educational institutions operate; making learning efficient and simple; increasing student engagement; and keeping students aware of important course tasks. While artificial intelligence has more benefits than drawbacks, it is important to highlight the obstacles educational institutions encounter when attempting to integrate AI technology. Among the obstacles are the high cost that some AI tools may incur, cyberattacks, the inflexibility of AI technology, teachers' readiness (Learn Cybers, 2021), the absence of a comprehensive public policy on AI, the absence of clear guidelines for ensuring inclusion and equity, and marketing AI to colleges and universities. The proposed book will aim to address future issues that incorporate AI in higher education as a means of enhancing the equality and quality of learning and promoting the perfect application of AI.

## **Using Multi-Facet Rasch Measurement to account for rater severity and leniency in rated assessments**

**DOUG LOVETT AND JASON THOMPSON**

(Higher Colleges of Technology)

### Abstract

Rated assessments, such as student essays, presentations, or speaking tests, often face problems due to varying leniency or severity of the raters. Colleges often use extensive moderation sessions, and double (or even triple marking) to deal with these issues. In this presentation I will explain how these methods are mostly ineffective, and suggest an alternative: Multi-facet Rasch measurement. Using this method, we can accurately measure rater severity and leniency, and compensate for this. We can also determine rater consistency, and identify where students have likely received scores that are too high, or too low, due to rater inconsistency. The method also allow us to evaluate our rating scale in great detail, and has the potential to be used for research into other factors that could affect student scores. In this session, I will outline how we use it in English Communications, and discuss how it could be applied in other programs.

## **Using Online Gamification to Improve Students' Academic Performance in Arabic Language Course in Abu Dhabi University: Experimental Study**

**DUHA MAZEN LABABIDI AND ANAND DWIVEDI**

(Abu Dhabi University)

### **Abstract**

The aim of this study is to determine the impact of using gamification on students' academic achievement in the Arabic language course. This quantitative research is based on experimental study, where the students' final scores in the Arabic course were used for this investigation. The study group consisted of 398 undergraduate students from Abu Dhabi University. In this process, the Arabic course was reinforced by gamification in all the taught topics and the control group were strengthened by traditional methods for 13 weeks. Research data were collected by using the students' final scores in the Arabic language course. The mean, standard deviation, and independent samples T-test were performed. As a result: Arabic language course reinforced by gamification conclusively proved that it contributes significantly to students' academic achievement towards Arabic language course than traditional method. Gamification as pedagogical tool has been proved to be an effective intervention for enhancing students' academic performance.

## **Vocabulary Literacy Instruction in Language Classroom: a Comparison of the Effectiveness between Utilizing Quizlet and Traditional Approach**

**HONGJUAN YU AND BICEN LUO**

(Xi'an Jiaotong-Liverpool University)

### **Abstract**

In the globalized era, modern teaching approaches attach great value to the Computer Assisted Language Learning (CALL) at tertiary educational institutions. Numerous language instructors tend to adopt CALL to facilitate their teaching in academic context. Widely acknowledged among practitioners and language learners is the web-based tool of Quizlet, which has witnessed its application in vocabulary learning and teaching. Research has indicated that Quizlet can promote students' engagement and significantly expand their vocabulary size<sup>1</sup>. Based on an empirical research study, this presentation aims to demonstrate the results by comparing the efficacy of vocabulary teaching between Quizlet and traditional approach in a Sino-foreign university where English serves as the medium of instruction (EMI). A mixed method of experiment and follow-up survey was utilized to collect both quantitative and qualitative data. A total of 70 year 1 students participated in this study for a 2-week duration. The experimental group received Quizlet teaching treatment while traditional teaching method was implemented on the control group. The findings revealed that there was an increase in vocabulary scores between primary and final tests for both groups while the improvement in the experimental group was statistically significant. Participants from the experimental group also reported positive learning experiences with Quizlet in the follow-up survey.

## **What Skills do Employers Really want from Graduates?**

**DR. NICOLE SHAMMAS AND HIND MOHAMED**

(Higher Colleges of Technology)

### **Abstract**

Over the last 20 years education has embraced numerous trends and various approaches, yet the core remit of education remains unchanged: to produce graduates ready for the workforce. This is particularly evident in the United Arab Emirates, where, for over a decade the government has supported an Emiratization initiative designed to employ UAE nationals in a meaningful manner in both the public and private sectors. Underpinning the country's Emiratization initiative is the role of the education section which plays an instrumental part in ensuring graduates are work ready and have the skills and knowledge to compete in a global market. This research study takes a fresh look at the skills employers in the UAE want from new graduates, examining the importance of both hard skills such as vocational competencies, and soft skills such as critical thinking. Alongside this, the perspectives of Emirati working graduates are also presented, revealing the mismatch between the skills graduates believe are needed in the workplace and those that employers prioritize. This is a mixed methods research design, incorporating both surveys and interviews with employers and working graduates in order to examine more closely job market realities and the potential disconnect with classroom practices with a hope to more effectively prepare graduates for employment. In addition to the study itself, the presenters also briefly discuss the unique dynamic of working together as teacher and student on a joint research project.

## **Why collaboration between the Social Sciences and Information Technology is important in education**

**Dr. Nicole Shammass and Jumana Tarazi**

(Higher Colleges of Technology)

### **Abstract**

The aim of this presentation is to explore this question and present a case for an alliance between the two distinct fields of Social Sciences and Information Technology. Our remit as educators is to prepare learners for their real-world experiences, not only in their careers, but in the skills to navigate an increasingly complex world. Unquestionably, these skills require exhaustive technical knowledge which is imparted by our IT experts. However, alongside this technical know-how, learners require a critical understanding of society and essential knowledge about what it means to be human. Social scientists bring to the table the skills to help create better practices, systems and ideas considering the 'human factor', and thereby play a strategic role in the social shaping of technology. The authors maintain that together, the Information Technology practitioner and the Social Scientist combine for optimal impact in education. We do this through preparing students for technology trends and by providing a whole broad education planning for both technical and soft skills development. This paper outlines why collaboration between these two fields is important and presents a working model, showcasing practical examples of collaboration between these two fields.

## **Writing Assessment in the Laptop-mediated English Language Classroom: Rasch analysis, fairness and flexible delivery**

**Robert Miles**

(Higher Colleges of Technology)

Abstract

This is a theory driven presentation and paper that documents a robust assessment strategy related to writing in English that makes innovative use of technology and Rasch analysis to ensure highly efficient administration and fair and accurate grading of student work. The assessment strategy is flexible for both face to face and off campus administration, and as such offers an adaptable yet rigorous assessment tool that can survive the uncertainty of ever-changing delivery modes. This paper contributes to knowledge related specifically to formal written assessment in English, especially where that assessment is carried out online, whether face to face or off campus. The approach could also be applied to any course or subject seeking to assess student learning through written assessment such as essays or projects. This is an important consideration given the potential growth of distance and remote teaching worldwide in the wake of the Covid19 pandemic. The paper also contributes to practical use of multi-faceted Rasch analysis, and highlights the impracticality of online proctoring software in this particular context.



## The Campus of Tomorrow