香港浸會大學
HONG KONG BAPTIST UNIVERSITY

全人教育教與學中心
Centre for Holistic Teaching and Learning

AI in T&L and Assessments

Featured Stories

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Featured Stories

Embracing Generative AI Tools with the Support of "DAPPER" Model among Pre-service ECE Teachers: Dr Irene Lam's Innovative Approach

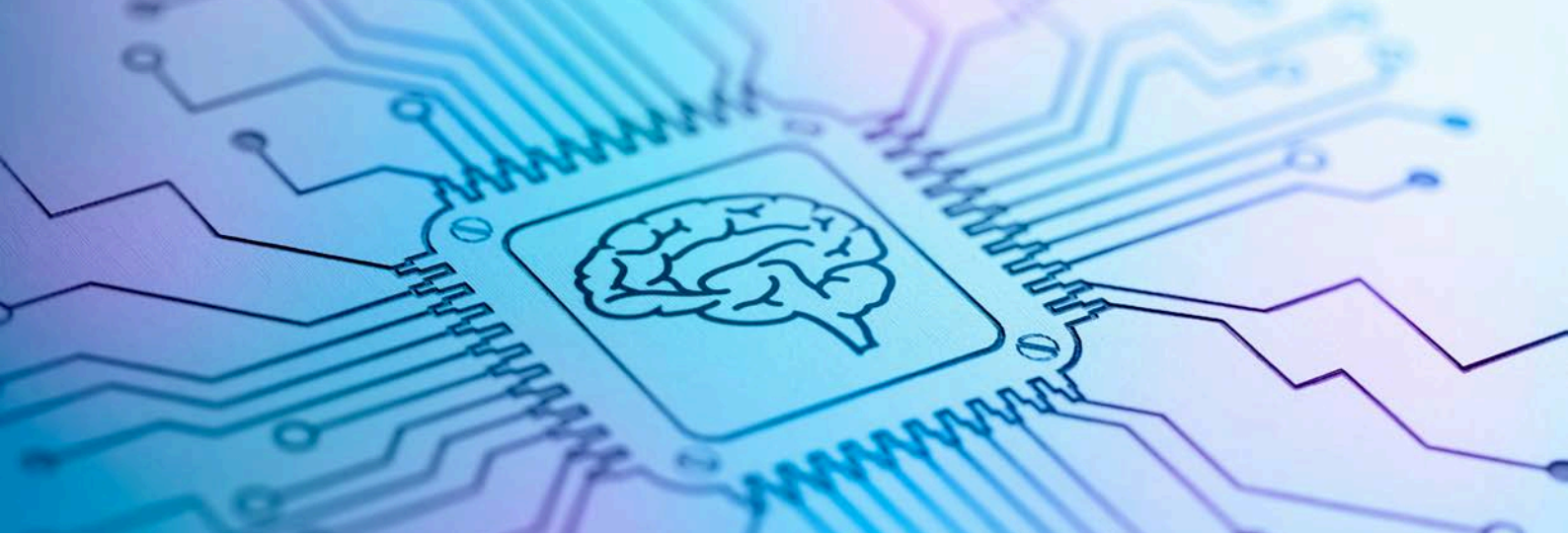
ECEED (SCE)
Course: HECE2160 Science and Technology for Young Children
Class Size: 40-50
Mode: Face-to-face

Dr Lam is a senior lecturer in the early childhood and elementary education division. As a teacher trainer, she is using generative AI to revolutionise teaching and learning. She identified the chance to apply generative AI tools in the "Science and Technology for Young Children" course that she taught and encouraged her pre-service teachers to do likewise.

In doing so, Dr Lam follows the "*Principles for the Use of Generative AI Tools in Teaching and Learning, and Assessment*", the guidelines recently released by HKBU on the ethical and critical use of GenAI in teaching and learning.

Supporting pre-service teachers to adopt ChatGPT with the model DAPPER

Dr Lam developed a model called "DAPPER" —Design, Analyze, Peer Review, Prompts, Evaluate, and Redesign— to support pre-service teachers' interactions with ChatGPT. She showcased how ChatGPT can be used to generate various creative and interesting learning activities involving inquiries. For instance, ChatGPT can "***Design***" inquiry learning and teaching activities for young children. Metacognition helps pre-service teachers "***Analyze***" the limitations of AI outputs. Secondly, "***Peer-review***" encourages pre-service teachers' active engagement and reflection. By prompting pre-service teachers to reflect on the AI generative outputs collaboratively, that can help them develop metacognitive skills like questioning, monitoring, and evaluating the AI generative outputs. This process helps pre-service teachers become active learners rather than passive recipients of information. Thirdly, quality "***Prompts***" will be fostered and metacognition assists pre-service teachers to "***Evaluate***" the outputs. By encouraging pre-service teachers to "***Redesign***" the outputs, creativity and problem-solving skills can be further nurtured.



Developing problem-solving skills and teamwork

Dr Lam also stressed the importance of peer review in the learning process. She engaged the pre-service teachers in group activities to collectively deliberate the AI-based activities. The use of group work facilitated the acquisition of critical metacognitive strategies, including quality prompts and evaluation among the pre-service teachers.

Dr Lam claimed, "Through identifying the strengths and weaknesses of AI-generated outputs and evaluating them, the pre-service teachers become active learners, not mere information consumers, they redesign the activity so as to build one's uniqueness." Thus, pre-service teachers learn to integrate AI into their teaching practices to boost creativity and problem-solving.

Practical Application of Artificial Intelligence Software Tools

For this reason, Dr Lam invited the Hong Kong Productivity Council to conduct a workshop. The workshop outlined the practical application of AI generative tools, such as POE and Midjourney, in developing educational images and videos. This live demonstration helped the students learn how GenAI can be utilised in the classroom with clear guidance on how they could incorporate it into their teaching in the future.

Empowering Future Teachers

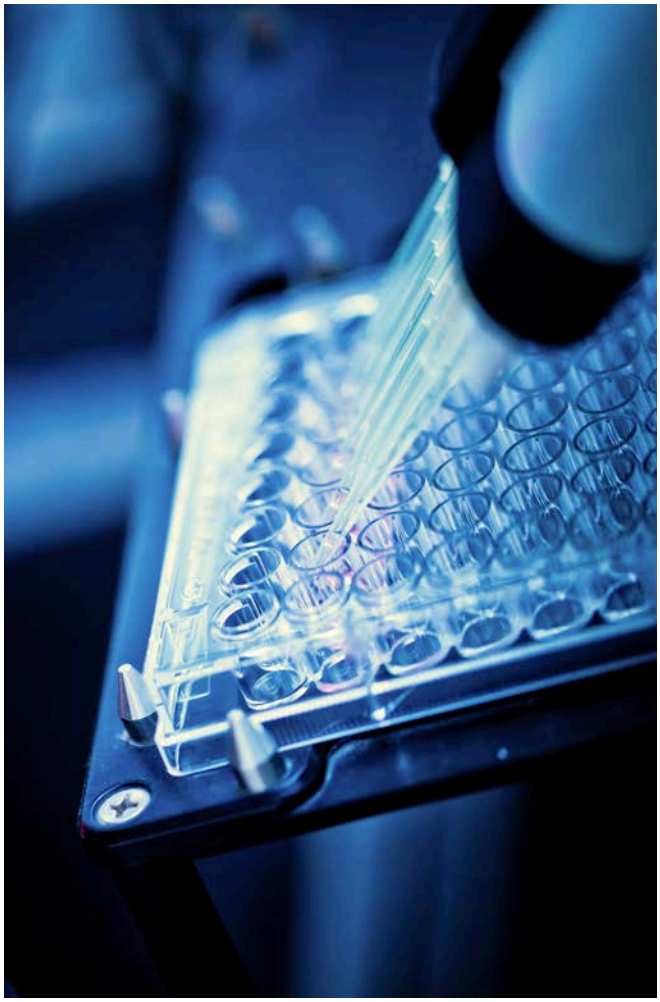
In conclusion, Dr Irene's students are being introduced to the effective use of AI tools. They are also able to think critically about the application of these tools and understand the value of metacognition and reflective activities. They are now more ready to create exciting and challenging learning tasks that incorporate the potential of GenAI and are, therefore, prepared to become innovative teachers in the modern, constantly changing education system.

> "THROUGH IDENTIFYING THE STRENGTHS AND WEAKNESSES OF AI-GENERATED OUTPUTS AND EVALUATING THEM, THE PRE-SERVICE TEACHERS BECOME ACTIVE LEARNERS, NOT MERE INFORMATION CONSUMERS, THEY REDESIGN THE ACTIVITY SO AS TO BUILD ONE'S UNIQUENESS."

Dr Ivan Yim Revolutionises Chemistry Education with AI

CHEM (SCI)
Course: CHEM3035 Integrated Laboratory for Analytical and Testing Sciences
Class Size: 30 – 80
Mode: Face-to-face

The use of GenAI tools, especially ChatGPT, is changing the way students learn Chemistry. Practicals have been a vital part of a student's curriculum, where they perform experiments based on the instructions provided to them in the form of a 'cookbook'. This format means they do not get the reasoning behind the experiments, but now, through the integration of GenAI, practicals are being transformed.



Enhancing Hands-on Learning with GenAI

Leading this change is Dr Ivan Yim, a dedicated lecturer in the Department of Chemistry. The course CHEM3035, "Integrated Laboratory for Analytical and Testing Sciences", has recently introduced the use of ChatGPT to develop laboratory manuals for chemical testing of actual samples. The major benefit is that ChatGPT can rapidly analyse and produce a large amount of information and offer many ideas and suggestions to the students to help them improve their laboratory experience.

A New Strategy for Conducting Laboratory Sessions

Dr Yim's approach incorporates AI to help the students be innovative and understand the meaning of the experiments they are conducting. Now, instead of just following the step-by-step instructions in the lab manuals, students are expected to submit the lab manuals filled in with AI and explain the reasoning behind the experiments they are conducting. This new approach to assessment has been seen to have some advantages.

Student Feedback

A survey was conducted to obtain the students' feedback, which was positive. The students were engaged by the new method and recognised its applicability in addressing real-life issues. Comments included: "This is quite interesting," "AI can work on real-life issues," and "We can involve the AI to help in our experiment."

The students also offered useful suggestions on how the learning experience could be further improved. Some proposed conducting the experiment in the last lesson to confirm the methodologies, while others proposed more practical lab work to support the AI analyses.

Widespread Approval

The survey showed that 84% of the participating students had positive perceptions about AI-related project topics and considered them useful for real-life problem-solving. Furthermore, around 74% of the students indicated that they thought instructors should proceed with equivalent AI-facilitated lab manual design projects in the following semesters of the course.

Looking Ahead

By integrating ChatGPT into the CHEM3035 course, it is possible to observe the effectiveness of AI tools in improving the existing education model. Dr Yim has developed a new way of teaching in the laboratory that encourages critical thinking, creativity and further understanding of scientific concepts. This innovation improves the learning process and equips the students to solve real-life problems using state-of-the-art technology.

Dr Kevin Wang Embraces AI in Programming Courses

COMP (SCI)
Course: COMP2045/COMP2046 Programming and Problem Solving / Problem Solving Using Object-Oriented Approach
Class Size: Over 120
Mode: Face-to-face

Dr Kevin Wang from the Department of Computer Science is exploring the integration of GenAI tools to enhance programming education. Teaching two intertwined courses, COMP2045 and COMP2046, Dr Wang is leveraging Microsoft Co-pilot and Discord chatbots to enrich the learning experience for over 120 students.

Background and Implementation

Microsoft Co-pilot, a powerful tool capable of auto-completing computer programs, has become a focal point of Dr Wang's innovative teaching strategy. While acknowledging the potential negative impact on beginner programmers – who might overly rely on AI – Dr Wang strategically discourages using GenAI for solving programming assignments directly.

Programming Assignments: Dr Wang designed three assignments using Co-pilot, intentionally ensuring the AI provided incorrect solutions. This approach forces students to critically analyse and correct the errors, thereby deepening their understanding of programming concepts.

Discord Chatbot for Administration: Students utilised a Discord chatbot for administrative tasks, such as finding quiz seat numbers and looking up scores. This practical use of AI familiarised students with real-world applications of their programming skills.

Final Assignment: Discord Chatbot - For their final assignment, students applied their programming knowledge to further develop the Discord chatbot they had been using. This task reinforced their coding skills and showcased the practical implications of AI in software development.

Additional Exercises: Co-pilot also allowed Dr Wang to generate extra ungraded exercises, providing students with further practice opportunities without adding to their graded workload.

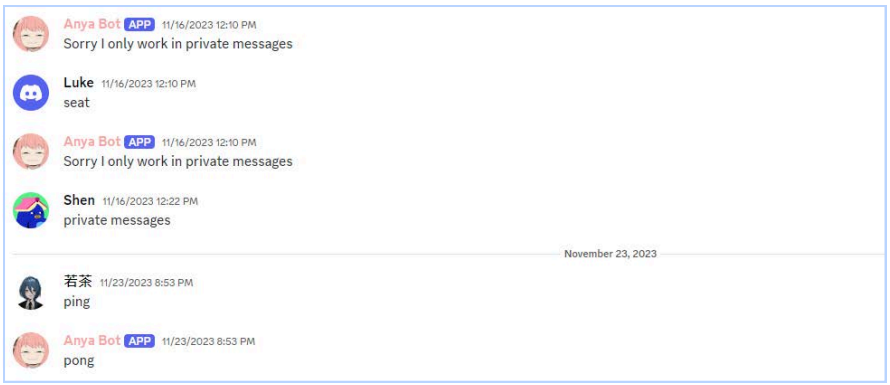
Copilot

Outcomes and Student Feedback

Following the implementation of these AI-integrated strategies, Dr Wang conducted a Course Feedback Questionnaire (CFQ) to assess the impact on student satisfaction, learning experience, and effectiveness.

Positive Engagement: The CFQ results indicated a positive reception from students. They found the assignments interesting and appreciated the extra practice opportunities provided by Co-pilot.

Mixed Results on GenAI Impact: Despite the innovative use of AI, there was no significant evidence that GenAI improved overall student satisfaction or learning outcomes. However, the approach did motivate high-performing students to delve deeper into AI technologies, particularly the development of Discord chatbots.



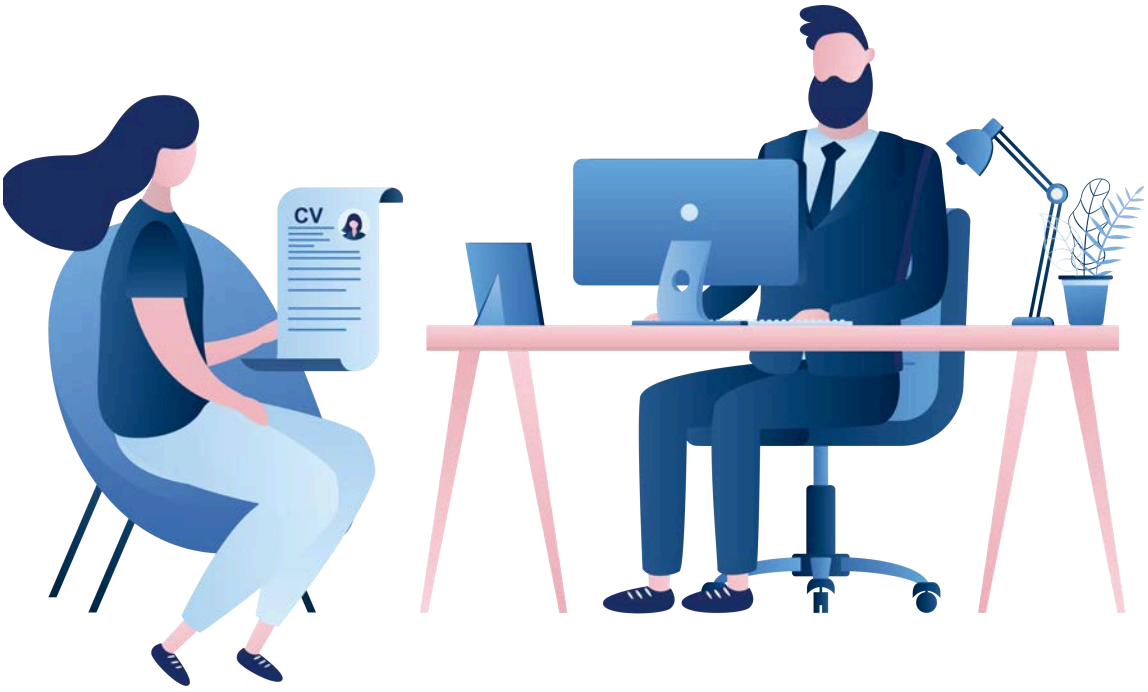
Future Directions

Although the integration of AI tools in both COMP2045 and COMP2046 has demonstrated good enthusiasm and practical application, Dr Wang is still in the process of fine-tuning his strategy. His aim is to achieve the optimum between the benefits of GenAI help and the necessity of students' comprehensive and self-reliant coding skills.

Dr Kevin Wang has showcased how GenAI can revolutionise the conventional programming courses in the education system. In this manner, he is a pioneer in highlighting that teachers can critically, creatively, and practically apply AI tools in the classroom. This teaching mode enhances the learning experience and ensures that the students are ready to face the challenges of the world of technology.

Dr Jamie Cheung Introduces AI-Powered Interviews in HR Course

MMIS (BUS)
Course: HRMN3006 People Resourcing and Employer Branding
Class Size: 30-80
Mode: Face-to-face



Dr Jamie Cheung of the Department of Management, Marketing, and Information Systems is a pioneer in applying AI in human resources education. In her course HRMN3006, "People Resourcing and Employer Branding", Dr Cheung has incorporated the use of video assessments powered by AI to ensure that her students are ready for tomorrow's HR working practices.

Neufast AI Interviews – Improving Learning with AI

Neufast is an AI interview provider focusing on video assessments wherein students can experience how AI interviews are conducted. With the department's support, Dr Cheung purchased interview quotas from Neufast to enable her students to experience how AI interview works and know how AI assess their interview performance. This enrichment learning experience complements the face-to-face selection interview role play exercise which students design, prepare, and conduct interviews for HR Associate position of an international bank in HK.

The traditional interview exercise is followed by the AI interview, in which students complete the given task to get participation marks. Dr Cheung created the new HR Associate position for this AI Interview at an international investment bank. The students were allowed to interview within a week at their convenience. The Neufast AI Interview is fully automated; Dr Cheung only has to enter the job details, assessment criteria, student names, emails, and questions for the interview.

Neufast

Hands-on Experience with AI Technology

To ensure the students were ready, Dr Cheung uploaded the instructions and additional information on Moodle, including the introduction and demonstration videos from Neufast. It was recommended that the students study the company and the position to before the AI interview. Each student was given a maximum of two minutes to answer each question, and the AI offered a score assessment of the student's performance.

Learning Outcomes and Feedback

Dr Cheung incorporated AI interviews in the course because this technology plays a significant role in many companies' selection processes. She feels that understanding the AI interviewing process and the mechanisms of AI evaluation will be beneficial once students are working in the HR industry. The students also benefited greatly from the evaluation reports prepared by the AI, as these provided suggestions that could help in future job interviews.

Student Reactions and Participation

Although not all students attended the AI interviews, the turnout was around 50%. Some of the students who took part enjoyed it, and they pointed it out as positive in their teaching evaluations. Even though the system is highly automated and simple to use, the key issue is students' lack of understanding about the impact of AI in their future work.

Prospects

Dr Cheung sees the integration of AI interviews as beneficial for her and the students. She intends to keep using the AI tools in her course as long as there is funding for it. Thus, with the increasing application of AI in HR practices, Dr Cheung's approach helps her students to be ready for the future of people management.

Harnessing AI to Enhance Creativity in Visual Arts with Dr Peter Nelson

AVA (SCA)
Courses: VART3445 Object Technology (Robotics and Kinetics); VART2407 Life Drawing; VART2575 3D Fundamentals
Class Size: 1-30
Mode: Face-to-face

Dr Peter A. C. Nelson from the Academy of Visual Arts embarked on teaching innovation by applying AI in his multiple courses. By weaving actualistic and artistic approaches in learning and experiments, Dr Nelson is revolutionising how students consider creativity and automatisation in arts. Here's how AI was used in his three courses:

Implications of Automation in the Development of Informatics and Creative Practices

The VART3445 "Object Technology" course teaches students about the dynamics between automation and creativity. Dr Nelson, in collaboration with Gyung-Jin Shin, Ekkehard Altenburger, and Michael Just, acquaints learners with the evolutionary history of kinetic and cybernetic art up to contemporary large language models. This course emphasises the deployment of AI in making smart rapid prototypes in physical computing.

Based on the natural language description, students can use the developed coding skills within the Arduino IDE platform and ChatGPT to teach the Microcontroller, Sensors, and Motors how to work with a specific structure. This way of working allows the students to witness the applied uses of AI in streamlining programming operations and improving the creative aspect of robotic systems.

Blending Old-school Thinking with AI Creativity

In the VART2407 “Life Drawing” course, Dr Nelson tries to unite two methods of life drawing with the help of present technologies. The students then transition to observational drawing methods, including the figure and aspects of proportion, halftone, and positive and negative areas.

The students' initial interaction with the concept of AI is established through the ink sketches they provide to Dr Nelson, whereby their images are then used as diffusion models. This creative module, which incorporates the use of tools such as OpenArt, exposes the learner to new modes of thinking in the digital age. As such, within a short period of iterating styles and creating the final portfolio, students obtain valuable insights into the potential of developing traditional art with the help of AI.

Adapting to the Future of 3D Modeling and Animation

In VART2575, “Digital Tools: 3D Software Fundamentals” brings the students to the exciting area of 3D Modeling, Animation, and Fabrication using beginner-friendly and free software. The course evolves with changes in the topic and includes traditional and novel approaches to computer graphics and AI.

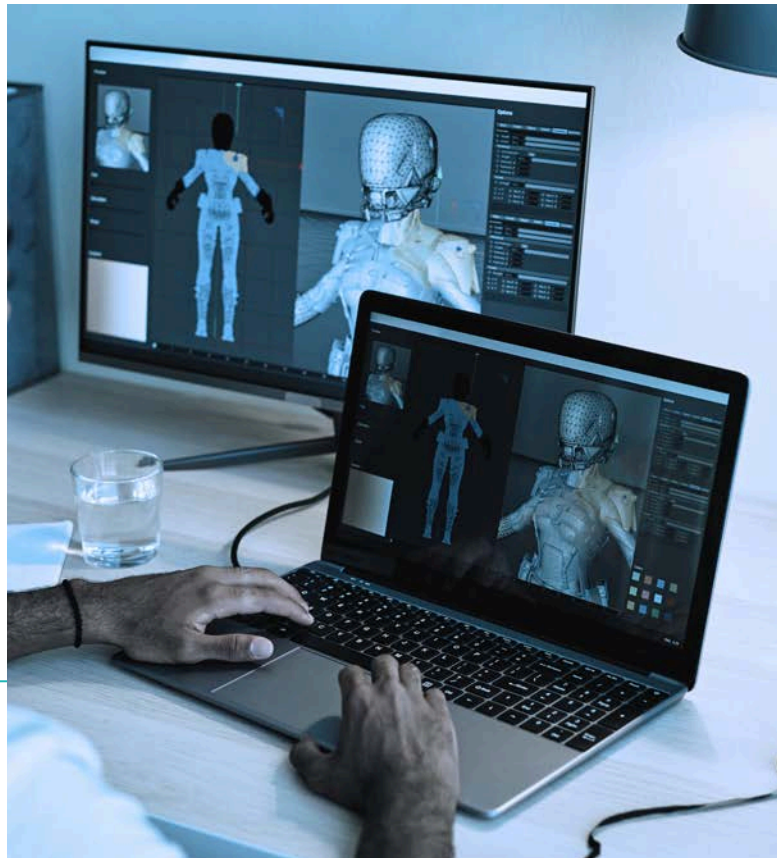
OpenArt

DEEPMOTION

In one of the projects, DeepMotion was involved in converting 2D video into 3D motion capture files. This technology played a big part in the sculptures of Dr Nelson’s honours student, Ms Amber Ng Wing Yan, who received an award. Both evolved a pipeline for turning children's videos into sequential 3D motion files. These motion files became the basis of her highly successful sculpture practice as well as collaborative robotically assisted drawings we produced together for publication and exhibition in Hong Kong (2021) and Mexico (2024). Further, the course includes topics such as applying ChatGPT to writing Python automation code and creating 3D models with alpha3D. Such tools help explain when it is best to use AI generation compared to the conventional modelling approach, giving the students an overall feel for both.

Impact and Future Prospects

By ensuring that AI complements the conventional and contemporary styles of artistic creation, Dr Nelson empowers the students to tackle the challenges that define the visual arts practice in the current world. This approach prepares and opens students' horizons to new possibilities, enabling them to innovate and excel in their artistic endeavours.



Dr Wan Mingyu Integrates AI in Statistics for Data Science

CIE (SCE)
Course: Statistics for Data Science
Class Size: 1-30
Mode: Face-to-face

Teaching at the College of International Education (CIE) of the School of Continuing (SCE), Dr Wan Mingyu is transforming the way statistics is taught in her course, "Statistics for Data Science." By integrating GenAI tools like ChatGPT, Dr Wan provides students with a modern approach to learning complex statistical concepts.

Innovative Course Structure

The course covers three basics of statistical knowledge and skills: descriptive statistics, inferential statistics, and probability distribution. To enhance the learning experience, Dr Wan has integrated the use of ChatGPT 3.5 and 4.0 to grade group projects and the writing of group reports.

Objective and Efficient Assessment

To assess the extent of statistical methods applied in the students' projects, Dr Wan employs ChatGPT. The tools used in the analysis are AI, and the features are objective, automatic, and pattern and digit-sensitive. They produce scores that are similar to her own while taking less time. This is an innovative approach that makes the grading systematic and equitable, hence increasing efficiency in the evaluation.

Guidelines for Effective AI Integration

Dr Wan emphasises the importance of the proper application of AI tools. Here are her key recommendations for colleagues looking to integrate GenAI into their teaching:

01

Provide Clear Marking Guidelines: It is critical to spell out the parameters that are to be used in assessing whether or not AI tools are applied.

02

Balance AI and Human Judgment: Human oversight remains crucial. The use of these tools should not be overemphasised since AI tools are not 100% reliable.

03

Focus on Specific Skills: It is crucial to determine the specific elements of students' skills to assess and apply AI tools accordingly.

04

Encourage Demonstrations and Tutorials: Presenting more examples and how-to resources for implementing AI-integrated assessments could stimulate and support teachers' decisions to incorporate such tools into their classrooms.

Positive Impact and Future Directions

The pilot of integrating ChatGPT in the "Statistics for Data Science" course has shown promising results. Students gain objective and timely feedback, which helps them comprehend the techniques they use in statistics. By taking the approach that Dr Wan has described, one can see how AI could support conventional pedagogy, improving both the teaching and learning processes.

Dr. Wan can be regarded as the pioneer of AI integration into academic teaching, as her statistics course is an example of the successful use of GenAI. Thus, she not only optimises the evaluation process with the help of AI tools but also enhances the students' learning experience. The ideas and suggestions she has shared are beneficial to other teachers who want to start using AI in the classroom.

Remark:
Please note that since the publication of this story, Dr Wan Mingyu has left HKBU and moved on to new opportunities.

Revolutionising Language Education with AI - Dr Bernie Mak's Innovative Approach

CIE (SCE)
Course: TCSC2200 Language in the Digital Age
Class Size: 1-30
Mode: Face-to-face

Dr Bernie Mak, teaching at the College of International Education (CIE) of the School of Continuing Education (SCE), is updating the interdisciplinary General Education (GE) course TCSC2200 Language in the Digital Age by integrating GenAI tools. His innovative pedagogical strategy is to provide students with analytical skills related to digital communication.

Innovative Assignments with AI

In a recent assignment known as the "Online Critical Analysis," Dr Mak implemented a writing task where the students had to create their own prompts for an email to be sent using ChatGPT. This task was developed to help students apply their knowledge in creating AI-generated content based on a given context.

Analysing AI-Generated Content

After generating the emails, students employed a model of linguistic politeness and specific terminology to analyze the discursive strategies used in the AI-generated emails. They then discussed areas for improvement, particularly focusing on the lack of human-like emotional depth in the AI's responses. The assessment was carried out via an e-Forum on Moodle, where the students interacted in a relaxed atmosphere that simulated other forums in the 'real' cyber world, using colloquial or informal English. This collaborative and interactive learning environment encouraged open dialogue and engagement.

> HIS INNOVATIVE PEDAGOGICAL STRATEGY IS TO PROVIDE STUDENTS WITH ANALYTICAL SKILLS RELATED TO DIGITAL COMMUNICATION.

Encouraging Critical and Creative Thinking

Dr Mak's main goal was to teach students how to apply analytical skills and recognise the nuances of digital communication. The exercise showed that the students were highly critical and creative in their discussions and provided valuable insights about the effectiveness and limitations of AI-generated texts.

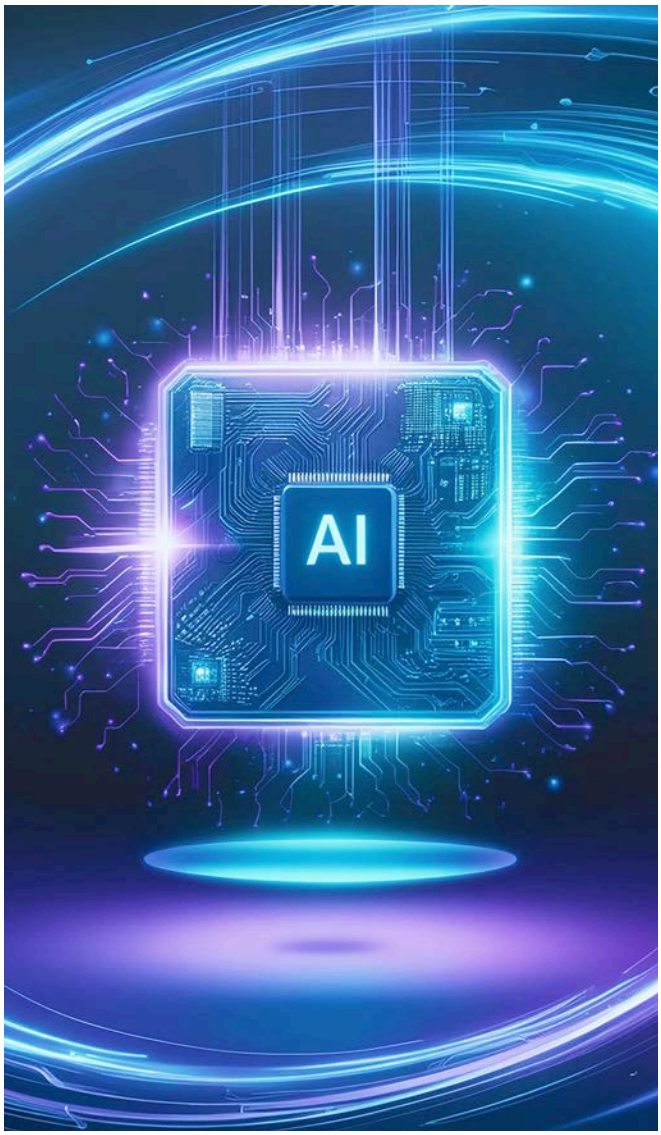
Addressing Challenges and Abusive Use of AI

Nonetheless, Dr Mak pointed out that some students might have employed AI tools to analyse the AI-generated content. He, therefore, recommended that colleagues should remain vigilant against such potential abuses of AI in assignments designed to evaluate students' cognitive abilities and analytical reasoning skills.

Future Prospects and Recommendations

Dr Mak's experience highlights the importance of clear guidelines and objectives when integrating AI into assignments. He suggests that colleagues should:

- Provide Clear Instructions: Explain to the students the purpose of the assignment and the appropriate use of AI tools.
- Monitor AI Usage: Be aware of how students might use AI tools and adapt assignments to minimise the risk of misuse.
- Foster Critical Thinking: Develop assignments encouraging students to evaluate AI-generated content and critically understand its limitations.

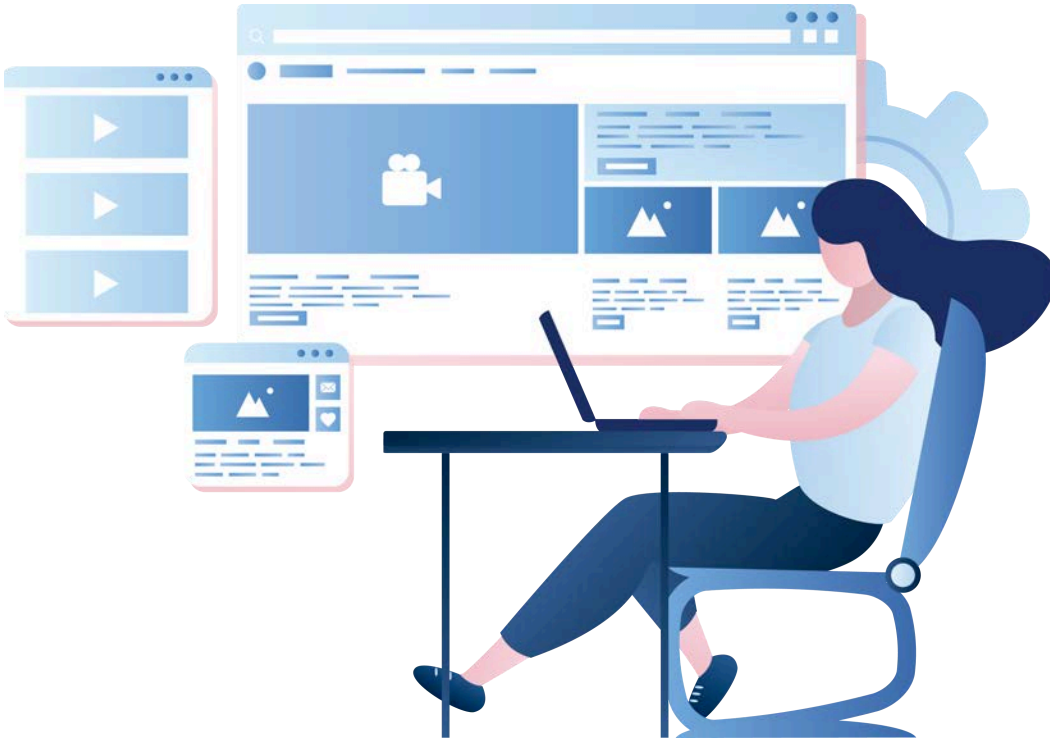


Inspiring Educators to Embrace AI

Dr Bernie Mak's innovative approach to using AI in language studies is an inspiring example for colleagues. By thoughtfully integrating GenAI tools, he enhances students' analytical skills and prepares them for the complexities of digital communication. His insights and recommendations provide valuable tips for colleagues looking to adopt AI in their teaching.

Dr Jolie Shi's AI-assisted Transformation of Advertising Education

IMD (COMM)
Course: PRAD/O4036 Social Communication and Advertising
Class Size: 1-30
Mode: Face-to-face



Dr Jolie Shi, an associate professor at the Department of Interactive Media (IMD) in the School of Communication (COMM), is at the forefront of integrating GenAI tools into her course, PRAD/O4036 Social Communication and Advertising. Her innovative approach prepares students for the evolving landscape of the advertising industry.

Discussing the Impact of AI on Advertising

In a class session titled "Emerging Technology and Advertising," Dr Shi started a group discussion on how GenAI tools have transformed and will further reshape the advertising industry. To orient the students with the contemporary trends and issues of advertising, they are assigned to read a Wall Street Journal article, "How AI Has the Advertising Business Excited -- and Worried," which provides an overview of the current industry.

Showcasing AI-Generated Advertisements

Dr Shi also showcased several advertisements featuring elements created by GenAI tools, such as the design of characters and virtual Key Opinion Leaders (KOLs). Thus, this visual demonstration highlighted how AI can be used to create engaging and effective advertising content.

Hands-On Exploration and Professional Reflection with AI Tools

To deepen their understanding, students used and compared various GenAI tools, including ChatGPT and Midjourney. They experimented with these tools to create their own advertising content, gaining firsthand experience of AI's capabilities and limitations in the creative process.

The exercise sparked curiosity and raised awareness among the students, making them rethink their roles as future communication professionals. They reflected on the ethical and practical concerns and possibilities of using AI in advertising, considering what they could and should do in the age of AI.

Professor's Responsibility in Introducing Emerging Technologies

Dr Shi emphasises the importance of teachers introducing students to the latest trends in emerging technology and its potential impact on their future profession. She believes students should be future-ready for the rapid technological advancements shaping the communication and advertising industries.

Inspiring Educators to Embrace AI

By integrating GenAI tools into her teaching, Dr Jolie Shi enhances students' learning experiences and prepares them with the skills and knowledge necessary to succeed in a world driven by technology. Most importantly, her efforts highlight the critical role of teachers in preparing students for the future and ensuring they remain adaptable and forward-thinking.

Harmonising AI with Education in Associate Professor Taurin Barrera's Music Technology Course

MUS (SCA)
Course: MUSI2016 Music Technology I
Class Size: 1-30
Mode: Face-to-face

Taurin Barrera, an Associate Professor of Practice at the Academy of Music, School of Creative Arts (SCA), is pioneering the integration of AI tools in his course, MUSI2016 Music Technology I. This course is designed to introduce students to the dynamic intersection of music and technology, offering a whole new perspective on digital sound as a creative medium.

Leveraging AI for Creative Assignments

Taurin Barrera designed a midterm assignment in which students were tasked with producing an "AI Remix" of a popular song, i.e. a self-produced reimagining creative work. They used cutting-edge tools such as LALAL.AI for cloud-based audio source separation, which helped them efficiently separate individual sound sources. Students also got to work with GenAI tools like Suno, designed to create authentic songs and other popular music creation AI technologies.

Enhancing the Creative Process

"AI was leveraged to perform non-creative tasks, which led to vastly more creative projects," said Taurin Barrera. This approach allowed students to focus on the artistic aspects of their projects. For the final assignment, students were asked to mix and master a studio recording using iZotope Audio's modern AI tools for noise removal, sound isolation, reverberation, and assisted mixing.

Developing Critical Listening Skills

Having AI as an “assistant”, students could go through the entire process of professional music production. They had to trust their creative instinct and ears when it came to deciding if the AI outputs fit their projects. "This was a great way for students to develop their listening skills and confidence and interact critically with the technology," Taurin Barrera added.

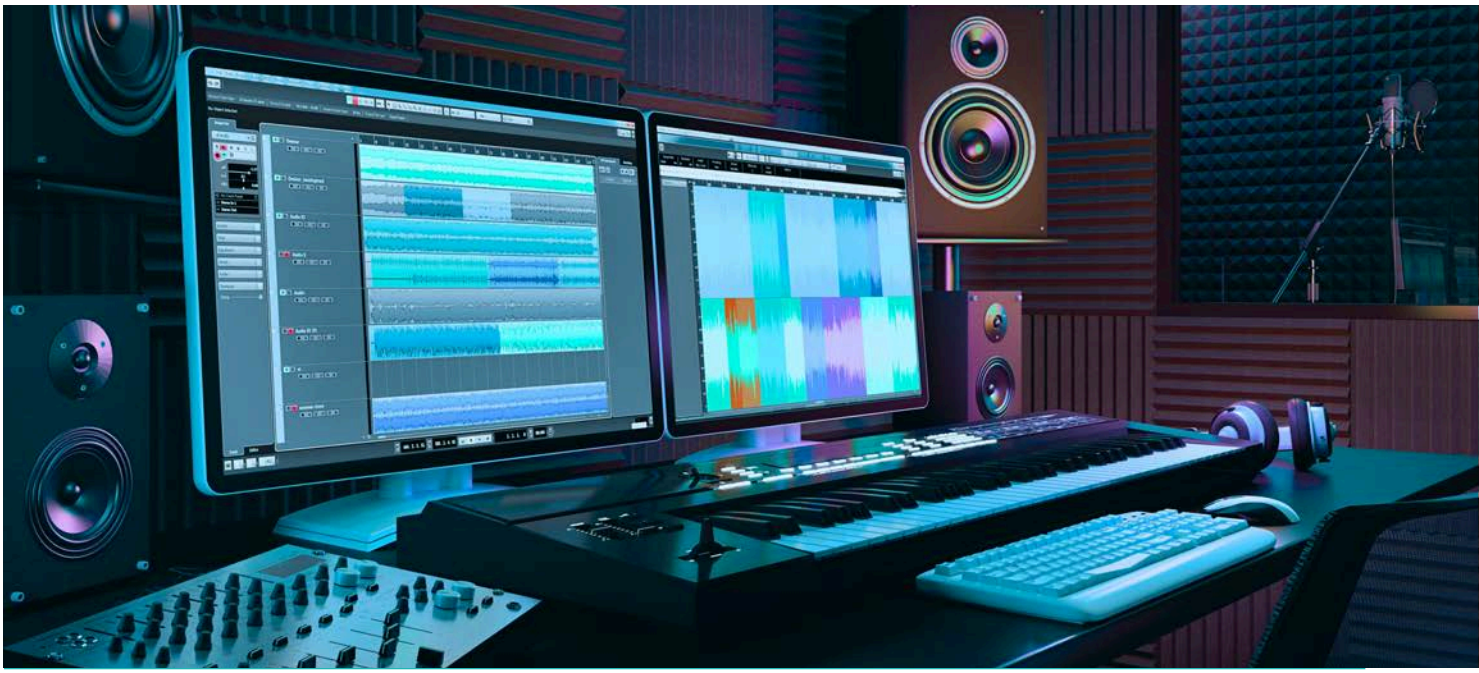
Preparing Students for the Future

The course Music Technology I emphasises using the latest tools in assignments to provide students with practical opportunities to interact with these emerging technologies. By engaging with AI tools in the artistic context, students develop a critical perspective on technology, shaping their creative approach in the rapidly evolving field of music technology.

Inspiring Educators to Embrace AI

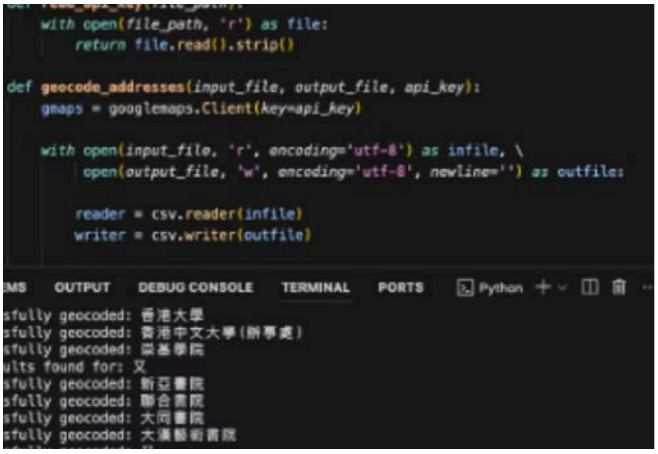
AI can be integrated into music education, according to Taurin Barrera’s innovative approach, thus enhancing both the teaching and learning experiences. His efforts showcase the importance of equipping students with the knowledge and skills to leverage AI effectively, preparing them for successful and future-ready careers in the music industry.

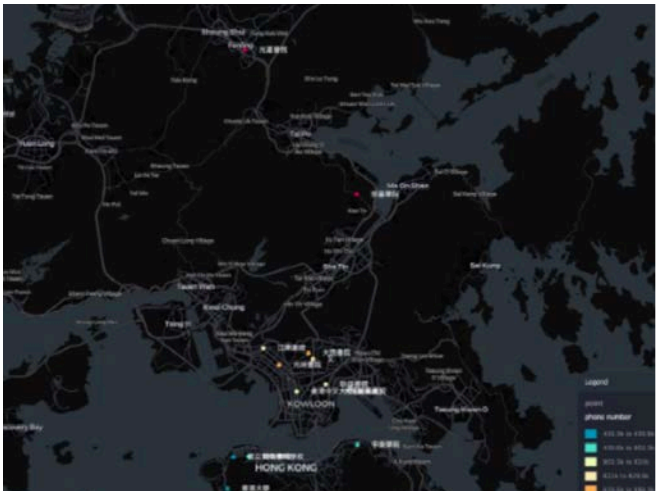
> “AI WAS LEVERAGED TO PERFORM NON-CREATIVE TASKS, WHICH LED TO VASTLY MORE CREATIVE PROJECTS.”



Innovating Historical Research with AI and GIS

CHRP (FASS)
Course: HIST4207 Introduction to Spatial History
Class Size: 30-50
Mode: Face-to-face





Dr Kwong Chi Man, an Associate Professor at the Academy of Chinese, History, Religion, and Philosophy of the Faculty of Arts and Social Sciences, is changing the way students approach historical research in his course HIST4207 Introduction to Spatial History. The course incorporates AI tools in teaching, with organizations including the Hong Kong Public Records Office and the Geospatial Lab of the Development Bureau supporting this course.

Empowering Students with Digital Tools

The core of the course is a hands-on research project in which students work in groups to create a spatial history website using GIS tools. This project requires students to convert historical data in various formats into GIS-compatible data.

"Before the extensive use of AI, our students needed to process contents largely by hand," Dr Kwong explains. "Now, with tools like Vertex AI, Python, and ChatGPT that teaches the students to write codes, we can teach students to process historical data quickly."

> NOW, WITH TOOLS LIKE VERTEX, PYTHON, AND CHATGPT, WE CAN TEACH STUDENTS TO PROCESS HISTORICAL DATA QUICKLY.

Streamlining Data Processing

Dr Kwong recently acquired new AI skills and is ready to share them with his students. He spent some lessons introducing the students to a AI-enhanced workflow to process data, confident that students can quickly learn these techniques. "Using these tools in data processing makes it much more efficient so that students can spend more time on other crucial parts of the project, such as data collection and interpretation," he says.

Overcoming Challenges and Fostering Creativity

One concern that Dr Kwong mentions is how to make sure that all students are on the same page and are developing the necessary skills. Drawing from his experience teaching Geographic Information Systems in the same course, he underlines the importance of providing initial step-by-step instructions. "Once they have mastered the basics, they can unleash their creativity," Dr Kwong notes. He also supports moving away from traditional assessment methods like essay writing and examinations and opts for more practical, project-based evaluations.

Educating Today for Tomorrow's World

By integrating AI into historical research, Dr Kwong is preparing his students for the future. The skills they will be learning in this course will be very useful for their future academic and career paths. The course exemplifies how one can apply AI in the humanities, thus encouraging other colleagues to consider possibilities of similar AI applications.

Dr Kelvin Lee's AI-Enhanced Facial Animation Course Empowers Students with Empathy

IMD (COMM)
Course: GAME4027 Facial Animation
Class Size: 1-30
Mode: Face-to-face

Dr Kelvin Lee, from the Interactive Media Department (IMD) of the School of Communication (COMM), is leading an innovative elective course, GAME4027 Facial Animation. This practice-oriented course is designed for year 3 and 4 students majoring in Animation and Media Arts. Evaluated solely through assignments and projects, the course also integrates a unique service-learning project titled "An Inclusive World of Emotions".

Empathy Through Animation and AI

This service-learning project seeks to leverage our University's expertise in communication, game engines, and the latest AI software. It allows students to apply their professional knowledge, imagination and creativity while fostering leadership skills grounded in humanity and empathy. "Through participation in the project, HKBU and Islamic Kasim Tuet Memorial College (IKTMC) students can develop greater sensitivity to their and other people's emotions by tapping into various emotional experiences," Dr Lee explains.

Project Overview: Animating Stories of Empathy

Students began the project by interviewing secondary school students of ethnic minority backgrounds about their life experiences growing up in Hong Kong. The students were then asked to recreate these memories by animating the facial expressions of digital avatars with the help of a game engine. Microsoft Copilot was introduced to enrich the stories and generate images that aided the students in understanding and empathising with their subjects.

Addressing Challenges with AI Tools

A challenge encountered in the project was the issue of unequal numbers of participants from our University and the secondary school where certain HKBU students did not get a counterpart. "In this situation, GenAI tools helped to 'imagine' new secondary school participants by 'interpolating' between stories from the interviews," Dr Lee says. This innovative use of AI ensured that all students could engage meaningfully with the project.

Learning and Leadership through Technology

Through this project, students were able to apply concepts and techniques of facial animation to create emotional depth and complexity. It was also an opportunity to develop their technical skills, while at the same time enhancing their ability to empathise and communicate effectively. Dr Lee emphasises, "This project allowed students to develop leadership skills grounded in humanity and empathy, preparing them for the future."

Inspiring Educators to Embrace AI

Dr Kelvin Lee's approach demonstrates how AI can be integrated into animation education to enrich the learning experience and foster essential soft skills among students. His project highlights the potential of AI to bridge gaps and create inclusive, empathetic learning environments. Dr Lee's work can be a good exemplar to inspire colleagues to explore and implement AI tools in their own teaching practices.

> THIS PROJECT ALLOWED STUDENTS TO DEVELOP LEADERSHIP SKILLS GROUNDED IN HUMANITY AND EMPATHY, PREPARING THEM FOR THE FUTURE.

Remark:
To access the animation please visit https://www.youtube.com/@SLFacialAnimProj/videos

Dr Li Kin Sum Brings History to Life with 3D GenAI

CHRP (FASS)
Courses: GTCU2056, HIST3405, and HIST7502
Class Size: 30-80
Mode: Face-to-face

Dr Li Kin Sum, from the Academy of Chinese, History, Religion and Philosophy in the Faculty of Arts and Social Sciences (FASS), is one of the pioneers to integrate 3D GenAI software into his courses. He employs these innovative tools in three different courses: GTCU2056, HIST3405, and HIST7502. Dr Li's attempt is to transform traditional learning methods into interactive, engaging experiences.

Innovative Use of 3D GenAI Software

Dr Li has been exploring various GenAI software known for their ability to generate 3D model content. These include 3D photogrammetry software like RealityCapture and Agisoft Photoscan, as well as 3D processing software such as Artec Studio, Leica P50 Cyclone, and 3D Reshaper. While current GenAI software cannot generate 3D content as easily as text-based or image-based GenAI tools due to computing power limitations, Dr Li effectively utilises these tools to enhance teaching and learning activities instead.

Engaging Students with Interactive Learning

In his GE and History-major courses, Dr Li teaches students how to use these 3D GenAI tools and demonstrates their applications. "I have uploaded examples of these activities to our digital library," he shares (https://digital.lib.hkbu.edu.hk/history/3d-artifacts/html/). Students are tasked with generating 3D content and creating video clips (https://www.youtube.com/@artinformationmodeling4327/playlists) to explain the making of artefacts. These projects have proven to be very interesting, fun, and innovative for students who prefer these non-traditional, interactive learning methods.

Overcoming Technical Challenges

Despite the numerous technical limitations, such as the software's current capabilities and the absence of open-access content, Dr Li remains optimistic. "I hope the software companies will keep improving, but I envision that day will come very soon," he says. Dr Li believes that as technology advances, more and more students will use these tools and the contents they generate and will continue to do so even after graduation.

Creating a Room for Imagination

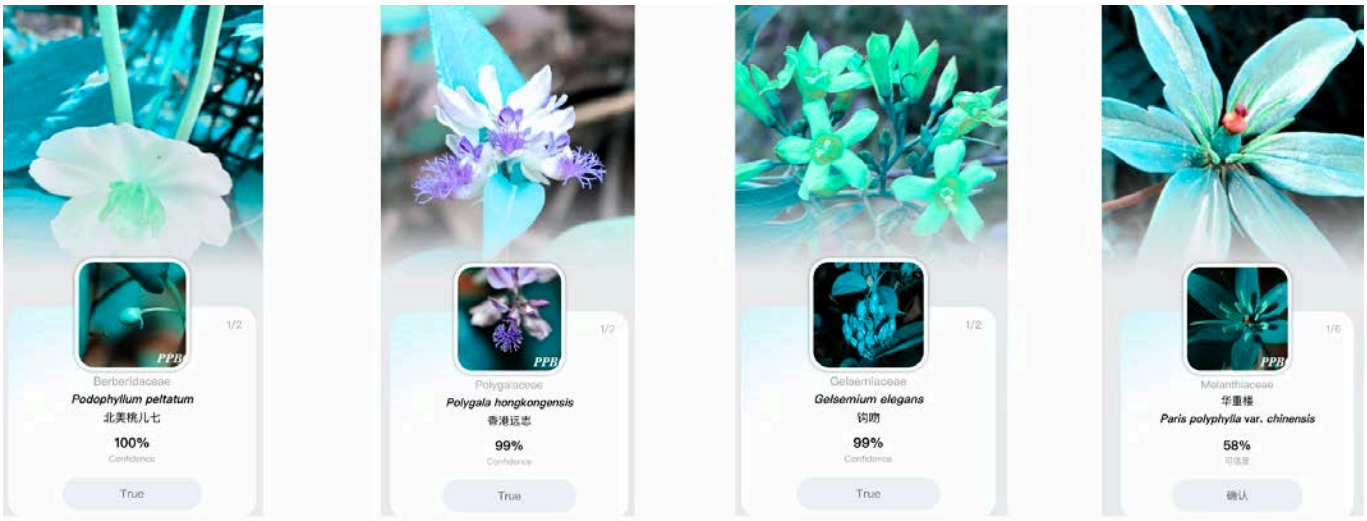
Dr Li points out the importance of not being confined by current definitions of GenAI. "We create the room of imagination for them," he notes. By introducing students to these emerging technologies, Dr Li is preparing them for a future where the possibilities of GenAI are continually expanding.

Inspiring Teachers to Embrace 3D GenAI

Dr Li Kin Sum's innovative use of 3D GenAI in education serves as an inspiring example for colleagues. It is shown that his approach highlights the possibilities of these tools in improving learning experiences and engaging students in new and exciting ways. By embracing these technologies, colleagues can prepare students for the rapidly evolving field of GenAI and its applications across disciplines.

AI Empowers Medicinal Plant Identification in Dr Guo Ping's Courses

CMTR (SCM)
Courses: PCMD1025 Supervised Practicum I, PCMD2015 Chinese Materia Medica, PCMD3016 Authentication of Chinese Materia Medica, & MPS7020 Utilization of Medicinal Plant Resources and Advanced Pharmacognosy
Class Size: 15-80
Mode: Hybrid



Some examples of identifying medicinal plants with FlowerMate 2.0

Dr Guo Ping, a Senior Lecturer at the Teaching and Research Division (CMTR) of the School of Chinese Medicine (SCM), is at the forefront of using AI to identify medicinal plants. This innovative approach is implemented in several courses, including PCMD1025 Supervised Practicum I, PCMD2015 Chinese Materia Medica, PCMD3016 Authentication of Chinese Materia Medica, and MPS7020 Utilization of Medicinal Plant Resources and Advanced Pharmacognosy.

Field Research and Learning

Identifying common medicinal plants in the wild and botanical gardens is a crucial part of the curriculum. Dr Guo explains, "Botanical origin identification establishes the taxonomic position of a medicinal plant, facilitating the inheritance and innovation of Chinese medicinal authentication." Regular field trips to locations such as Hong Kong country parks, the South China Botanical Garden, and various university botanical gardens provide students with practical experience.

Leveraging Advanced AI Tools

Dr Guo encourages his students to use advanced AI tools like FlowerMate 2.0, iNaturalist, and Google Lens to aid in plant identification. By integrating these tools with platforms like www.iPlant.cn and the Kew Science Plants of the World Online (POWO), scientific names of observed medicinal plants are identified effectively. "Intelligent identification significantly enriches the plant diversity database. It transforms every willing participant into a qualified observer, every smartphone into a mobile observatory, and every photograph into a valuable plant observation record," Dr Guo says, referring to recent studies such as https://doi.org/10.1016/j.xinn.2024.100636.

Inspiring Teachers to Embrace AI

Dr Guo Ping's innovative use of AI in the identification of medicinal plants sets a new standard for educational practices in the field of Chinese Medicine. His work demonstrates how AI can effectively integrate into traditional learning environments to enhance student interaction, engagement and learning outcomes. By embracing these technologies, educators can prepare students for a future where AI plays a significant role in various scientific disciplines.

> "INTELLIGENT IDENTIFICATION SIGNIFICANTLY ENRICHES THE PLANT DIVERSITY DATABASE. IT TRANSFORMS EVERY WILLING PARTICIPANT INTO A QUALIFIED OBSERVER, EVERY SMARTPHONE INTO A MOBILE OBSERVATORY, AND EVERY PHOTOGRAPH INTO A VALUABLE PLANT OBSERVATION RECORD."

Breaking Barriers with AI: Dr Nan Zhao's Visionary Translation Tech

LAC (FASS)
Courses: TRAN3035 Introduction to Translation Technology, TRA7570 Translation Technology II & TRAN3055 Interpreting Technology
Class Size: 30-80
Mode: Face-to-face/Hybrid

Dr Nan Zhao, Assistant Professor from the Academy of Language and Culture in the Faculty of Arts and Social Sciences (FASS), is highly involved in integrating GenAI technologies into translation and interpreting pedagogy. Since 2020, Dr Zhao has been preparing students for the fast-paced developments in the Language Service Industry by introducing these cutting-edge tools into both undergraduate and postgraduate programmes.

Pioneering Pedagogical Pathways

Dr Zhao has spearheaded curriculum development by integrating technologies into courses like TRAN3035 Introduction to Translation Technology and TRA7570 Translation Technology II. "The upcoming course, TRAN3055 Interpreting Technology, will further specialise in GenAI technologies, making it a first among UGC institutions," Dr Zhao explains. This initiative enhances the quality of HKBU's programmes and advances the field of performance-based language education. Since 2022, GenAI tools have also been integrated into two Service-Learning courses, reinforcing our University's role in educational transformation.

> THIS PRACTICAL EXPERIENCE WITH DIVERSE TECHNOLOGIES PREPARES STUDENTS FOR INDUSTRY DEMANDS AND BOOSTS THEIR CONFIDENCE AND COMPETENCE.

Promoting Innovative Technology in Interpreter Training

AI-driven tools such as Descript for transcription and other AI-based tools for multilingual audio/video enhancement have greatly impacted material development. "ChatGPT 4.0 and Sider offer precise text recognition and content summarisation, improving learning outcomes and CFQ scores," Dr Zhao notes. The virtual boothmates of InterpretBank and real-time ASR features have significantly enhanced interpreting accuracy and efficiency. Additional supports from GenAI tools like Copilot and Gemini enhance students' learning, while tools like the Echo2 smart pens and Sora's text-to-video capabilities support the teaching by assisting in the clarification of complex concepts.

descript

Enhancing the Student Learning Experience

Dr Zhao employs Padlet and ClickUp for efficiently visualising glossaries and managing workflows, ensuring seamless collaboration and effective project management. VEED.IO enhances learning by transcribing web-based audio/video content to text, leveraging the sophisticated ASR features, and supporting multiple languages and customisable avatars. "This practical experience with diverse technologies prepares students for industry demands and boosts their confidence and competence," Dr Zhao emphasises. Supported by two UGC innovative educational technology grants, Dr Zhao has developed pioneering practices and achieved notable success in this area.

VEED.IO

Innovative GenAI Solutions

01

Customising Exam Materials for Teachers:

Previously, creating conference interpreting exams was cumbersome. Dr Zhao employed AI speech generators and voice cloning technologies to tailor speeches in terms of difficulty, accent, speed, and in different languages. Tools such as Synthesia and Speechify generated AI voiceovers and videos with avatars for exams. This standardised the content and streamlined the process, significantly enhancing the relevance and quality of exam materials.

02

Preparing Exams for Students:

Traditionally, students used to prepare for interpreting exams by manually searching for background information. With GenAI, Dr Zhao guided students to use AI to predict speech content, generate key terminologies, and summarise essential knowledge based on given scenarios. Tools like ChatGPT 3.5, Copilot, and Gemini provided up-to-date information. A 'List of Frequently Used Prompts in Conference Interpreting Preparation' was used to compile a structured knowledge bank for students. These methods made exam preparation more dynamic, proactive, and less stressful.

03

Real-time, Time-stamped, Quantifiable Virtual Assessment and Feedback:

Traditional feedback on interpreting performance was often retrospective and relatively general. Dr Zhao introduced GoReact for real-time, time-stamped, quantifiable virtual assessments, which provided immediate, colour-coded, textual, audio, and video feedback. This method allowed for systematic evaluation of interpreting quality and performance, using tailored rubrics and specific markers in students' videos. This objective assessment process increased consistency in evaluation and grading.

Contributions and Achievements

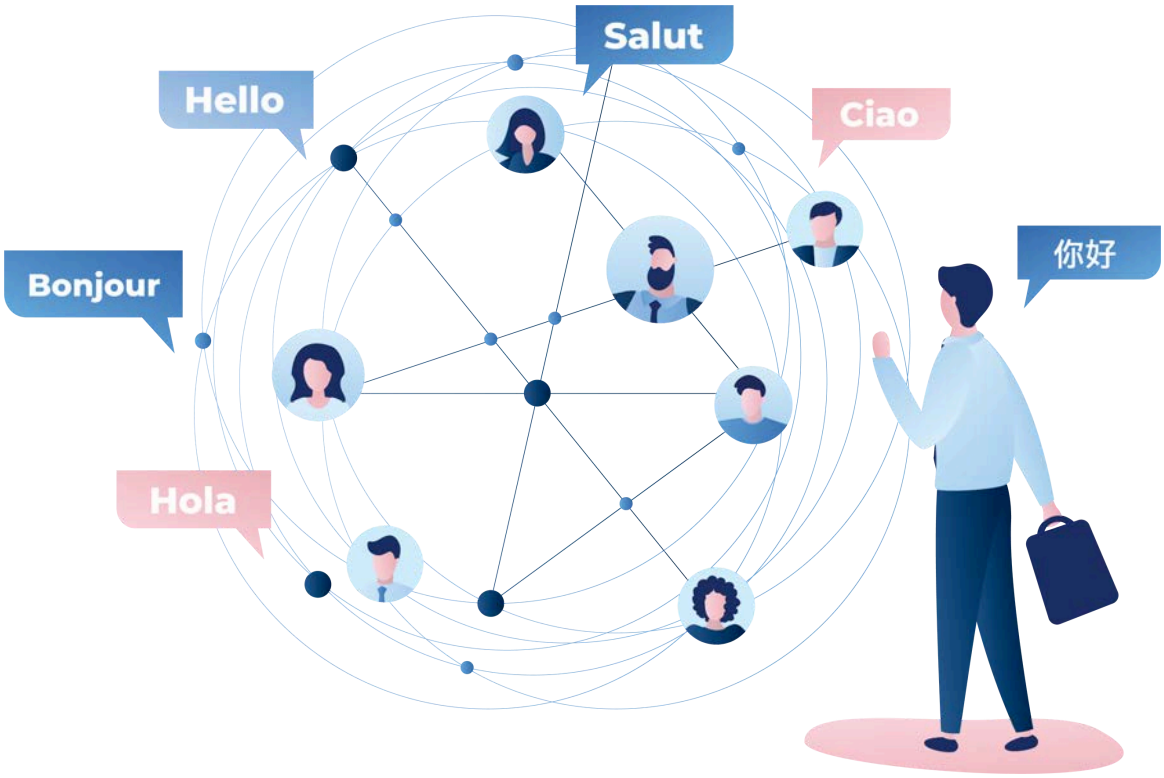
Dr Zhao's achievements include authoring the book Interpreting Technology: From the Classroom to the Workplace by Cambridge University Press, a comprehensive guide on conference interpreting globally. This book, along with the innovative TRAN3055 Interpreting Technology course, reveals significant advancements in teaching and assessing conference interpreting. These aforementioned initiatives are supported by the UGC Fund for Innovative Technology in Education (FITE) and the UGC Special Grant for Strategic Development of Virtual Teaching and Learning (VTL).

Inspiring Teachers to Embrace GenAI

Dr. Nan Zhao's innovative use of GenAI in translation and interpreting education sets a new trend for educational practices within the discipline. Her work demonstrates how AI can be effectively integrated, thus turning conventional classrooms into engaging and future-ready ones.

Making Translation Fun with AI - Dr Luis Damián Moreno García's Innovative Approach

LAC (FASS)
Course: TRA7520 Translation Technology I
Class Size: 30-80
Mode: Face-to-face



Dr Luis Damián Moreno García, an Assistant Professor at the Academy of Language and Culture in the Faculty of Arts and Social Sciences (FASS), is changing the way translation technology works through the application of GenAI. In his course, TRA7520 Translation Technology I, Dr Moreno García employs AI tools like HKBU ChatGPT to demonstrate how technology can adapt synthetically created source texts to different languages and cultural contexts.

Innovative Classroom Activities

These activities were conducted in the Interpreting & Translation Technology Lab, and every student used a desktop PC. Dr Moreno García utilised HKBU ChatGPT to show students the capabilities of GPT technology in translating and localising texts. "The fact that localisation processes often require a high level of linguistic and cultural adaptation encouraged me to include such a tool as part of in-class activities," Dr Moreno García explains. Student feedback was overwhelmingly positive, highlighting the simplicity and effectiveness of using AI tools in translation.

Hands-On Learning with Interactive Machine Translation

One of the innovative activities involved interactive machine translation, where students used GPT models to create, edit, and improve translations by conversing with the system. Dr Moreno García outlines the process, "Students first used ChatGPT's ability to locate potential translation difficulties or challenges and then worked on extracting terminology and refining the translation."

For example, students were tasked with translating a colourful English text into Traditional or Simplified Chinese and then using ChatGPT to modify the text according to specific prompts. These prompts included altering the protagonist's name, adapting cultural references, and experimenting with different translation styles. This hands-on approach allowed students to experience the versatility and responsiveness of interactive machine translation.

Exploring Cultural Nuances and Language Adaptation

In addition to translating texts, students were encouraged to translate memorable Chinese expressions into English with the help of ChatGPT, comparing the AI-generated translations with those suggested by the students themselves. Dr Moreno García emphasised the importance of being cautious with sensitive information in using machine translation systems, citing cases of data breaches and confidentiality issues.

Enhancing Translation Skills and Cultural Awareness

Besides improving the technical translation skills, Dr Moreno García's approach focuses on cultural awareness and adaptability among students. "These activities can benefit colleagues teaching courses related to specialised translation, localisation, adaptation, or cultural translation, as chatbots have a certain potential to assist translation processes," he points out. Thus, by applying GenAI tools in classes, Dr Moreno García prepares students for the complexities and challenges of today's translation and localisation tasks, equipping them with practical skills and critical thinking abilities.

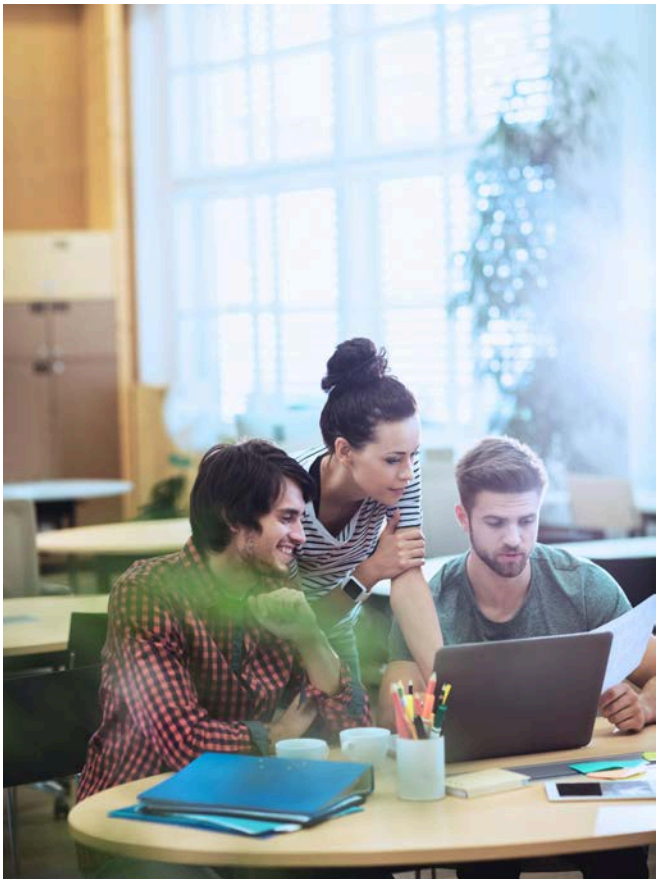
Inspiring Teachers to Embrace AI in Translation Education

Dr Luis Damián Moreno García's innovative use of GenAI in translation education sets a new benchmark for educational practices in the field. His work demonstrates how AI can be effectively integrated into traditional learning environments to enhance student engagement and learning outcomes with fun T&L activities.

GenAI in Digital PR: Dr Lola Xie's Innovative Teaching in Emerging Media Trends

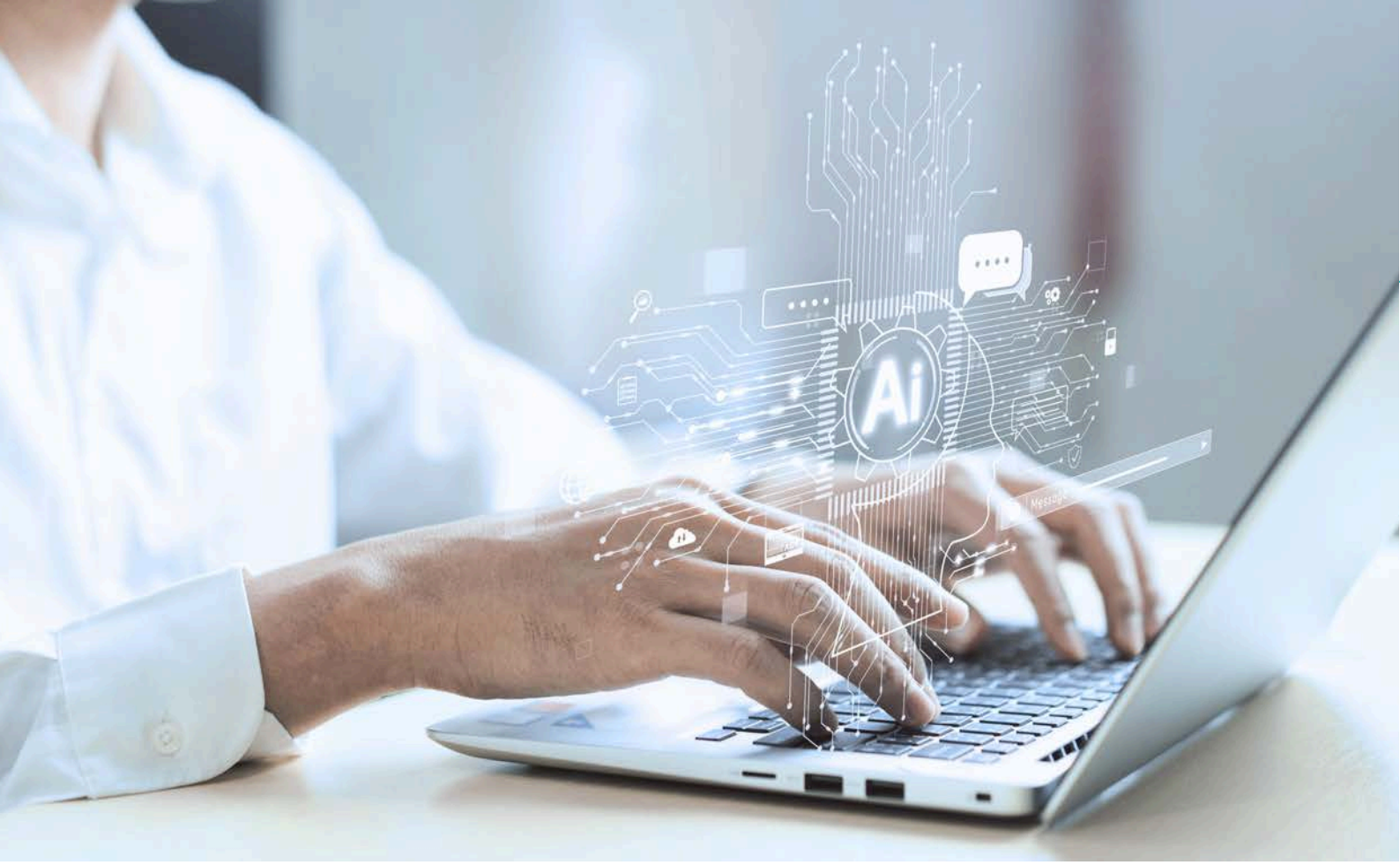
COMS (COMM)
Course: PRAO/PRAD3017 Strategic Communication and Emerging Media Trends
Class Size: 30-80
Mode: Face-to-face

In a world where AI and GenAI are transforming the landscape of marketing and public relations, Dr Lola Wanying Xie, Research Assistant Professor at the Department of Communication Studies (COMS), School of Communication (COMM), is at the forefront of preparing students for these changes. In her course, PRAO/PRAD3017 Strategic Communication and Emerging Media Trends, Dr Xie's students get an overview of digital public relations with a focus on GenAI applications and their consequences.



Integrating GenAI into Digital Marketing Education

Dr Xie's course guides students from introducing ChatGPT and MidJourney to the professional application of the two platforms in creating digital marketing content. "I started by introducing students to GenAI tools and taught them how to look up digital marketing cases and brainstorm ideas," Dr Xie explains. Further on, the students started to employ these platforms to create digital marketing materials, including copywriting, press releases, and social media illustrations.



Balancing Creativity with Responsibility

One of the key challenges in teaching this course, as Dr Xie highlights, is helping students navigate the delicate balance between leveraging GenAI to enhance their creativity and yet understanding the importance of originality and copyright laws. "Students loved this segment of the course, but it's always crucial to first help them understand the social impact and implications of GenAI before they start using the tools," she notes.

Dr Xie's approach emphasises the responsible use of GenAI, particularly in fields where creativity and originality are paramount. "There were occasions where students misused the tool for assignments, and it's a challenge to identify when this happens and provide the necessary correction," she says. To handle this, Dr Xie introduced sessions where she and her students reviewed cases together, distinguishing the output produced by GenAI from that produced by human beings. This not only helped students understand the logic behind AI-generated work, but also educated them on the consequences of GenAI misuse.

Inspiring the Next Generation of PR Professionals

Dr Xie's innovative teaching methods add new elements to digital public relations education. By incorporating GenAI into her curriculum, she is not only preparing students for the future of PR but also teaching them accountability, responsibility and ethical awareness. "In any future practice, it's always crucial to first help students understand the social impact and implication of GenAI before guiding them on how to use these tools, especially in disciplines where originality and creativity are celebrated and protected," Dr Xie advises.

Exploring AI Ethics with Dr Pak-Hang Wong: Shaping Thoughtful Cyberworld Citizens

CHRP (FASS)
Course: GTSC2006 Becoming Critically Thoughtful Cyberworld Citizens
Class Size: 30-80
Mode: Face-to-face

In the rapidly evolving digital age, understanding the social, ethical, political, and epistemic challenges posed by emerging technologies is more crucial than ever. Dr Pak-Hang Wong, Assistant Professor at the Academy of Chinese, History, Religion, and Philosophy, Faculty of Arts and Social Sciences (FASS), guides students through these complex dilemmas in his course GTSC2006 Becoming Critically Thoughtful Cyberworld Citizens.

Using AI as Both Subject and Tool in the Classroom

In his course, Dr Wong has developed an innovative approach to exploring the ethical implications of AI and incorporating GenAI as a teaching tool. "GenAI, therefore, is both the subject matter and the tool for teaching and learning," Dr Wong explains. By integrating HKBU ChatGPT into the curriculum, he demonstrates the biases and limitations inherent in large language models (LLMs), thus giving students a first-hand experience of the challenges these technologies can pose.

Engaging Students with Real-World Ethical Dilemmas

One of the key components of Dr Wong's course is the exploration of algorithmic bias. Through in-class dialogues with ChatGPT, students are shown how gender and racial biases can be embedded in AI systems. For example, he asked ChatGPT to generate stories about individuals of different gender and racial backgrounds and then discussed with the students how their occupations and (romantic) relations between individuals often show gender and racial stereotypes. "While some students have heard about the issues of biases and discrimination in AI, showing the potential biases and discriminatory tendencies in action offers them a more direct, personal insight vis-a-vis the problem of algorithmic bias," Dr Wong shares.

"Hallucination", or misinformation, is another problem that Dr Wong raises and shows how LLMs can generate false information. This serves as a critical lesson for students on the importance of verifying the outputs given by AI, especially when used in academic or professional contexts.

> IT IS IMPORTANT TO STRESS HUMANNESS IN THE USE OF GENAI, IN WHICH WE ARE AND WILL ULTIMATELY BE THE ONES RESPONSIBLE FOR TEACHING AND ASSESSING, AND THAT STUDENTS ARE AND WILL BE RESPONSIBLE FOR LEARNING."

Empowering Students with AI-Enhanced Learning Tools

To further enhance the learning experience, Dr Wong has introduced a "virtual TA" prompt in ChatGPT, which provides students with preliminary feedback and grades on their assignments before final submission. "Students are encouraged to use the virtual TA before submitting the final assignment, but they are also reassured that their assignment will be read and graded by me in person," he emphasises. This tool has been very helpful for students as it provides them with the initial review and helps them enhance the quality of their work.

The Future of AI in Education

"My next step is to include other in-class activities and assignments that allow students to interact with and reflect on GenAI more directly," he notes. Dr Wong believes that while AI has great potential to enhance education, it is essential to maintain the human element in teaching and learning. "It is important to stress humanness in the use of GenAI, in which we are and will ultimately be the ones responsible for teaching and assessing, and that students are and will be responsible for learning."

Professor Pietarinen Elevates Ethical AI: Transforming Assessments in Cyberworld Ethics

CHRP (FASS)
Course: GTSC2006 Becoming Critically Thoughtful Cyberworld Citizens
Class Size: 30-80
Mode: Face-to-face

In a groundbreaking initiative, Professor Ahti-Veikko Juhani Pietarinen, from the Academy of Chinese, History, Religion, and Philosophy, Faculty of Arts and Social Sciences, has introduced the use of GenAI to evaluate assessments in his course GTSC2006 Becoming Critically Thoughtful Cyberworld Citizens. This innovative approach intends to explore the possibilities of using AI as a tool to complement human judgment in grading students' work while also addressing the broader implications of AI in the learning context.

Exploring AI's Grading Capabilities

The main goal intended to be achieved through this initiative was to investigate whether GenAI could grade assignments in the same manner as human graders. As a part of the method, Professor Pietarinen conducted a pilot study with the help of a random sample of student papers from his CyberWorld Ethics course. These papers were graded by both the professor and a GenAI model, specifically GPT-4, to analyse the accuracy and consistency of the AI's grading.

The results were promising: out of 27 sampled papers, 11 were identical to the grading done by the human grader and GPT-4, 12 had only a one-letter grade difference, and 3 had a two-letter grade deviation. Only one paper showed a deviation of a three-letter grade. In cases where discrepancies occurred, Professor Pietarinen asked the AI to provide further justification for its grading, offering a reflection on human versus AI assessment capabilities.

Benefits and Ethical Considerations

The study revealed the potential of AI technologies to enhance teaching processes and learning outcomes. With an accuracy level above chance, the AI was able to achieve performance at or even above the level of the human grader. Based on this finding, it can be recommended that AI can play a valuable role in supporting educators, particularly in handling large volumes of assessments.

However, Professor Pietarinen also emphasised the ethical considerations that come with using AI in assessments. "While GenAI has great potential to improve teaching and learning processes, we must be mindful of the biases, privacy concerns, and transparency issues it introduces," he highlighted. The study identified key challenges, such as the risk of perpetuating existing biases through synthetic data, concerns over student privacy, and the "black box" nature of AI algorithms that could hinder understanding assessment outcomes.

Balancing Technology and Human Judgment

Despite these challenges, Professor Pietarinen sees AI as a powerful tool that, when used thoughtfully, can enhance the teaching and learning experience. He advocates for a balanced approach where technology supports, rather than replaces, human judgment. "Overreliance on technology can diminish the role of human agency and gratitude in the learning process," he warns, stressing the importance of maintaining a human-centred perspective in education.

As teachers at our University and beyond continue to explore the possibilities of AI, Professor Pietarinen's work serves as a valuable case study in integrating cutting-edge technology into traditional teaching practices. His innovative use of AI provides critical insights into the ethical and practical implications of AI in education.

> "OVERRELIANCE ON TECHNOLOGY CAN DIMINISH THE ROLE OF HUMAN AGENCY AND GRATITUDE IN THE LEARNING PROCESS."

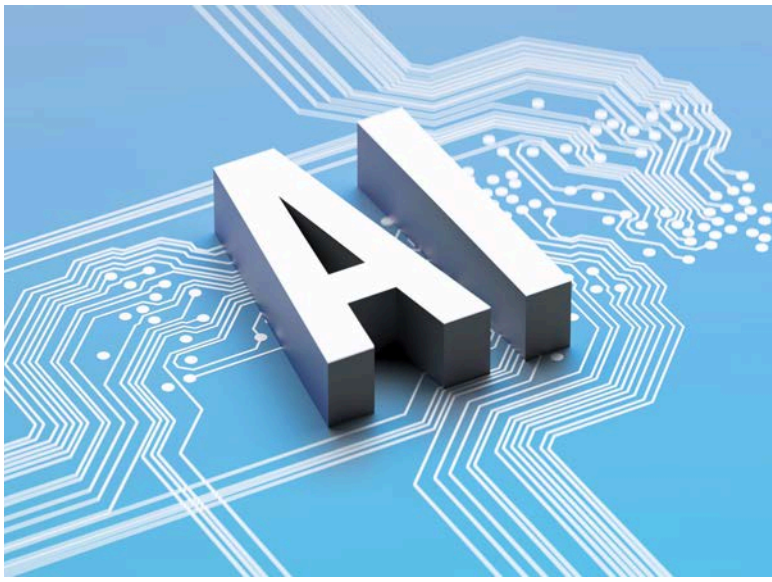
Dr Moorhouse Reimagines Assessments with GenAI Integration

WHD (FASS)
Course: EDUC7860 Grammar for Teaching
Class Size: 45
Mode: Flipped and Face-to-face

As AI continues to reshape the educational landscape, Dr Benjamin Luke Moorhouse from the Academy of Wellness and Human Development (WHD), Faculty of Arts and Social Sciences (FASS), is one of the pioneers in adopting GenAI in his classes. Due to the increasing influence of AI on traditional T&L and assessment methods, Dr Moorhouse saw the need to transform how students are assessed. By revisiting his course assessments, he has adopted a creative approach that embraces the capabilities of GenAI and empowers students with the essential skills to excel in the future environment.

Adapting to the GenAI Era

Previously, Dr Moorhouse's course featured three assignment tasks, including (1) a language identification and analysis task, (2) a reflective account of students' own learning experiences, and (3) a textbook critique with improvement suggestions. However, after testing these assignments on various large language models (LLMs), he discovered that AI was capable of doing these assignments, particularly the first one. These results prompted him to rethink his assessment strategy significantly.



"I had to change my assessments fundamentally due to the development of GenAI," Dr Moorhouse explains. "The goal was to create assignments that not only reflect the realities of GenAI but also engage students in a way that develops their GenAI skills."

Innovative Assessment Redesign

The following redesigned assessments are a clear reflection of Dr Moorhouse's educational innovation:

01

In-Class Assessment: The first assignment was converted into an in-class assessment to ensure students' abilities could be evaluated in a contained environment without using any external resources.

02

Group Lesson Planning: The second assignment shifted to a group activity where students collaborated to prepare a lesson plan based on the grammar topics discussed in the class. GenAI tools were introduced as aids, and students were asked to reflect on their learning experiences, particularly when they used GenAI for help.

03

Individual GenAI Interaction: The final assignment tasked students to individually engage with GenAI to refine their lesson plans based on the feedback received from the second assignment. Students had to justify their revisions and reflect on the implications of using GenAI in their professional practices. They were required to submit the logs of their interactions with the GenAI tools.

Positive Student Feedback

The response from students has been very favourable. They particularly appreciated the practical experience of working together with GenAI tools and the relevance of these activities to their future professions. "Students were very positive about the assignments," Dr Moorhouse adds. "They found the integration of GenAI competence development activities within the course to be extremely useful."

Challenges and Recommendations

Despite the success, some challenges were encountered. Striking the right balance between open and restrictive tasks was a key consideration. However, Dr Moorhouse's experience suggests that it is important to understand how students might use GenAI for learning, for working, or for having fun. His advice to fellow colleagues is to "consider how students might be using GenAI in their daily lives and incorporate those elements into your CILOs, course and assignment design. Discuss ideas with others to refine your approach."

AI-Powered Co-Authoring: Dr Simon Wang Makes Policy Writing Future-Ready

Language Centre
Course: GCAP3056 Taking a Stand: Turning Research Insights into Policy Recommendations
Class Size: 20-30
Mode: Face-to-face

In an effort to enhance students' learning experiences, Dr Simon Wang from the Language Centre has reimagined the traditional assessment model in his course, "Taking a Stand: Turning Research Insights into Policy Recommendations." Prior to the presence of GenAI, students were supposed to write a letter to the editor, showcasing their research and analytical skills about social and policy issues in Hong Kong. However, many students had difficulties in writing in English, and this often overshadowed their ability to demonstrate their research findings effectively.

Embracing AI for Better Learning

Recognising the potential of AI to overcome these language barriers among students, Dr Wang decided to integrate AI tools into the assessment process. The redesigned assignment encourages students to co-author their letters with cutomized AI chatbots, using the technology to help in structuring the ideas, refining the language, and ensuring clarity through a structured approach designed by the teacher. This new approach allows students to concentrate on their research and analytical skills while AI assists them in writing.

Positive Student Feedback and Impact

The shift to AI-assisted writing has been positively received by students. Many appreciated the new approach, saying it was time-effective and built their confidence in structuring and presenting their arguments. With AI, the quality of their submissions has greatly improved, thus demonstrating that technology can enhance the traditional way of T&L.

Challenges and Lessons Learned

Despite the success, the implementation was not without its challenges. Some students needed additional help to use AI tools effectively, and there were concerns about over-reliance on the technology. To these issues, Dr Wang emphasised the importance of using AI as a supplementary tool rather than a replacement for critical thinking and writing skills.

Recommendations for Teachers

Dr Wang offers several recommendations for colleagues considering the integration of AI into their teaching practices:

- **Customize an AI chatbot:** Provide contextual information and instructions through a system prompt so a chatbot can engage students in ways designed by the teacher

- **Provide Clear Guidelines:** Ensure students understand using AI tools effectively without compromising their learning.

- **Offer Training Sessions:** Help students learn AI tools through workshops or training sessions.

- **Monitor Usage:** Implement systems to track AI usage, encouraging students to engage thoughtfully with the technology.

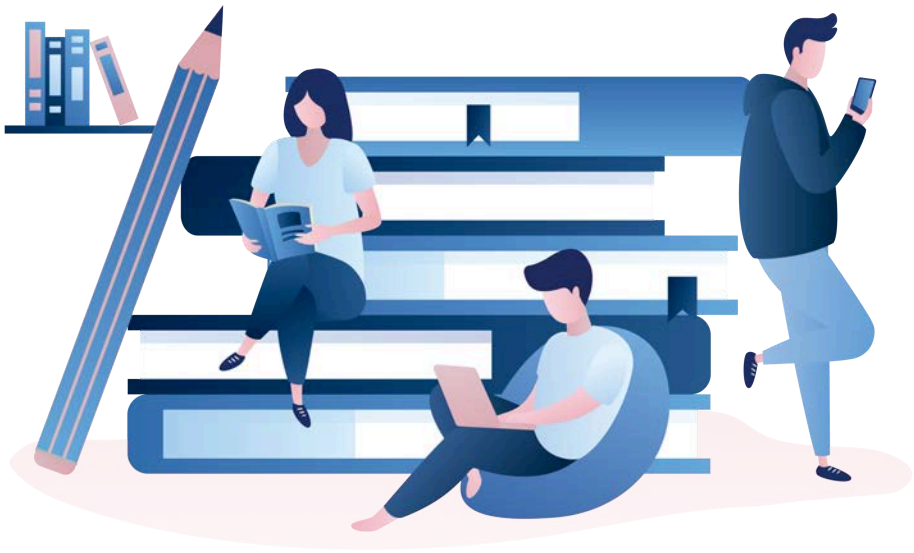
- **Balance AI and Human Input:** Promote a balanced approach where AI enhances, but does not replace, the writing process.

- **Collect Feedback:** Regularly gather student feedback to refine and improve the integration of AI in T&L and assessments.

Dr Simon Wang's forward-thinking approach exemplifies how colleagues can leverage AI to overcome the current educational challenges, preparing students for a future where technology will be an essential part of their professional development.

From Prompts to Masterpieces: Transforming Professional Communication with Dr Serban

COMD (COMM)
Course: PRAD3066 Writing for Professional Communication
Class Size: 30
Mode: Face-to-face



In the fast-paced world of professional communication, staying ahead of technological advancements is essential. Dr Florin Constantin Serban, a Lecturer in the Department of Communication Studies (COMD) at the School of Communication (COMM), observed the growing impact of GenAI tools on writing and design. As such, Dr Serban reviewed his Teaching and Learning Activities (TLAs) in his "Writing for Professional Communication" course to better prepare his students for these advancements.

Previously, students in Dr Serban's course wrote their personal branding statements solely relying on their writing skills. However, starting in 2023/2024, Dr Serban brought a new approach: students were now asked to collaborate with GenAI tools like ChatGPT to create these brand statements. On top of that, in a Media Design course, instead of only searching for images on Google, students began using AI tools such as Midjourney, Dall-E-3, Adobe Firefly, and StableDiffusionXL to generate illustrations tailored to their prompts.

Reasons for the TLAs Redesign

Dr Serban's motivation for this redesign stemmed from student curiosity about AI and his commitment to equipping them with the latest tools that would be relevant in their future professions. He aimed to engage students more deeply by refining their prompt-writing skills and encouraging them to evaluate the content generated by these AI tools critically.

Impact and Student Feedback

Students responded positively to the new TLAs, expressing that although they might have explored these AI tools themselves, the structured learning environment of the course led to significantly better results. The hands-on experience gave them valuable insights into understanding AI technologies, the best practices for their use, and how to assess AI-generated content critically.

Challenges During Implementation

However, things were not without challenges while implementing the new TLAs. For instance, students lacked free access to certain AI tools, requiring them to rely on Dr Serban's limited resources. Nevertheless, this limitation highlighted the need for broader access to such tools within educational institutions.

Recommendations and Advice

Reflecting on the process, Dr Serban emphasised the importance of embracing the trial-and-error nature of working with AI. He admitted that while the AI outputs might sometimes be unexpected or mediocre, the learning experience lies in exploring these outcomes together with students. "These tools don't have a road map; they are a compass. Be prepared to discover uncharted territories when using them, and don't be frustrated in the process," he shared.

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Midjourney

DALL·E

Adobe Firefly

Stable Diffusion XL

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